

SOLICITATION, OFFER AND AWARD		1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 700)		RATING		PAGE OF PAGES 1 618	
2. CONTRACT NUMBER 89303318CEM000007		3. SOLICITATION NUMBER DE-SOL-0008109		4. TYPE OF SOLICITATION ☐ SEALED BID (IFB) ☒ NEGOTIATED (RFP)		5. DATE ISSUED	
7. ISSUED BY EMCBC U.S. Department of Energy EM Consolidated Business Center 250 E. 5th Street, Suite 500 Cincinnati OH 45202		CODE 03001		8. ADDRESS OFFER TO (if other than item 7) See Provision L. 10			

NOTE: In sealed bid solicitations "offer" and "offeror" mean "bid" and "bidder".

SOLICITATION	
9. Sealed offers in original and <u>See Provision L. 10</u> copies for furnishing the supplies or services in the Schedule will be received at the place specified in item 8, or if hand carried, in the depository located in <u>See Provision L. 10</u> until <u>1700 ET</u> local time <u>11/21/2016</u> (Hour) (Date)	

CAUTION: LATE Submissions, Modifications, and Withdrawals: See Section L, Provision No. 52.214-7 or 52.215-1. All offers are subject to all terms and conditions contained in this solicitation.

10. FOR INFORMATION CALL:		A. NAME Kimberly A. Tate		B. TELEPHONE (NO COLLECT CALLS) AREA CODE NUMBER 513 246-0102		C. E-MAIL ADDRESS kimberly.tate@emcbc.doe.gov	

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OFFER (Must be fully completed by offeror)

NOTE: Item 12 does not apply if the solicitation includes the provisions at 52.214-16, Minimum Bid Acceptance Period.

12. In compliance with the above, the undersigned agrees, if this offer is accepted within <u>415</u> calendar days (60 calendar days unless a different period is inserted by the offeror) from the date for receipt of offers specified above, to furnish any or all items upon which prices are offered at the price set opposite each item, delivered at the designated point(s), within the time specified in the schedule.	

13. DISCOUNT FOR PROMPT PAYMENT (See Section I, Clause No. 52.232.8)	10 CALENDAR DAYS (%) N/A	20 CALENDAR DAYS (%) N/A	30 CALENDAR DAYS (%) N/A	CALENDAR DAYS (%) N/A

14. ACKNOWLEDGEMENT OF AMENDMENTS (The offeror acknowledges receipt of amendments to the SOLICITATION for offerors and related documents numbered and dated):	AMENDMENT NO.	DATE	AMENDMENT NO.	DATE
	Amendment No. 001	9/29/16	Amendment No. 000003	11/04/16
	Amendment No. 000002	11/02/16	Amendment No. 000004	11/16/16
			Amendment No. 000005	12/04/17

15A. NAME AND ADDRESS OF OFFEROR Newport News Nuclear BWXT-Los Alamos, LLC 105 Technology Drive, Suite 190 Broomfield, Colorado 80021		16. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER (Type or print) Nicholas Lombardo, President	

15B. TELEPHONE NUMBER AREA CODE NUMBER EXT. 303 546-4300 403		15C. CHECK IF REMITTANCE ADDRESS ☐ IS DIFFERENT FROM ABOVE - ENTER SUCH ADDRESS IN SCHEDULE.		17. SIGNATURE 		18. OFFER DATE Dec 5, 2017	

AWARD (To be completed by government)

19. ACCEPTED AS TO ITEMS NUMBERED		20. AMOUNT		21. ACCOUNTING AND APPROPRIATION	
22. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION: ☐ 10 U.S.C. 2304 (c) () ☐ 41 U.S.C. 253 (c) ()		23. SUBMIT INVOICES TO ADDRESS SHOWN IN (4 copies unless otherwise specified)		ITEM	
24. ADMINISTERED BY (if other than item 7) CODE		25. PAYMENT WILL BE MADE BY CODE			
26. NAME OF CONTRACTING OFFICER (Type or print) Kimberly A. Tate		27. UNITED STATES OF AMERICA  (Signature of Contracting Officer)		28. AWARD DATE 12/19/17	

IMPORTANT - Award will be made on this Form, or on Standard Form 28, or by other authorized official written notice.

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STANDARD FORM 33 (Rev. 9-97)

Prescribed by GSA - FAR (48 CFR) 53.214(c)

PART I – THE SCHEDULE

SECTION B

SUPPLIES OR SERVICES AND PRICES/COSTS

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B.1 DOE-B-2012 SUPPLIES/SERVICES BEING PROCURED/DELIVERY REQUIREMENTS (OCT 2014)

The Contractor shall furnish all personnel, facilities, equipment, material, supplies, and services (except as may be expressly set for in this contract as furnished by the Government) and otherwise do all things necessary for, or incident to, the performance of work as described in Section C, Performance Work Statement.

B.2 TYPE OF CONTRACT

(a) This is a performance based contract that includes Cost-Plus-Award-Fee (CPAF), Cost Reimbursable, and Indefinite-Delivery, Indefinite-Quantity (IDIQ) type Contract Line Items (CLINs).

(b) The Contract consists of the following CLINs:

Table B.2-1 Contract CLINs			
CLIN	CLIN Title	Type	PWS Section(s)
Transition Period (90 days)			
00001	Transition (90 days)	CR (no fee)	C.2
Base Period (5 Years)			
00002	CH-TRU Waste Disposition (PBS 0013)	CPAF	C.3, C.4
00003	Environmental Remediation (PBS 0030)	CPAF	C.3, C.5, C.6, C.7, C.8, C.9, C.10, C.11, C.12, and C.13
00004	Additional Assignments in Accordance with PWS Section C.14	IDIQ	C.3, C.14
Option Period 1 (3 Years)			
00005	CH-TRU Waste Disposition (PBS 0013)	CPAF	C.3, C.4
00006	Environmental Remediation (PBS 0030)	CPAF	C.3, C.5, C.6, C.7, C.8, C.9, C.10, C.11, and C.12
00007	Additional Assignments in Accordance with PWS Section C.14	IDIQ	C.3, C.14
Option Period 2 (2 Years)			
00008	CH-TRU Waste Disposition (PBS LANL-0013)	CPAF	C.3, C.4
00009	Environmental Remediation (PBS LANL-0030)	CPAF	C.3, C.5, C.6, C.7, C.8, C.9, C.10, C.11, and C.12
00010	Additional Assignments in Accordance with PWS Section C.14	IDIQ	C.3, C.14

(c) CLIN Types

(1) **Cost Reimbursable (CR) CLIN 00001**

CLIN 00001 – Transition: The Contract Transition Period is anticipated to be a period beginning with issuance of the Notice to Proceed (NTP). The Transition Period is as defined in Section F.3. Costs are reimbursed on the basis of actual costs billed to the contract and there is no fee for the Transition Period.

(2) **Cost Plus Award Fee CLINs (00002, 00003, 00005, 00006, 00008, and 00009)**

Payment of fee will be made in accordance with *B.7 DOE-H-2060 Base and Award Fee, B.8 Provisional Payment of Fee, B. 9 Fee Reductions, and Section J, Attachment J-10, Performance Evaluation and Measurement Plan (PEMP)*.

(3) **IDIQ CLINs (00004, 00007, and 00010)**

- (A) Under the IDIQ CLINs, the Government may issue Cost Reimbursable or Fixed Price Task Orders depending on the nature of the requirement for the delivery of work. Payment for the services ordered and delivered shall be made in accordance with the applicable contract clause addressing payment as included in each individual task order. The minimum and maximum quantity to be ordered as required by Section I, FAR 52.216-22 Indefinite Quantity for each IDIQ CLIN is as follows: The minimum ordering guarantee for the IDIQ CLINs is \$1,000. The maximum quantity of services the Government will acquire under the IDIQ CLINs will not cumulatively exceed **\$112,000,000**.
- (B) Any work under the IDIQ CLIN(s) will be ordered by the issuance of individually negotiated Task Orders, which will contain specific terms and conditions applicable to the given task order. As the Government may require, the Contractor shall provide the specified services up to the maximum quantity identified above, on a schedule to be specified by the Government in accordance with the contract clause at Section I, FAR 52.216-22 Indefinite Quantity.
- (C) For budget planning purposes, the Government has provided an estimated maximum quantity of services for each IDIQ CLIN as seen below in paragraph (d). However, the Government reserves the right to adjust the estimated maximum quantity associated with each IDIQ CLIN, as long as the total cumulative amount does not exceed the stated contractual maximum quantity in paragraph (A) above.
- (D) Payment for the services ordered and delivered shall be made in accordance with *B.7 DOE-H-2060 Base and Award Fee, B.8 Provisional Payment of Fee, B. 9 Fee Reductions, and Section J, Attachment J-10, PEMP*.
- (E) The fee ceiling percentage for any cost-plus-award-fee type Task Orders issued under the contract is 10%. For cost-plus-award-fee Task Orders, there will not be base fee.

- (F) The estimated cost and fee amount will be established in each individual cost reimbursable Task Order. The Contractor may propose whatever fee amount it determines appropriate for the individual Task Order, provided that the fee amount as a percentage of the estimated cost of each proposed Task Order does not exceed the fee percentage ceiling as specified above.

(d) Total Estimated Cost for All CLINs

The Total Estimated Cost and Fee (as applicable) for each CLIN, the Total Estimated Cost and Fee (as applicable) for each contract period, and the cumulative Total Estimated Cost and Fee for the Contract are as follows:

Table B.2-2 Contract Cost and Fee				
CLIN	CLIN Description	Estimated Cost	Available Award Fee	Estimated Cost and Fee
Transition Period				
00001	Transition Period (CR, No Fee)	\$3,991,378	N/A	\$3,991,378
Base Period				
00002	CH-TRU Waste Disposition (CPAF)	[REDACTED]	[REDACTED]	\$355,642,087
00003	Environmental Remediation (CPAF)	[REDACTED]	[REDACTED]	\$338,199,405
00004	Additional Assignments in Accordance with PWS Section C.14 (IDIQ)	To be determined as Task Orders are issued		\$54,000,000.00
Total Base Period				\$ 747,841,493
Option Period 1				
00005	CH-TRU Waste Disposition (CPAF)	[REDACTED]	[REDACTED]	\$ 195,323,192
00006	Environmental Remediation (CPAF)	[REDACTED]	[REDACTED]	\$ 177,505,141
00007	Additional Assignments in Accordance with PWS Section C.14 (IDIQ)	To be determined as Task Orders are issued		\$45,000,000.00
Total Option Period 1				\$ 417,828,333
Option Period 2				
00008	CH-TRU Waste Disposition (CPAF)	[REDACTED]	[REDACTED]	\$ 96,436,995
00009	Environmental Remediation (CPAF)	[REDACTED]	[REDACTED]	\$ 110,988,437
00010	Additional Assignments in Accordance with PWS Section C.14 (IDIQ)	To be determined as Task Orders are issued		\$13,000,000.00
Total Option Period 2				\$ 220,425,432
Total Contract Value (Transition Period, Base Period, Option Period 1, and Option Period 2)				\$ 1,390,086,635

- (1) *Estimated Cost* for each CLIN is defined as the cost to perform the CLIN agreed to by the parties at contract inception, as may be revised by modification to the contract in accordance with the contract terms. The exception is the IDIQ CLINs,

for which the amount shown in Table B.2-2 reflects the maximum quantity of supplies or services the Government will acquire under the IDIQ CLINs (inclusive of any fee or profit).

- (2) *Available Award Fee* is defined as the amount of award fee that may be earned under the Contract for each applicable CLIN.
- (3) Available Award Fee will include award-fee criteria and Performance-Based Incentive (PBIs) Criteria as defined in B.7, DOE-H-2060, Base and Award Fee. PBIs will be defined during contract performance as part of the PEMP. Also, no base fee is payable under this Contract.
- (4) Available Award Fee is made up as 15% award-fee criteria and 85% PBIs.
- (5) Award Fee based upon award-fee criteria will be evaluated on an annual basis as delineated in the PEMP. The PBI fee will be evaluated in accordance with the established completion criteria in the PEMP.
- (6) *Contract Value* is defined as the total of the Estimated Cost and Available Award Fee.

B.3 DOE-B-2013 OBLIGATION OF FUNDS (OCT 2014)

Pursuant to the clause of this contract at FAR 52.232-22, Limitation of Funds, total funds in the amount(s) specified below are obligated for the payment of allowable costs and fee. It is estimated that this amount is sufficient to cover performance through the date(s) shown below.

The amount of \$ 3,991,378.00 is obligated to cover the 90-day transition period.

B.4 DOE-B-2014 OPTION TO EXTEND THE TERM OF THE CONTRACT: ESTIMATED COST, FEE AND PERIOD OF PERFORMANCE (OCT 2014)

- (a) In accordance with the clause at FAR 52.217-9, Option to Extend the Term of the Contract, the Government may unilaterally extend the contract period of performance (as set forth in Section F, Deliveries) to require the Contractor to perform the work set out by Section C, Description/Specs/Work Statement of the contract. In the event that the Government elects to exercise its unilateral right to extend the term of the contract pursuant to this clause and FAR 52.217-9, all terms and conditions of the contract will remain in full force and effect.
- (b) The Contracting Officer will consider factors set forth in FAR 17.207, Exercise of Options, in determining whether to exercise an option to extend the term of the contract. The Government is concerned with ensuring that the Contractor's performance meets, or exceeds, the performance requirements of the contract in a cost-effective manner. Accordingly, the Contracting Officer will consider the Contractor's performance as part of the determination to exercise any option to extend the contract term.
- (c) The Estimated Cost and Fee of each option are set forth in B.2, *Type of Contract*, paragraph (d). The associated Period of Performance of each option are set forth in

Section F Clause entitled *DOE-F-2003, Period of Performance – Alt II (Oct 2014)*.

B.5 EXECUTION OF CLINS

Upon the Notice to Proceed, the Transition CLIN (00001) will be executed. Upon completion of Contract Transition, the CLINs for CH-TRU Waste Disposition (00002), Environmental Remediation (00003) will be executed. For IDIQ CLIN 00004, a task order may be issued at any time during the Base Period. The execution of the Option CLINs will be in accordance with Section B Clause entitled *DOE-B-2014 Option To Extend The Term Of The Contract: Estimated Cost, Fee And Period Of Performance (OCT 2014)*.

B.6 ESTIMATED ANNUAL CONTRACT VALUE

- (a) DOE expects to obligate funding to the Contract in accordance with the estimated annual Contract value:

Table B.6-1 Estimated Annual Contract Value	
Gov't Fiscal Year	Contract Value (in \$M)*
FY17 (Transition)	\$ 3.9
Base Period	
FY18	\$ 142.3
FY19	\$ 137.7
FY20	\$ 136.6
FY21	\$ 140.3
FY22	\$ 136.9
Base Period Total	\$ 693.8
Option Period 1	
FY23	\$ 126.9
FY24	\$ 128.9
FY25	\$ 117.0
Option Period 1 Total	\$ 372.8
Option Period 2	
FY26	\$ 104.9
FY27	\$ 102.5
Option Period 2 Total	\$ 207.4
Contract Total	\$1,277.9

*Projected FY funding less the IDIQ maximum value. Table B.6-1 will be updated as IDIQ task orders are awarded.

The above is anticipated funding only and is subject to the appropriations of Congress. It is not a guarantee that the funding will be provided or obligated in the amounts stated.

B.7 DOE-H-2060 BASE AND AWARD FEE (OCT 2014)

- (a) The Government shall pay the Contractor for performing this contract the base fee, if any, and any award-fee that may be earned from the available award-fee, specified in Section B in accordance with this clause and other applicable clauses of the contract.
- (b) Base Fee Payment. The base fee, if any, shall be payable on a schedule specified in another clause of this contract or as determined by the Contracting Officer and subject to the following provisions. The Contracting Officer shall withhold a reserve not to exceed 15 percent of the total base fee or \$100,000, whichever is less, to protect the Government's interest.
- (c) Award-fee.
 - (1) Performance Evaluation and Measurement Plan.
 - (A) A PEMP shall be issued unilaterally by the Contracting Officer for each evaluation period that establishes the criteria and procedures for evaluating the Contractor's performance for the purpose of determining any award-fee earned. The PEMP shall include, as a minimum, the following:
 - (i) Evaluation criteria linked to the contract's performance objectives as defined in terms of cost, schedule, technical, or other contract performance requirements or objectives;
 - (ii) Means of how the Contractor's performance will be measured against the evaluation criteria;
 - (iii) Award-fee evaluation period;
 - (iv) Amount of the total available award-fee that is allocated to the evaluation period, including the allocation for award-fee criteria and performance-based incentive criteria; and
 - (v) Methodology for application of subjective evaluation ratings or attainment of predetermined objectives to earned fee.
 - (B) There are two categories of evaluation criteria that may be used in determining award-fee earned: award-fee criteria and performance-based incentive criteria. Each of these categories, in general, is defined as follows:
 - (i) Award-fee Criteria– Evaluation criteria that are qualitative or subjective for which it is neither feasible nor effective to devise pre-determined objective criteria applicable to cost, schedule, technical or other contract performance requirements or objectives. These types of criteria require a judgmental evaluation process and allow the Government the flexibility to evaluate both actual performance and the conditions under which it was achieved.
 - (ii) Performance-Based Incentive Criteria – Evaluation Criteria which can be defined by predetermined, objective incentive criteria applicable to cost, schedule, technical or other contract performance requirements or objectives. Performance measurement standards contain well-defined parameters for measuring performance against evaluation criteria. These criteria may extend beyond one evaluation period when appropriate to incentivize the completion of long-term objectives.

- (C) The length of evaluation periods shall be determined unilaterally by the Contracting Officer. The evaluation periods should provide a balance between the Contractor's ability to have sufficient performance time for the Government to evaluate; but evaluation periods should provide the ability for the Government to provide timely evaluations on the Contractor's performance without being administratively burdensome.
 - (D) The PEMP shall be provided to the Contractor 14 calendar days prior to the beginning of the first and each successive evaluation period. If there is not sufficient time for the PEMP to be provided to the Contractor in the required number of days in advance of the beginning of the evaluation period, the Contractor shall not be evaluated on its performance until 14 calendar days after the PEMP is received by the Contractor. The PEMP may be revised unilaterally at any time during the evaluation period; but the revised PEMP, or revised portion thereof, shall not be effective until 14 calendar days after the Contractor receives the revised PEMP.
- (2) Performance Evaluation and Fee Determination.
- (A) Monitoring Performance. During the evaluation period, performance monitors will track the Contractor's performance in accordance with the PEMP. Interim evaluations may be provided to the Contractor to identify strengths, weaknesses and deficiencies in the Contractor's performance during the current evaluation period. At the end of an evaluation period, performance monitors will assess the Contractor's performance in accordance with the PEMP and report the results to the Award-fee Board (AFB).
 - (B) Contractor Self-Assessment. Following each evaluation period, the Contractor may provide a written self-assessment of its performance to the AFB to be considered in its report to the Fee Determining Official (FDO). The self-assessment shall be submitted not later than 21 calendar days after the end of each evaluation period. The self-assessment shall address strengths, weaknesses and deficiencies in the Contractor's performance during the evaluation period. Where deficiencies in performance are noted, the Contractor should describe the actions planned or taken to correct such deficiencies to avoid their recurrence.
 - (C) Award-fee Board Recommendation. The AFB will consider the performance monitors' reports and any other pertinent information, including the Contractor's self-assessment, and prepare a report for the FDO with findings and recommendations. The Contractor will be provided a draft copy of the AFB's report and will be afforded an opportunity to identify factual errors. The AFB's draft report is not subject to negotiation with the Contractor. The Contractor will be provided a copy of the final AFB report immediately after the report is finalized.
 - (D) Award-fee Determination. The FDO will review the AFB's recommendation, the Contractor's self-assessment and other pertinent information related to the Contractor's performance. The FDO will make a final, written determination, consistent with the PEMP, as to the amount of the award-fee

earned. The FDO's final determination will be provided to the Contractor no later than 90 calendar days after the end of the evaluation period. The FDO, AFB representative, or Contracting Officer will provide a debriefing to the Contractor on the final determination. All FDO decisions regarding award-fee are made solely at the discretion of the Government, including but not limited to, the characterization of the Contractor's performance, amount of earned fee, if any, and the methodology used to calculate the earned fee.

- (3) Unsatisfactory Performance. No award-fee shall be earned if the Contractor's overall performance in the aggregate is below satisfactory.
- (4) Unearned Award-fee. Any unearned award-fee, for which the Contractor had the opportunity to earn during an evaluation period, shall not be transferred to subsequent evaluation periods.
- (5) Award-fee Payment. After the FDO's award-fee determination, the Contracting Officer will issue a unilateral modification to the contract setting forth the amount of earned fee. Payment will be made after the modification has been issued and consistent with other clauses of this contract related to payments. The PEMP may provide for the payment of earned fee for performance-based incentives completed prior to the end of the evaluation period or provisional payments of earned fee based on established progress in meeting performance-based incentives extending beyond an individual evaluation period.

B.8 PROVISIONAL PAYMENT OF FEE

- (a) Notwithstanding any other term or condition of this contract to the contrary, this clause applies to and has precedence over all other terms and conditions of this contract that provide for provisional payment of fee.
- (b) The Contractor must notify the Contracting Officer immediately if it believes any incongruence exists between this clause and any other term or condition of this contract that provides for provisional payment of fee. If a term or condition of this contract provides for provisional payment of fee but fails to include all of the requirements of this clause, that term or condition will be considered to include the omitted requirements.
- (c) This clause conforms to the Federal Acquisition Regulations and Department of Energy fee policy and constructs. The following definitions and concepts apply.
 - (1) Price means cost plus any fee or profit applicable to the contract.
 - (2) The terms profit and fee are synonymous.
 - (3) Incentive means a term or condition whose purpose is to motivate the Contractor to provide supplies or services at lower costs, and in certain instances with improved delivery or technical performance, by relating the amount of profit or fee earned to the Contractor's performance.

- (4) Earned fee for an incentive means fee due the Contractor by virtue of its meeting the contract's requirements entitling it to fee. Earned fee does not occur until the Contractor has met all conditions stated in the contract for earning fee.
- (5) Available fee for an incentive means the fee the Contractor might earn but has not yet earned.
- (6) Provisional payment of fee for an incentive means the Government's paying available fee for an incentive to the Contractor for making progress towards meeting the performance measures for the incentive before the Contractor has earned the available fee.
- (7) Provisional payment of fee has no implications for the Government's eventual determination that the Contractor has or has not earned the associated available fee. Provisional payment of fee is a separate and distinct concept from earned fee. The Contractor could, for example, receive 100% of possible provisional fee payments yet not earn any fee (the Contractor would be required to return all of the provisional fee payments). The Contractor could receive 0% of possible provisional fee payments yet earn the entire amount of available fee (it would not receive any fee payments until the Government's determination that the Contractor had earned the associated available fee for the incentive).
- (8) Clause means a term or condition used in this contract.
- (d) This contract's price, incentives included in its price, and all other terms and conditions reflect the Government's and the Contractor's agreement to link, to the maximum extent practical, the Contractor's earning of fee to its achievement of final outcomes rather than interim accomplishments.
- (e) Certain terms and conditions of this contract provide for provisional payment of fee for certain incentives. Other terms and conditions of this contract provide for each such incentive the requirements the Contractor must meet to earn the fee linked to the incentive. The terms and conditions of this contract that provide for provisional payment of fee for certain incentives include for each such incentive the requirements the Contractor must meet before the Government is obligated to pay fee, provisionally, to the Contractor and for the Contractor to have any right to retain the provisionally paid fee.
- (f) The Contracting Officer, at his/her sole discretion, will determine if the Contractor has met the requirements under which the Government will be obligated to pay fee, provisionally, to the Contractor and for the Contractor to have any right to retain the provisionally paid fee.
- (g) If the Contracting Officer determines the Contractor has not met the requirements to retain any provisionally paid fee and notifies the Contractor, the Contractor must return that provisionally paid fee to the Government within 30 days: (i) the Contractor's obligation to return the provisional paid fee is independent of its intent to dispute or its disputing the Contracting Officer's determination; and (ii) if the Contractor fails to return the provisionally paid fee within 30 days of the Contracting Officer's determination, the Government, in addition to all other rights that accrue to the Government and all other consequences for the Contractor due to the

Contractor's failure, may deduct the amount of the provisionally paid fee from: amounts it owes under invoices; amounts it would otherwise authorize the Contractor to draw down under a Letter of Credit; or any other amount it owes the Contractor for payment, financing, or other obligation.

- (h) If the Contractor has earned fee associated with an incentive in an amount greater than the provisional fee the Government paid to the Contractor for the incentive, the Contractor will be entitled to retain the provisional fee and the Government will pay it the difference between the earned fee and the provisional fee.

B.9 FEE REDUCTIONS

- (a) All annual earned fee in each year of Contract performance is subject to reductions imposed by the terms and conditions of this Contract, including, but not limited to:
 - (1) Section B Clause entitled, *DOE-H-2060 Base and Award Fee*;
 - (2) Section B Clause entitled, *Small Business Subcontracting Fee Reduction*;
 - (3) Section E Clause entitled, *FAR 52.246-3, Inspection of Supplies – Cost Reimbursement*;
 - (4) Section E Clause entitled, *FAR 52.246-5, Inspection of Services – Cost Reimbursement*;
 - (5) Section H Clause entitled, *DOE-H-2070 Alternate I Key Personnel*;
 - (6) Section I Clause entitled, *DEAR 952.223-76, Conditional Payment of Fee or Profit – Safeguarding Restricted Data and Other Classified Information and Protection of Worker Safety and Health*;
 - (7) Section I Clause entitled, *FAR 52.203-10, Price or Fee Adjustment for Illegal or Improper Activity*;
 - (8) Section I Clause entitled, *FAR 52.215-11, Price Reduction for Defective Cost or Pricing Data – Modifications*;
 - (9) Section I Clause entitled, *FAR 52.215-13, Subcontractor Cost or Pricing Data – Modifications*;
 - (10) Section I Clause entitled, *FAR 52.219-16, Liquidated Damages – Subcontracting Plan*; and
- (b) The maximum fee reduction in any one-year period of Contract performance is the allocated *Annual Award Fee*, as defined in the PEMP that can be earned in the one-year period the event occurred.

B.10 SMALL BUSINESS SUBCONTRACTING FEE REDUCTION

For the purpose of implementing this Clause, the percentage goals established in the Section J Attachment entitled, *Small Business Subcontracting Plan*, will remain in effect for the duration of the Contract.

If the Contractor has not met any or all of the subcontracting goals, and/or has failed to provide meaningful work (as defined in H.63, Subcontracted Work) for small businesses, the Contracting Officer may reduce the available adjectival award fee pool by up to \$500,000.00 for each annual evaluation period starting at the end of Year 3.

B.11 ALLOWABILITY OF SUBCONTRACTOR FEE

- (a) If the Contractor is part of a teaming arrangement as described in FAR 9.601(1), *Contractor Team Arrangements*, the team shall share in the *Total Available Fee* as shown in B.2, *Type of Contract*, paragraph (d). Separate, additional critical subcontractor fee is not an allowable cost under this Contract for individual team members, or for a subcontractor, supplier, or lower-tier subcontractor that is a wholly-owned, majority-owned, or affiliate of any team member.
- (b) The subcontractor fee restriction in paragraph (a) does not apply to members of the Contractor's team that are: (1) small business(es); (2) Protégé firms as part of an approved Mentor-Protégé relationship as identified in the Contractor's Diversity Plan as per the Section H clause at DOE-H-2046, Diversity Program; (3) subcontractors under a competitively awarded firm-fixed price or firm-fixed unit price subcontract; or (4) suppliers of commercial items as defined in FAR Subpart 2.1, *Definitions*.

PART I – THE SCHEDULE

SECTION C

PERFORMANCE WORK STATEMENT

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SECTION C DESCRIPTION/SPECIFICATIONS

PERFORMANCE WORK STATEMENT

C.1 CONTRACT OVERVIEW AND OBJECTIVES

This section provides an overview of the Los Alamos Legacy Cleanup Contract (LLCC), including the objectives of the Contract, as well as a description of the performance work statement for program management and infrastructure.

C.1.1 Background

Established in 1989, the U.S. Department of Energy's (DOE) Office of Environmental Management (EM) is charged with addressing the environmental legacy of over 50 years of nuclear weapons production and government sponsored research. Since its inception in 1943 as part of the Manhattan Project, the Los Alamos National Laboratory (LANL)'s primary mission has been nuclear weapons research and development. Other DOE missions have included high explosives research, development, fabrication, and testing; chemical and material science research; electrical research and development; laser design and development; and photographic processing.

Waste management activities at LANL resulted in the release of hazardous wastes, hazardous waste constituents, mixed waste, radiological and transuranic (TRU) wastes, groundwater contaminants, toxic pollutants, and Explosive Compounds into the soils, sediments, and groundwater. Mixed low-level waste (MLLW) and TRU waste generated prior to 1999 and recognized as legacy waste, have been staged to prepare for off-site disposition.

The EM mission at LANL is to clean up the site safely and to reduce risks to the public, workers and the environment associated with legacy material, facilities and waste sites. Since October 1, 1988, EM has funded the work performed to characterize and remediate contaminants in the environment; decontaminate, decommission and demolish (DD&D) process-contaminated facilities; and manage and dispose of legacy TRU waste.

The National Nuclear Security Administration (NNSA) is the LANL property owner and landlord, and maintains site-wide infrastructure; while EM is a tenant on the LANL site. EM is responsible for cleaning up and remediating the effects from these historical operations as part of the legacy waste remediation. EM is not, however, responsible for the environmental effects or impacts of current LANL operations.

The EM program at LANL must comply with numerous regulatory requirements. Since 1989, the *Resource Conservation and Recovery Act* of 1976 (RCRA) has been the main regulatory driver to executing environmental cleanup (RCRA corrective actions) at LANL. In 1996, the U.S. Environmental Protection Agency (EPA) granted primacy to the State of New Mexico for corrective actions. In March of 2005, the New Mexico Environment Department (NMED), New Mexico Attorney General, University of California, and DOE signed a Compliance Order on Consent (Consent Order) pursuant to the New Mexico

Hazardous Waste Act (NMHWA). The 2005 Consent Order was a comprehensive and enforceable Order that is grounded in RCRA and set a completion date for the last scheduled deliverable of December 2015 that has subsequently been automatically been extended through (currently) 2019.

In fiscal year (FY) 2012, DOE initiated discussions with the State of New Mexico to reprioritize the near-term scheduled activities within the 2005 Consent Order, based on a risk-based approach. This reprioritization is documented in the 2012, *Framework Agreement, TA-54, MDA-G Transuranic Waste Removal* (Framework Agreement). The Framework Agreement is a shared commitment between DOE and the State of New Mexico, but unlike the 2005 Consent Order, the Framework Agreement is not an enforceable agreement. Inherent in reaching this agreement was the acknowledgement by DOE that it could not meet the 2005 Consent Order current completion date of 2015. The Framework Agreement contained a milestone to complete disposition of 3,706 cubic meters of above ground TRU waste (a campaign) by June 30, 2014. LANL missed the milestone due to the pause in operations at the Waste Isolation Pilot Plant (WIPP) and the pause in shipments of TRU waste for temporary storage at a commercial storage facility. LANL made significant progress, however, prior to the WIPP pause, and only 10% of the 3,706 cubic meters of above ground TRU waste remains at LANL.

On June 24, 2016, NMED issued a revision to the Consent Order with which DOE, all contractors, all subcontractors, all agents, and all representatives shall comply. This 2016 Consent Order continues the previous RCRA corrective action processes while allowing more flexibility in accelerating work scope at the DOE's and Contractor's risk and relying on the final documentation of the completed work to meeting the 2016 Consent Order requirements. This 2016 Consent Order is the contract requirement that all Offerors shall propose to and comply with following contract award.

The 2016 Consent Order now includes campaigns as an approach to 'bin' related work scopes into concentration areas, similar to what was done for the '3,706 cubic meters of above-ground TRU Campaign.' The Performance Work Statement (PWS) for this contract is not organized into campaigns because it is up to the Environmental Management Los Alamos Field Office (EM-LA) to agree to what work is being fit into which campaign. The campaigns that EM-LA and NMED have agreed to are provided in Section J, Attachment J-8, *Campaign Crosswalk to Performance Work Statement Sections*. Work scope outside of the campaigns listed in Section J, Attachment J-8 is base work scope that is more continuous throughout the contract and is thus not amenable to creating a campaign or is DOE-regulated radiological work scope for which NMED does not have primacy. Campaigns are to be a reasonably short duration (3-4 years) and have measureable and definable end-states or summary-level milestones.

The Contractor must understand that execution of the requirements in the 2016 Consent Order, as a contract requirement, potentially subjects the Contractor to stipulated penalties for failure to deliver the enforceable milestones listed in the 2016 Consent Order, Appendix B. Each year, EM-LA will allow the Contractor to participate in development of the milestone list for the next (upcoming) FY and the targets for the next two FYs as part of EM-LA's negotiations with NMED under the 2016 Consent Order, Section VIII, *Campaign Approach*. Any stipulated penalties assessed by NMED and/or

passed through by EM-LA as having been the responsibility of the Contractor will be non-reimbursable costs.

Other regulatory drivers include environmental permits, compliance agreements, and other agreements applicable to the EM work scope which are listed in Section J, Attachment J-16, *Environmental Permits, Compliance Documents, and Agreements*, and closure plans, Federal and State of New Mexico regulations, and other implementing documents. Although some of the environmental permits (such as Title V of the Clean Air Act) are issued to the LANL landlord as operator or owner/operator, others are issued jointly to LANL and the M&O Contractor. Regardless of who is designated as the permittee(s), the EM Contractor's legacy environmental cleanup activities must comply with the permit provisions, in accordance with Section J, Attachment J-16.

The DOE has other prime contractors that support ongoing activities at the LANL. The current prime contractors are listed in Section J, Attachment J-7, *Interfaces With Other Contractors*, as the expected interfaces needed.

Funding for the LANL EM legacy waste cleanup and remediation is through EM distribution channels. The LANL EM legacy waste cleanup and remediation focuses equally on reducing risks to workers, the public, and the environment.

C.1.2 Contract Purpose and Objectives

The purpose of the LLCC is to support EM-LA's mission work. The LLCC encompasses ongoing legacy above ground stored TRU waste disposition activities, ground and surface water monitoring and protection programs, groundwater contaminant plume investigation and evaluation including for hexavalent chromium and high-explosive contamination, aggregate area investigations and remediation activities, and facility (DD&D) activities. Specific objectives for the LLCC include the following:

- Protect, characterize, remediate (as necessary), and monitor the regional aquifer.
- Clean up legacy contaminated media and legacy waste sites at LANL and surrounding private and government-owned lands, including groundwater and surface water, to levels appropriate for the intended land use and in accordance with regulatory requirements.
- DD&D inactive, process-contaminated, and non-contaminated facilities at Technical Area (TA)-21 and TA-54 that impede the progress of the execution of environmental restoration (ER) activities.
- Retrieve, characterize, and prepare legacy MLLW and TRU waste for shipment off-site. The EM-LA Program manages the disposition of legacy waste generated between 1970 and 1998 and the newly generated waste, i.e., waste generated after fiscal year 1998, that is already within the EM operational control area at TA-54, Area G. NNSA is responsible for newly generated wastes that are outside of the EM operational control area at Area G. The EM Operational Control Concept to be implemented is described in Section J, Attachment J-6, *Interfaces with the NNSA Managing and Operating Contractor Systems and Services*.

- Transfer remediated sites to NNSA for long-term surveillance and monitoring as needed, to provide necessary safeguards and protection of workers, the public, and the environment. All required post-remediation monitoring and maintenance activities will be transitioned from EM to NNSA.

The scope of this Contract includes work scope in the following areas:

- Solid Waste Stabilization and Disposition. This work scope includes:
 - maintaining all above grade stored contact handled (CH)-TRU and other waste streams in a safe configuration until treatment, processing, and shipment of wastes is planned and authorized;
 - retrieving below grade stored CH-TRU for processing, characterization, and preparation for shipment;
 - maintaining an appropriate nuclear safety basis for the waste streams;
 - dispositioning MLLW;
 - treatment, management, characterization, storage, and disposal of excess EM radioactive and hazardous materials; and
 - supporting the disposition and storage of newly-generated TRU waste in TA-54 Area G.
- Soil and Water Remediation. This work scope includes:
 - compliance with the 2016 Consent Order's RCRA corrective action processes including work planning, investigation, evaluation, and remediation; interim measures;
 - groundwater compliance monitoring and specific plume investigation and remediation for hexavalent chromium and high-explosive contaminants;
 - surface water monitoring and protection activities including those for the National Pollutant Discharge Elimination (NPDES) Individual Permit (IP) for Stormwater, soil investigations and contaminant remediation in several aggregate area and project areas; and investigation, evaluation, and proposal of potential remedies in several material disposal areas; and
 - supporting demolition activities for radiological liquid waste facility structures and Delta-Prime (DP) West facility slabs at TA-21 and some of the facilities that are made available in TA-54 as CH-TRU is processed and facilities are excessed.

During the term of this Contract, the LLCC Contractor (hereby referred as the *Contractor*) shall interface with the other site contractors. The Contractor shall establish *Interface Agreements* in accordance with Section C.3.2.4 with the other DOE-Los Alamos contractors, as required. The Contractor will not be responsible for the performance of the other DOE-Los Alamos Contractors/Subcontractors, but will remain responsible for its own subcontractors working on the project.

The Contractor is to determine the specific methods of accomplishing the work and perform all work specified in this Contract. The Contractor shall ensure this work is performed safely and in compliance with all Federal, State, and local laws and regulations, Executive Orders, DOE Orders (and other types of directives that are listed in Section J Attachment J-1, *Requirements Sources and Implementing Documents* (*List*

A) and List of Applicable DOE Directives (List B)). The Contractor shall comply with and implement as necessary the documents listed in *Environmental Permits, Compliance Documents, and Agreements* listed in Section J, Attachment J-16. The Contractor shall also comply with and meet the commitments to Orders and Milestones with the regulators (both State and Federal) in the performance of this contract.

The Contractor shall support EM-LA in achieving its goals as described in the "DOE Office of Environmental Management FY15/16 Performance Agreement" (Section J, Attachment J-18). The goals pertinent to this PWS are:

- Goal 1: Improve Organizational Culture - Improve organizational culture to ensure that all work activities are appropriately scoped, analyzed for hazards, comprehensively planned to eliminate or mitigate those hazards, effectively performed by trained employees, and performed safely and correctly.
- Goal 2: Increase Efficiency/Improve Performance - Increase efficiency and improve performance to ensure the maximum cleanup value for every dollar invested in the EM Program under this Contract.
- Goal 3: Achieve Program/Project Results - Commitment to improve acquisition, contract, and project management.

DESCRIPTION OF PROJECT PERFORMANCE REQUIREMENTS

C.2 INCOMING CONTRACT TRANSITION

During the transition period, as specified in DOE-F-2003, Period of Performance, the Contractor shall perform those activities that are necessary to transition work from the current Los Alamos National Laboratory Legacy Cleanup Bridge Contract (LCBC). The Contractor shall perform the activities in a manner that:

- (1) ensures that all work for which the LLCC Contractor is responsible is continued without disruption;
- (2) provides for an orderly accounting of resources, responsibilities, and accountability in support of EM work scope from the LCBC-contractor,
- (3) provides for a complete and accurate reporting of cleanup and remediation work scope activities; and
- (4) ensures that all work is performed work in an efficient, effective, and safe manner.

The Contractor shall perform the transition activities listed in the Transition Plan and shall ensure all necessary personnel, including Key Personnel (Section H, Key Personnel) are on-site during the transition period, unless specifically directed otherwise by the Contracting Officer (CO). The LLCC Contractor shall brief workers, Federal staff, and stakeholders during the transition period on the Contractor's approach and commitments for accomplishing the PWS.

C.2.1 Transition Plan

The Contractor shall submit a *Transition Plan* for DOE approval within 15 days after the Notice to Proceed (NTP). The objectives of the *Transition Plan* are to ensure that

implementation of the Contract minimizes impacts on continuity of operations. The *Transition Plan* shall provide a description of transition activities, involved organizations, and transition schedule. The Transition Plan shall include a description of all activities necessary for the Contractor to assume full responsibility for the PWS no later than 90 days after NTP, including the following activities listed below. The Transition Plan shall include a detailed transition schedule with identified critical path.

In addition, the Plan shall include:

- A description of all necessary transition activities; to ensure uninterrupted operations and a status of all PWS elements.
- Coverage of key functional and matrix support areas during the transition period;
- Any changes from the LCBC Contractor's strategy for developing required documents (including licenses and agreements);
- A brief description of the LLCC Contractor organizations involved in transition and their role in the transition;
- Planned execution of Interface Agreements with other EM-LA contractors and necessary Memorandums of Understanding (MOUs) with outside support organizations (see Section J Attachment J-6, *Interfaces with NNSA Management and Operations Contractor Systems and Services* and J-7, *Interfaces with Other Contractors*);
- Schedule of transition activities; and,
- Required utilities and other transition activities such as retention of personnel, and adoption or revisions of required plans and procedures.

The Contractor shall perform due diligence to ensure that all transition activities are identified and completed during the Transition Period, e.g., interface or service-level agreements are to be put in place 90 days after the NTP (see Section J Attachment J-6, *Interfaces with NNSA Management and Operations Contractor Systems and Services*).

The Contractor shall put into place any *Interface Agreements* (Deliverable C.2.1) necessary between it and other DOE-Los Alamos contractors/subcontractors to define necessary interface points, scope boundaries, and/or provision of services, as required. A purchase order, subcontract, or other contracting vehicle between the contractors may dually serve as the necessary Interface Agreement where appropriate. Initial *Interface Agreements* finalized and signed by all applicable parties, shall be in place within 90 days after the NTP. The Contractor shall provide informational copies of all *Interface Agreements* to DOE as they are established.

The Contractor shall review the LCBC Contractor's existing procedures and plans during the transition. The Contractor shall determine a course of action for adopting, updating, and/or replacing the LCBC Contractor's existing procedures and plans while ensuring continuity of operations in accordance with applicable requirements. The Contractor shall describe the course of action in a *Continuity of Procedures and Plans* deliverable. Following any transition phase interim procedure and program revisions, permanent procedures and programs will be in-place and functioning as expected within one year of NTP.

C.2.1.1 Implementation of Human Resources Management Requirements

The Contractor's Transition Plan required above in Section C.2.1 shall include a description of the Contractor's implementation of human resource management consistent with Workforce Transition and Contractor Human Resources Management requirements as described in Section H, Clause H.4 through H.7, including:

- (a) Expected workforce composition and any immediate or anticipated workforce restructuring;
- (b) Identification of any existing issues under the National Labor Relations Act (NLRA) and its plan for engaging with any labor representatives;
- (c) A schedule for preparation and submission of any bargaining parameters requests;
- (d) Identification of any prevailing wage requirements, including any requirements under section 4(c) of the Service Contract Labor Standards statute as well as any NLRA requirements with respect to determination of wages and benefits;
- (e) Description of processes for handling labor standards determinations for work packages;
- (f) Define any obligations with respect to pension and post-retirement benefit plans;
- (g) A plan for identification and resolution of any legal issues regarding any of the above, including the Contractor's plan for engaging outside counsel as needed; and
- (h) A plan for communicating and engaging with DOE on these matters.

C.2.1.2 Implementation Plan for Information Technology and Cyber Security Requirements

The Contractor's Transition Plan shall include a description of the Contractor's implementation of information technology and cyber security requirements to correspond with the transition of the contract from the LCBC to the Contractor. This plan will include timeframes for separation of services, institution of new systems, and any continuation of access that is necessary to access the NNSA M&O Contractor systems as identified in Section J, Attachment J-6.

C.2.2 Transition Status Reports

The Contractor shall provide *Transition Status Reports* on a weekly basis of transition activities to EM-LA Field Office Manager and the Contracting Officer Representative (COR). The Contractor shall establish routine status meetings with the EM-LA Field Office Manager, COR, and other affected contractors to review transition activities and issues until the end of the Contract Transition Period. The Contractor shall raise issues, if any, to the Management Steering Committee (see Section C.3.2.2). The Contractor shall coordinate directly with the EM-LA Field Office, and other organizations and contractors to finalize any transition agreements required for the Contractor to assume full responsibility.

C.2.3 Permits and Memorandums

The Contractor shall evaluate the permits and memorandums and determine whether changes are necessary to support the Contractor's work under this contract and provide a plan as a transition deliverable for any changes. The plan shall include any necessary commitments to comply with the requisite permits or agreements. The Contractor shall execute the plan by implementing any document modifications within one year of NTP.

Section J Attachment J-16, lists current Environmental Permits applicable to EM-LA work scope (e.g., site-wide level RCRA permits, EM facility-specific air permits, and EM facility-specific Waste Water Land Application permits). With respect to any new permits, the Contractor and EM-LA agree to modify Section J Attachment J-16, to reflect such permits.

Section J Attachment J-16, also lists current MOUs, Memorandums of Agreement (MOAs), and other Agreements applicable to the EM work scope.

C.2.4 Identification of Material Differences

The Contractor shall identify any material differences in the systems, facilities, waste sites, waste volumes, property and services between what is described in this PWS and what actual conditions exist at the end of the Contract Transition Period. The Contractor shall prepare and submit a Statement of Material Differences to EM-LA, as a contract deliverable before the end of the transition period. If the Material Differences require revisions to the contract, the Contracting Officer will issue a request for proposal to reconcile the material differences with the Contract.

C.2.5 Property Inventory

All real and personal property currently accountable to the LCBC Contractor for contract performance will be provided to the Contractor. During the contract transition period, an inventory record of such property in the DOE Facilities Information Management System (FIMS) and incumbent contractor's personal property databases will be provided to the Contractor. Specifically, the following property acceptance requirements will be implemented:

- a. The Contractor must perform during the transition period a joint wall-to-wall physical inventory with the LCBC Contractor of all accountable high-risk and sensitive property during the transition period and accept full accountability for the high-risk and sensitive property at the end of transition.
- b. The Contractor must accept, at the end of transition, transfer of accountability for the remaining government-owned real and personal property not covered under paragraph (a), based on existing inventory records, on an "as-is, where-is" basis, or perform a wall-to-wall inventory within the transition period of the Contract. Any discrepancies from the existing inventory records shall be reported to the CO. As the formal inventories are completed, the Contractor shall assume responsibility and liability for subsequent losses and damages. If the physical inventory is not accomplished within the allotted timeframe, the LCBC Contractor records will become the inventory baseline.

- c. The Contractor shall work with DOE Property Manager, Fleet Manager and Realty Officer and provide the property and vehicle reports in accordance with Federal requirements listed in Section J, Attachment J-1.
- d. The Contractor property transition will include the furniture including desks, file cabinets, credenzas, book shelves, white boards and general area notice boards located both at the Pueblo Complex and the trailers located at Area-G (Government-Furnished Services and/or Information [GFS/I] facility leases).
- e. The Contractor shall include in the inventory those computers, printers, plotter, telephones, etc. that are taken over from the LCBC Contractor. The Contractor shall arrange for any necessary technical support as part of this contract.

C.2.6 Negotiated Site Services

The Contractor shall establish a formal *Interface Agreement* with the NNSA Management and Operations (M&O) Contractor describing how the Interfaces with the NNSA M&O Contractor Systems and Services listed in Section J, Attachment J-6 (Interfaces with M&O) will be performed and reimbursed throughout the Contract period.

C.2.7 Matrix of Personnel Interfaces (Zipper Plan)

The Contractor shall develop and maintain a *Matrix of Personnel Interfaces (Zipper Plan)* between Contractor personnel and EM-LA Personnel and provide updates to DOE within two (2) weeks of changes in the plan/matrix (see Section J Attachment J-2, *Summary of Contract Deliverables*).

C.2.8 Inter-Contractor Ordering and Financial Agreements

The Contractor shall develop the inter-contractor ordering and financial agreements that are necessary to support transition and Contract performance, and be responsible for the costs incurred under these agreements.

C.2.9 Assessment and Verification

The Contractor shall conduct a self-assessment of its completion of transition activities prior to the end of the transition period and support DOE with in-process verification of Contract transition completion.

C.2.10 Executive Summary

Within 2 days following NTP, the Contractor shall release on its own website a brief Executive Summary of its offer including the following elements:

- Name of Contractor including the identification of any Teaming Partners and Critical Subcontractors (if applicable) and a description of past performance and experience that each brings to the program
- Summary/Description of Contractor's Technical Approach (e.g., what do you plan to accomplish, cost savings anticipated)
- Organizational Structure and Identification of Key Personnel
- Commitments to the Community for the Term of the Contract

- Total Contract Value Commitment to Small Business Subcontracting (if applicable)
- Brief overview of Contract Schedule including anticipated completion dates of major campaign milestones

The purpose of this Executive Summary is to provide immediate release of relevant information to stakeholders and the public at large.

C.3 PROGRAM MANAGEMENT AND GENERAL REQUIREMENTS

The Contractor shall provide program management support to EM-LA to ensure successful and efficient implementation and reporting of cost and schedule performance of the contract activities in compliance with regulatory requirements. This includes: program management/technical planning; scope, cost and schedule control activities required to ensure compliance with applicable regulations; and the annual budget call, which is required for EM-LA strategic and financial planning and reporting.

The Contractor shall distribute costs for all personnel performing management and support activities specifically for the scopes of work identified in the other sections of Section C (C.4 through C.12, and C.14) to the corresponding CLIN for that particular scope of work. The Contractor shall assign only those costs for overall program management and support, as described in this Section C.3, to the CLINs associated with C.3.

C.3.1 Program and Projects

C.3.1.1 Scope, Schedule and Cost Baseline

The Contractor shall develop and maintain a Contract Performance Baseline in accordance with Section H.73, *Integrated Work Control Systems and Reporting Requirements*. As part of the Contractor's management of the Contract Performance Baseline (CPB), the Contractor shall be responsible for developing and maintaining a three-year rolling contract and regulatory baseline of milestones and near-term targets that will be used by EM-LA in negotiating the annual work planning process contained in the 2016 Consent Order. EM-LA expects the Contractor to directly support negotiation of these annual milestones with NMED. The Contractor shall provide the CPB input in the timeframes specified in the 2016 Consent Order to EM-LA. EM-LA will use this input as part of the evaluation of the Contractor's performance. The Contractor shall update and manage the CPB through contract changes based on changes derived from the Consent Order annual work planning process and other changes as a result of Contracting Officer direction.

C.3.1.2 Risk Management

The Contractor shall implement a risk management process and submit a *Risk Management Plan* to EM-LA for approval. The *Risk Management Plan* shall use the principles in the DOE Guide 413.3-7A, *Risk Management Guide*.

The *Risk Management Plan* shall also specify:

- The use of probabilistic risk analysis using Monte Carlo simulation and identify when Monte Carlo simulations will be run.
- Probabilistic risk analysis with sufficient analytical information to establish cost and schedule confidence.
- The contractor PWS execution risks and its quantification in the management reserve (MR) estimate which is documented and recorded separately from the federal contingency.

- Risk assessments identifying the magnitude of variance in conjunction with reported variances or baseline change proposals (BCP).
- The application of the life cycle phases defined for Environmental Restoration Cleanup Phases in Chapter 4, Types of Cost Estimates, of DOE Guide 430.1-1, *Cost Estimating Guide*, to the RMP.
- How the contractor shall maintain a risk register to manage remediation activities.

The Contractor shall use logic linked schedules compatible for use by EM-LA in conducting EM-LA program risk management assessments and analysis. The Contractor's identified program risks shall be linked to the activities in the schedule.

Risk and decision management activities shall be coordinated on a continuing basis with EM-LA.

C.3.1.3 Program Management

The Contractor shall implement and maintain an integrated program management system to support safe, efficient, and measurable progress. The program management system shall include the processes and implementing procedures necessary to plan, execute, and control all work performed under this Contract.

The Contractor shall develop and maintain a program management work control system in accordance with Section H.73, *Integrated Work Control Systems and Reporting Requirements* (April 2016), and Section H.16, DOE-H-2024 *Earned Value Management System* (OCT 2014).

EM-LA will continuously seek to improve LLCC performance under this Contract, and will actively seek effective Contractor program management and execution. The Contractor shall structure their program management system to provide early and continuous identification of opportunities to improve LLCC performance.

C.3.1.4 Environmental Projects

Although environmental projects are no longer required to implement DOE Order 413.3B, *Program and Project Management for the Acquisition of Capital Assets*, the Contractor shall apply the project management principles in DOE Order 413.3B to individual environmental projects using a graded approach.

The Contractor shall submit the 30%, 60%, 90% and final designs for any environmental projects to EM-LA for review and approval. The Contractor shall submit the as-built designs, long-term monitoring, and maintenance requirements to EM-LA for acceptance.

Within one year of the contract's expiration date, the Contractor shall communicate in writing to EM-LA regarding upcoming decision/hold points for the

project. For discrete projects that may continue beyond the period of performance, EM-LA will make a decision on whether to proceed or wait.

C.3.1.5 Progress/Status Reviews

The Contractor shall provide monthly *Contractor Progress/Status Report* as outlined in Section H.73, *Integrated Work Control Systems and Reporting Requirements* (April 2016).

The Contractor shall also report certain performance metrics and progress to EM-LA on a monthly basis to allow EM-LA input into various DOE business systems, including, but not limited to, the IPABS on the current schedule of inputs provided by EM (calendar) (Section J, Attachment J-11, GFS/I). The Contractor shall provide an initial contract baseline profile for the following EM corporate metrics and provide monthly reporting of performance against these EM corporate metrics:

- Periodic Monitoring Reports Planned and Submitted,
- D&D Debris and Remediated Soil Disposed,
- Remediation Complete (Certificates of Completion Received), and
- Site Remediated / Footprint Reduction

The Contractor shall also provide the planned EVM and monthly EVM data, as well as providing a list of milestones and a monthly update of schedule status to EM-LA on the same schedule.

C.3.2 Interfaces

C.3.2.1 National Nuclear Security Administration Los Alamos Field Office

The Contractor shall support EM-LA in interfacing with NNSA Los Alamos Field Office (NA-LA) in accordance with the existing agreements between EM and NNSA, including the *Memorandum of Understanding between National Nuclear Security Administration (NNSA) Los Alamos Field Office (NA-LA) and Department of Energy Environmental Management Los Alamos Field Office (EM-LA) for Transition of Legacy Environmental Cleanup Work at Los Alamos from NNSA to EM*, signed September 17, 2015 (Section J, Attachment J-16).

C.3.2.2 Management Steering Committee

The Contractor shall become a member of the Management Steering Committee (MSC) consisting of senior-level advisors from the site. The MSC provides a forum to facilitate the resolution of crosscutting issues and concerns during contract transitions, contract performance, and transition to any successor contractor(s) consistent with the NNSA-EM Memorandum of Understanding (MOU) for "Transition of Legacy Environmental Cleanup Work at Los Alamos from NNSA to EM", terms and conditions of the contract(s), and applicable law, regulation and DOE/NNSA policy. The MSC will provide a stabilizing influence and Members of the Steering Committee will ensure objectives of the LCBC

transition are being met. The Contractor shall participate in the associated implementing organizations including a Integrated Project Team (IPT), a Regulatory Interface Steering Committee (RISC), and an Executive Software Change Control Board (ESCCB) (See Section J, Attachment J-6) such that all work at LANL is coordinated between contractors and potential problems are resolved quickly.

The Contractor shall provide representatives to serve as members of the Committee and the associated organizations. The MSC includes members of EM-LA, NA-LA, the NNSA M&O Contractor, and the LLCC Contractor. The Contractor shall raise issues as applicable, as they are identified to the MSC, RISC, or IPT as appropriate. The MSC meets as needed, and the implementing organizations meet monthly, but expect that the frequency will decrease over time. The Management Steering Committee does not diminish authority of the designated EM and NNSA Contracting Officers (CO) responsible for the contract(s). Therefore, before consulting with the Management Steering Committee, parties must first address their concerns, issues, disagreements, and/or recommendations to the CO(s) for resolution. All contractual actions and technical direction under this Contract shall be provided by the designated Contracting Officer and Contracting Officer Representative, respectively.

C.3.2.3 National Nuclear Security Administration Management and Operating Contractor Interfaces

The Contractor shall interface with the NNSA M&O contractor

- (a) to obtain access to use existing site systems to perform EM work;
- (b) to obtain services that are required to allow performance of EM work;
- (c) to integrate programs including emergency management and safeguards and security;
- (d) to provide EM program information necessary to allow the NNSA M&O Contractor to develop and submit site reports; and,
- (e) execute shared responsibilities such as Airnet permitting which is split between NNSA and EM (11 stations and 3 stacks) program support.

The Contractor shall work to the interface agreements established in the Transition Plan (see Section C.2.1.). The parties acknowledge the services provided by the NNSA M&O contractor will be on a non-interference basis with the M&O mission. In addition, in the execution of this Contract work scope, the Contractor shall not interfere with nor negatively impact NNSA missions at LANL. The Contractor shall notify EM-LA of any potential interface or interference delays.

The Contractor shall support EM-LA and the NNSA M&O Contractor who is the lead and has the site-wide coordination role for all regulatory programs including:

- RCRA and the NMHWA and implementing regulations;
- Federal Facilities Compliance Order (FFCO) Site Treatment Plan; and
- RCRA under the FFCO.

The Contractor shall support EM as the lead for work scope under the Consent Order regulatory program (see Section J, Attachment J-16, *Environmental Permits, Compliance Documents, and Agreements*). Interfaces are identified in Section J, Attachment J-6, *Interfaces with NNSA Managing and Operating Contractor*.

For all other services not identified in Section J Attachment J-6, the Contractor has the flexibility to use any service provider that supports safe and efficient performance of the Contract

C.3.2.4 Interfaces with Other Contractors

The Contractor shall interface with other contractors including those listed in Section J, Attachment J-7 (Interfaces with Other Contractors). The Contractor shall establish Interface Agreements as necessary to establish working relationships. The Contractor shall regularly evaluate the Interface Agreements to identify additional updates, as needed, to ensure the EM-LA mission is being supported efficiently and effectively.

The Contractor shall coordinate with the other contractors when more than one contractor works in a shared workplace to ensure roles, responsibilities, and worker safety and health provisions are clearly delineated (see Section J Attachment J-7, *Interfaces With Other Contractors*).

If a reportable incident occurs involving personnel working under another contractor's authority (e.g. personnel injury, notice of violation, safety, security, quality, radiological) at LANL, any such incidents shall be reported by the cognizant contractor and will not contribute toward the LLCC Contractor's statistics or reflect negatively on the LLCC Contractor's performance.

C.3.2.5 Safeguards and Security

The Contractor shall interface with the NNSA M&O Contractor (Section J, Attachment J-6) and the NNSA security operations contractor, Centera. (Section J, Attachment J-7) regarding Safeguards and Security (S&S) responsibilities, in particular, regarding Contractor responsibilities, LANL security requirements.

The Contractor shall provide derivative classifiers to ensure information brought into the Contractor facilities, and subsequently used in the work will not require additional protections. Although the Contractor shall interface with the NNSA M&O Contractor and the LANL security operations contractor for Foreign National Visits and Assignments, Unclassified Visits, Area and Facility access, and Contraband Pass issuance necessary to access LANL on-site facilities, the Contractor shall implement the appropriate requirements within its facilities.

For EM operational controlled areas such as TA-21 and leased office spaces, the LLCC Contractor shall control access to the contractor's facilities and work locations to meet the Contractor's program needs and not to specifically implement physical security requirements. Access to information in operationally

controlled areas shall be commensurate with protection of normal business systems, and the Contractor shall protect the integrity of DOE information technology (IT) systems. The Contractor shall not need to interface with the NNSA M&O Contractor regarding TA-21 activities.

All information shall be protected within the LANL on-site facilities commensurate with the sensitivity level of the information and the designation of facility protection provided by the NNSA M&O Contractor and the Security Operation Contractor.

The Contractor shall obtain the necessary security training required by the NNSA M&O Contractor for those personnel accessing LANL on-site facilities. All LLCC Contractor personnel will not need access to LANL on-site facilities.

C.3.2.6 Central Characterization Program

The Contractor shall interface with the Central Characterization Program (CCP), as needed, only for those CH-TRU waste activities within TA-54 Area G for EM legacy wastes.

The CCP is tasked with characterizing and certifying Transuranic (TRU) waste for disposal at the Waste Isolation Pilot Plant (WIPP). Accordingly, the Contractor and CCP must comply with *Transuranic Waste Acceptance Criteria for the Waste Isolation Pilot Plant* (WAC) (recently issued Revision 8). The WAC also requires that the CCP produce documents, including a certification plan, that addresses applicable requirements and criteria pertaining to packaging, characterization, certification, and shipping of defense TRU waste to WIPP for disposal.

The Contractor having operational control of Area G has general management oversight responsibility for work performed by the CCP at TA-54, Area G. The Contractor is responsible for ensuring that CCP conducts its activities at TA-54, Area G in compliance with site requirements, as defined in a site-specific interface document between CCP and the Contractor.

The Contractor shall provide the necessary facilities and equipment for the CCP to perform their function within TA-54. The Contractor shall ensure that TRU waste meets the CCP requirements for shipment configuration and content before presenting it to the CCP process.

The Contractor is not responsible for the cost of CCP services for the TRU Waste certification program such as assay, radiography, EPA/NMED certification, Acceptable Knowledge determinations, etc.

The Contractor is responsible for the purchase of commodities (i.e. drums, solid waste boxes) purchased from the National TRU Program.

The Contractor is responsible for the cost associated with CCP onsite support such as access, work controls including safety and health physics, infrastructure

support, utilities to the CCP equipment, waste inventory tracking, and physical waste movement into and out of the CCP facilities or structures.

C.3.2.7 Tribal Nations

The Contractor shall support EM-LA in its communications with the Tribal Nations. The Contractor shall review Tribal documents prepared under the Los Alamos Pueblo Project (LAPP) run by EM-LA, such as the Pueblo human health risk assessments, prepare and present program briefings as necessary for the Pueblos, and support implementation of the agreements with the Pueblos (see Section J, Attachment J-16). LAPP includes the Pueblo de San Ildefonso, Santa Clara Pueblo, Jemez Pueblo, and Cochiti Pueblo.

The Contractor shall prepare all necessary access permits required for their work on Pueblo de San Ildefonso lands in accordance with the *“Memorandum of Agreement between the U.S. Department of Energy and the Pueblo de San Ildefonso”* and the three associated protocols:

- Protocol for Access to Pueblo Lands,
- Protocol for Protecting Confidential Pueblo Information, through review and release of data and reports, and
- Protocol for Inadvertent Discoveries of Native American Human Remains and Cultural Items.

EM-LA shall be the formal point-of-contract for submittal of access requests, information requests and reviews, and notifications to the Pueblo (Government-to-Government interface) unless EM-LA specifically authorizes the Contractor to act in this capacity.

C.3.2.8 Regulatory Interfaces

EM-LA is the regulatory lead for all activities related to the 2016 Consent Order, the IP for Stormwater, the legacy TRU waste disposition activities conducted within TA-54 Area G, and radiological regulatory authority for cleanup activities. The Contractor shall propose strategies and solutions to EM-LA for concurrence or approval. Changes in previously accepted strategies require re-submission and re-approval by EM-LA. The Contractor is NOT responsible for any waste management activities (specifically TRU) that are necessary for the NNSA mission at LANL.

Protocol for Interfaces with NMED Regulatory Bureaus and other State Agencies

The Contractor shall ensure a representative of EM-LA is with them when contacting NMED personnel by telephone and in person. At the direction of EM-LA, the Contractor can talk to and meet with NMED staff without EM-LA personnel being present. When meeting with NMED Bureau Chiefs and above, the Contractor shall ensure an EM-LA Representative is in attendance. Telephone calls and meetings shall be documented in an email (minimum) or

communications record provided to EM-LA within one week of the call or meeting.

The Contractor shall provide NMED Oversight Bureau access to facilities for inspection and meeting participation; implementation of agreements between DOE (EM-LA) and the New Mexico Environment Department Hazardous Waste Bureau (NMED-HWB) and other bureaus; and logistic and technical support for public meetings by the agencies, to include, but is not limited to Remedy Statement of Bases meetings.

The Contractor shall obtain any necessary operator permits and relevant regulatory agency determinations, including but not limited to the following:

- air permits from the NMED Air Quality Bureau,
- drilling and withdrawal permits from the New Mexico Office of the State Engineer (NMOSE),
- discharge permits (including land application of treated waters and introduction of tracers into either groundwater or surface water) from the New Mexico Environment Department Surface Water Quality Bureau (NMED-SWQB) and Ground Water Quality Bureau (NMED-GWQB), and
- underground injection control (UIC) permits from NMED-GWQB.

The Contractor shall provide all permit applications to EM-LA for review before submittal. The Contractor shall include NA-LA and the NNSA M&O Contractor in the review of permit applications and modifications for which NA-LA or the NNSA M&O Contractor are the responsible owners.

Protocol for Interfaces with U.S. Environmental Protection Agency

The Contractor shall make every attempt to have a representative of EM-LA with them when contacting EPA personnel by telephone and in person. EM-LA will authorize the Contractor to talk and meet with EPA staff without EM-LA participation, as necessary. The Contractor shall document telephone calls and meetings in an email (minimum) or in a communications record provided to EM-LA within one week of the call or meeting. These protocols are particularly relevant for the NPDES Individual Permit for Stormwater (IP).

The Contractor shall be responsible for obtaining the necessary operator permits and relevant determinations including but not limited to new source preconstruction authorization applications. The Contractor shall provide all permit applications to EM-LA for review before submittal.

C.3.2.9 Other Federal Agencies

The Contractor shall support implementation of the agreements with the New Mexico Department of Transportation (see Section J, Attachment J-16).

The Contractor shall interface with the U.S. Army Corps of Engineers (USACE) for a variety of activities applicable to the work scope including wetland management, floodplain assessment and notification, unexploded ordnance surveys, 401/404 permitting, etc. This may also include various tasks including *National Environmental Policy Act of 1969 (NEPA)*.

The Contractor shall notify the EPA of asbestos in EM-owned facilities planned for demolition (listed as *EM Owned Buildings and Structures* in the Facility Supplement to the *Memorandum of Understanding between National Nuclear Security Administration (NNSA) Los Alamos Field Office (NA-LA) and Department of Energy Environmental Management Los Alamos Field Office (EM-LA) for Transition of Legacy Environmental Cleanup Work at Los Alamos from NNSA to EM*, signed September 17, 2015.).

C.3.2.10 County of Los Alamos and City and County of Santa Fe

The Contractor shall interface with County of Los Alamos personnel as needed to execute the assigned work and provide support such as, but not limited to:

- provide support to EM-LA in meeting commitments;
- prepare presentations and briefings;
- respond to data calls and provide analysis;
- provide materials and publications;
- provide logistic support when requested; and,
- notify EM-LA (if not also in attendance) of commitments requested by the County of Los Alamos.

The Contractor shall provide field sample collection or screening at County projects located at former LANL structures and solid waste management units (SWMUs) to ensure no residual contaminants require disposal or mitigation, and shall provide this screening information to EM-LA and County personnel. In those rare circumstances where contaminants impact County land uses, the Contractor shall remove and dispose of contaminated media.

The Contractor shall implement the agreements with Los Alamos County (see Section J, Attachment J-16) including execution of the existing DOE Access Agreement for work on County Property and preparation of new site-specific access agreements for DOE and Los Alamos County approval to facilitate Contractor work.

The Contractor shall support EM-LA activities that may be required as a result of County economic development efforts and/or private property owner efforts on non-DOE property that may have previously been affected by LANL activities (see Section C.3.6.3, *Regulatory Management*).

The Contractor shall support preparation and meetings with the County of Los Alamos including monthly SWMU working group meetings, periodic Interdepartmental Review Committee (IDRC) meetings, periodic Public Works

coordination meetings, trail committee meetings, and ad-hoc project-specific meetings.

The Contractor shall interface with County and City of Santa Fe personnel as needed to support EM-LA such as: meeting commitments regarding the Buckman well field sampling, planning and execution; preparation of presentations, briefings; respond to data calls and provide analysis; provide materials and publications; and, provide logistic support when requested. The Contractor shall notify EM-LA personnel (if not also in attendance) of requested commitments by the County and City of Santa Fe.

C.3.2.11 Public and Stakeholders

The Contractor shall coordinate with the NNSA Public Affairs organization when communicating with the public and stakeholders in accordance with DEAR 952.204-75 Public Affairs (DOE 2000) and the *Memorandum of Understanding Between the National Nuclear Security Administration Los Alamos Site Office and the Environmental Management Los Alamos Field Office for Transition of Legacy Environmental Management Cleanup from NNSA to EM* such that the EM and NNSA messages are consistent. This coordination includes, but is not limited to stakeholder and oversight organization support, media relations, tours, visits, access to documents.

The Contractor shall support EM-LA in its communications with the public both in response to good-neighbor relationships and as required by regulatory permits (see Section C.3.6.3, *Regulatory Management*). The LLCC Contractor shall prepare presentations, briefings, data calls and analysis, materials and publications, and provide logistic support when requested. In addition, the contractor shall provide necessary technical support to the EM-LA Field Office and participate in stakeholder activities at the direction of the Contracting Officer. The Contractor shall support public meetings, such as the semi-annual public meetings for the IP for Stormwater.

Some of the current interfaces are:

- Northern New Mexico Citizen's Advisory Board (NNMCAB),
- Regional Coalition of LANL Communities,
- Natural Resources Damage Assessment Trustee Council,
- DOE public meetings,
- County and City of Santa Fe,
- Buckman Direct Diversion Board (BDDDB) and project staff,
- Private property owners, as needed, on non-DOE property that may have been affected by previous LANL activities (see Section C.3.6.3, *Regulatory Management*),
- Local and regional non-DOE land management entities and private property owners,
- Non-DOE local and regional property owners including the U.S. Forest Service (USFS), National Park Service,
- Other Non-Governmental Organizations.

The Contractor shall perform research into past LANL activities, available analytical data, and any other available information to assist the non-DOE entities in determining what controls, if any, must be put in place to protect the public and workers and to comply with environmental regulations when conducting non-DOE entity work on property formerly owned and used by LANL but now owned by the non-DOE entities. When necessary (i.e., when unexpected conditions arise), the Contractor will arrange for other support, such as radiation protection monitoring, sampling, waste management, and fencing.

The Contractor shall assist the non-DOE entities in determining what controls, if any, must be put in place to protect the public and workers and to comply with environmental regulations when conducting non-DOE entity work on property formerly owned and used by LANL but now owned by the non-DOE entities. When necessary (i.e., when unexpected conditions arise), the Contractor will arrange for other support, such as radiation protection monitoring, sampling, waste management, and fencing.

The Contractor shall work with local and regional non-DOE land management to ensure those projects and other actions are tracked with regards to their proximity to SWMUs and areas of concern (AOC) where contamination from former LANL activities may result in exposure to the public and/or compliance issues.

C.3.3 Safety Program Support

C.3.3.1 Integrated Safety Management System

The Contractor shall establish and maintain an Integrated Safety Management System (ISMS) for the contract performance period in accordance with applicable requirements. EM-LA will review and approve the Contractor's ISMS. EM-LA's expectations for safety standards are incorporated into Section J, Attachment J-1 *Requirements Sources and Implementing Documents (List A) and List of Applicable DOE Directives (List B)*.

The Contractor shall submit its *ISMS Description* for EM-LA approval. Until EM-LA approves the Contractor's ISMS Description, the Contractor shall adopt and implement the existing LCBC ISMS Description.

C.3.3.2 Environment, Safety, Health and Quality Program

The Contractor shall establish and maintain an integrated environment, safety, health, and quality (ESH&Q) program to ensure the protection of human health and the environment in performing the scope of this contract. The Contractor shall operate its ESH&Q program as an integral and visible part of Contract performance. The Contractor's ESH&Q program shall include effective work planning and execution, establish clear priorities, allocate the appropriate resources, establish performance measures, analyze performance, and take effective corrective actions. The Contractor shall develop and submit an *ESH&Q Program Plan* for EM-LA approval. Until EM-LA approves the Contractor's

ESH&Q Program Plan, the Contractor shall adopt and implement the existing LCBC ESH&Q program.

The Contractor shall flow the applicable ESH&Q requirements down to all levels of self-performed work and all tiers of subcontracted work performance, and promptly identify and correct areas of non-compliance and performance concerns on self-performed and subcontracted levels of work performance. Where applicable, *Site-Specific Health and Safety Plans* (SSHASPs) shall be developed for specific work scope activities.

Worker Safety and Health

The Contractor shall develop and implement a single Worker Safety and Health Program (WSHP) that eliminates, limits, or mitigates the identified workplace hazards in a manner that is necessary and sufficient to provide adequate protection of workers and is tailored to reflect the activities and hazards in particular work environments. The Contractor shall submit for EM-LA approval, a *WSHP* in accordance with the applicable requirements of 10 CFR 851.102. The Contractor may adopt existing LCBC WSHPs as an interim measure.

When more than one contractor works in a shared workplace, the Contractor shall coordinate with the other contractors to ensure roles, responsibilities, and worker safety and health provisions are clearly delineated.

The Contractor shall immediately report all job-related injuries and/or illnesses that occur in any EM-LA facility to the COR. Upon request, the Contractor shall provide a copy of occupational safety and health self-assessments and/or inspections of work sites for job hazards for its EM-LA facilities to the COR.

After receipt of notice from the Contracting Officer of any noncompliance with the terms of the WSHP, the Contractor shall immediately take corrective action to resolve the noncompliance.

In the event that the Contractor fails to comply with the terms and conditions of this section the CO may, without prejudice to any other legal or contractual rights, issue a stop work order halting all or any part of the work. Thereafter, a start order for resumption of the work may be issued at the discretion of the CO. The Contractor shall not be entitled to an equitable adjustment of the Contract amount or extension of the performance schedule on any stop work order issued under this special Contract requirement.

The Contractor shall also provide an ergonomic equipment program that will support the Contractor and approximately 60 Federal and federal support service contractor staff such as providing condition evaluations and order and install items such as Vari-Desks, ergonomic chairs, keyboards, and computer mice.

The Contractor shall also develop metrics and statistics on the safe execution of work and present this information (including injury rates and lost work day cases) to EM-LA on at least a monthly basis and shall prepare an annual (fiscal year) worker health and safety report for EM-LA by the end of the calendar year. The Contractor shall share this information with the NNSA M&O Contractor such that LANL can compile site-wide reports.

Occupational Medical Program

The Contractor shall provide occupational medical program services either directly or obtain them from the NNSA M&O Contractor, for the Contractor and its subcontractor personnel and for EM-LA and its support service personnel. If the Contractor obtains these services from the NNSA M&O Contractor, then the Contractor shall establish an Interface Agreement as part of the transition process [see Section C.2.1].

The Contractor shall describe the occupational medical program in the *Occupational Medical Program Plan* and submit the plan for EM-LA approval.

Chronic Beryllium Disease Prevention Program

The Contractor shall develop a Chronic Beryllium Disease Prevention Program that supplements and integrates into the WSHP for those few sites containing beryllium contamination.

Occurrence Reporting

The Contractor shall provide Occurrence Reporting and Processing System (ORPS) reporting in accordance with DOE Order 232.2, *Occurrence Reporting and Processing of Operations Information*, for events related to the performance of EM work scope. The Contractor shall identify their point-of-contact (POC) for ORPS to EM-LA and develop any necessary procedures and training. The Contractor shall ensure the requirements for reporting are flowed down to all subcontractors.

Mapping, Project Interferences, and Excavations

The Contractor shall obtain and provide specific EM activity mapping coordinates and provide through the NNSA M&O Geographic Information System (GIS) to maintain a single coordination of Contractor activities relative to existing and planned LANL structures, systems, and plans, with culturally sensitive areas, and known locations of contaminants. The Contractor shall obtain a subject matter expert review of project interferences through the NNSA M&O Contractor's Project Requirements Identification System (PRID) prior to authorizing any field activities (see Section J, Attachment J-6). The Contractor shall obtain an excavation permit through the NNSA M&O Contractor's Excavation Identification System (ExID) prior to conducting any excavations (see Section J, Attachment J-6). The LANL excavation permit process and the requirements are described in LANL Procedure 101-17, *Excavation/Fill and Soil Disturbance*. The Contractor

shall use the LANL Facility Locates program to verify areas for ground disturbances are free of identifiable utilities.

Utility Markings

Prior to conducting environmental field work on LANL, the Contractor will engage the NNSA M&O Contractor through the use of site procedures and requirements to call for the location mark out of buried utilities and structures and for the proper execution of hazardous energy controls and lockout/tagout processes. Prior to conducting environmental field work off of LANL property, the Contractor will engage the appropriate County utility department for the location of buried utilities and structures and the appropriate hazardous energy controls.

C.3.3.3 Environmental, Safety, and Health Reporting

The Contractor shall report all Environmental, Safety, and Health (ES&H) Reports as required in DOE Order 231.1B, *Environment, Safety and Health Reporting*, and DOE Order 435.1, *Radioactive Waste Management*. The Contractor shall flow down the applicable reporting requirements to all levels of self-performed work and all tiers of subcontracted work performance. The Contractor shall consolidate all information and serve as a single point of reporting to EM-LA for all environmental, safety, and health events and information.

The Contractor shall provide all required support for the preparation of annual and/or periodic consolidated LANL reports for all contract activities, including summaries of work performed, monitoring and assessment, compliance status, identification and resolution of problems, and other related activities. As part of the consolidated reporting activities, the Contractor shall provide the necessary support to multi-contractor LANL Site working groups responsible for report preparation.

C.3.3.4 Accident Investigation

The Contractor shall support all accident investigations for accidents on all self-performed and subcontracted levels of work performance, as required in DOE Order 225.1B, *Accident Investigations*. The Contractor shall establish and maintain readiness to respond to an accident; respond to all accidents; mitigate potential accident consequences; assist in preserving, collecting, and processing information and evidence from the scene of the accident; and provide all necessary support required to investigate the accident and support an accident investigation board.

C.3.3.5 Nuclear Safety Programs

Safety Culture

The Contractor shall provide and maintain a strong safety culture and a Safety Conscious Work Environment (SCWE), as required by DOE Policy 420.1, *Department of Energy's Nuclear Safety Policy*, DOE Policy 450.4A, *Integrated Safety Management Policy*, and DOE Guide 450.4-1C, *Integrated Safety Management System Guide*. The Contractor shall establish an employee concerns program as required by DOE O 442.1A, *DOE's Employee Concerns Program* and DOE O 442.2, *Differing Professional Opinions for Technical Issues Involving Environment, Safety and Health*, to encourage the free and open expression of employee concerns.

The Contractor shall set the expectation that employees have not only the right to raise concerns, but also the responsibility to raise concerns, and that they can do so without fear of retaliation. The Contractor shall take action to proactively address, or demonstrate adequate and effective response to, chilling effect (i.e., suppression of input, expertise, and opinions). The Contractor shall also demonstrate evidence of immediate, adequate and effective mitigation of substantiated allegations of harassment, intimidation, retaliation, and/or discrimination (for engagement in protected activity). The Contractor shall specifically focus on the three Safety Focus Areas of Leadership, Employee Engagement, and Organizational Learning.

The Contractor shall develop metrics that reflect the importance of the nuclear safety culture and provide *Nuclear Safety Culture Metrics Monthly Reports* and *Nuclear Safety Culture Metrics Annual Assessment Reports* to EM-LA. The metrics to be developed shall include direct safety metrics, worker involvement in all aspects of planning and work, the engagement of management, and the relationship between worker involvement and the successful execution of work without safety issue delays.

The Contractor's safety culture shall address recommended elements from the *Safety Culture Improvement Plan Report on Safety Culture and Contractual Language*, November 2015:

- Maintaining and implementing the approved Safety Culture Sustainment Plan;
- Improving trends in Corrective Action Program condition report (CR) corrective action effectiveness, self-identification, and percent of employees issuing CRs;
- Employee concerns performance which demonstrates responsiveness, employee satisfaction, and reduced recurrence;
- Conduct and effectiveness of management to employee engagement sessions (proactive vice reactive);
- Percentage/frequency of management time in the field, and engagements with employees within the workplace; and
- Attainment/maintenance of third party quality certifications (ASME NQA-1, ISO 9001, VIP, Baldridge, etc.).

EM-LA will be assessing the execution of a strong nuclear safety culture in the periodic contract evaluations. Although DOE Guide 450.4-1C, *Integrated Safety Management System Guide* is non-mandatory, the execution of best practices in the guide will be part of the EM-LA assessment and will include the three focus areas of leadership, employee engagement, and organizational learning. The Contractor shall coordinate their annual assessment report with NNSA M&O Contractor in the preparation of their nuclear safety culture assessment reports. Each report shall include a common conclusion section addressing the culture across the EM-LA legacy EM work scope.

Radiation Protection

The Contractor shall provide their own, fully compliant radiation protection program (RPP) for the EM work scope as described in this PWS. The RPP shall be submitted to and approved by EM-LA before conducting radiological work. The Contractor may begin radiological work using the NNSA M&O Contractor programs and RP personnel until the Contractor's RPP has been approved. The Contractor shall completely implement their approved radiation protection program within 9 months of contract award.

The Contractor's radiation protection program (RPP) shall include program management, oversight and performance assurance, procedures, qualification and training, operations and logistics support, radiological engineering, external and internal dosimetry, a personnel dosimetry program, dose reporting and records, exposure monitoring within facilities or work areas, bioassay program, periodic monitoring of work sites and potential release sites, radiological control equipment and personnel, monitoring equipment and calibration services.

The Contractor shall assume custody of, operate, maintain, replace, and calibrate the network of continuous air monitoring samplers (eCAMS) for reliably monitoring WIPP drums in TA-54, Area G.

Nuclear Safety

The Contractor shall provide and maintain a compliant nuclear safety program that is sufficient to address the EM program activities. The Contractor shall utilize and comply with the existing nuclear safety authorization and safety basis documents that currently exist (until EM-LA replacement documents are prepared and provided as GFS/I (Section J, Attachment J-11, GFS/I) as a separate and discrete Contract Change. NA-LA will be conducting review of the implementation of the safety basis documents that are currently in place; the Contractor must work through EM-LA for resolution of all identified review issues.

The Contractor is to maintain the *Existing Safety Basis for all Hazard Category 2 and 3 Facilities* until the hazards are reduced to a level that the Safety Basis can be revised and facilities can be down-graded. The Contractor shall provide all changes to Safety or Authorization Bases to EM-LA for submittal to NA-LA who currently is the Safety Basis Approval Authority for the existing BIO and TSRs in

Area G and to the EM HQ contact technical authority (Section J, Attachment J-11, GFS/I).

As part of the safety basis, the Contractor shall prepare a DOE Order 420.1C, *Facility Safety* Exemption from DOE-EM HQ for fire protection for the current TA-54 facilities. The Contractor shall support EM-LA discussions on the exemption. The Contractor shall implement the current exemption. DOE has provided a copy of the NNSA Fire Protection Exemption in Section J, Attachment J-11, GFS/I.

Criticality Safety

The Contractor shall provide and maintain a compliant Criticality Safety Program that is sufficient to address EM program activities. The Contractor shall utilize and comply with the existing nuclear safety authorization and safety basis documents that currently exist until EM replacement documents are prepared and approved.

C.3.3.6 Emergency Management

The Contractor shall obtain emergency management response services such as security response, fire and rescue services, police assistance and coordination, medical response, emergency event notifications, and emergency storm warnings for lightning and flash flooding, etc. from the NNSA M&O contractor, as listed in Section J, Attachment J-6, in accordance with the interface agreements established in the *Transition Plan* [see Section C.2.1].

The Contractor shall establish an *Emergency Management Plan* as a contract deliverable specific to the scope of work under this Contract. The Contractor's plan shall coordinate and be compatible with the NNSA M&O Contractor's emergency management program and be compliant with DOE Order 151.1C, *Comprehensive Emergency Management System*. This includes providing technical base documents (e.g., hazard surveys and emergency planning hazard assessments) and technical resources to support the activities of the emergency operations center, which is managed by NA-LA, as well as receiving data and information notices and alerts as required. The Contractor shall take over the three emergency planning and hazard analysis documents that are applicable to TA-54, Area G and review, maintain, modify, or validate, as necessary. The Contractor shall participate in the site drill/exercise program. The Contractor's *Emergency Management Plan* must be reviewed and accepted by EM-LA; EM-LA will be coordinating the review with NA-LA.

The Contractor shall establish a Continuity of Operations (COOP) Program per DOE Order 150.1A. The Contractor shall provide to EM-LA as a Contract deliverable a COOP Plan and a Continuity Readiness Assurance Plan, which must be coordinated and compatible with the NNSA M&O Contractor's plans. The Contractor shall define the COOP Program to (a) shutdown environmental remediation activities to a safe walk-away condition and (b) shutdown CH-TRU operations and establish and maintain an absolute minimum safe (min-safe)

shutdown condition. Min-Safe does NOT include a minimum regulatory compliant condition (e.g., RCRA weekly surveys).

The Contractor shall also provide an annual Emergency Readiness Assurance Plan for assessing the ability to respond to emergencies related specifically to the EM work scope activity related emergencies.

C.3.4 Environmental Program Support

C.3.4.1 Environmental Management System

The Contractor shall integrate with the NNSA M&O Contractor who maintains the LANL-wide Environmental Management System (EMS), and provide appropriate environmental data inputs (see Section J, Attachment J-6).

The Contractor shall provide status and updates of environmental field activities and plans, of environmental investigations and remediation, of environmental data and evaluations, and of surveillance activities and results for inclusion in the site-wide Annual Site Environmental Report (ASER) prepared by the NNSA M&O Contractor. The Contractor shall participate in the product peer review of this NNSA M&O Contractor document (five volumes), which typically is conducted annually in August and September.

Product peer review is the currently performed and expected future process for independent review of documents by individuals not involved in the development of the document to ensure the document meets requirements and is technical accurate and complete. This review part of the quality assurance requirements expected of all contractors. The Contractor shall provide EM-LA the opportunity to fully participate in this review before documents are finalized.

C.3.4.2 Sample Management Program

The Contractor shall establish a Sampling Management Program for the planning necessary for sample collection, limited on-site analyses for field screening only, field collection of samples, chain-of-custody controls, sample preservation, sample packaging and shipment for groundwater, surface water, soil, and debris sampling associated with EM-LA work scope. The Contractor shall include the development of *Standard Operating Procedures for Sampling Management*, in the program, and submit to EM-LA for acceptability within 90 days of NTP. The Contractor shall submit significant changes to these procedures to EM-LA for acceptability review.

C.3.4.3 Environmental Sustainability

The Contractor shall establish an environmental sustainability program in accordance with the associated Section H clauses and is appropriate for the execution of work scope under this contract. The Contractor may coordinate with the NNSA M&O Contractor for shared support with CO approval.

C.3.4.4 Human Health and Ecological Risk Assessment Activities and ECORISK Database Maintenance

The Contractor shall establish and maintain a risk-based Human Health and Ecological Risk Assessment Program including integration, methodology development, and communication activities for human health and ecological risk assessments conducted for each of the cleanup activities to facilitate the regulatory acceptance of deliverables and translate to more reliable data interpretation, quicker review cycles, and easier contractor oversight. The Contractor shall integrate any necessary program change reviews with the NNSA M&O Contractor to support a single LANL site-wide system for multiple purposes across LANL. The Contractor shall contribute and include soil screening levels and screening action levels to work plans and reports for several exposure scenarios. The Contractor shall identify critical data gaps on the watershed scale, identify major contributors to watershed source terms, model ecosystem health, interpret significance of transport modeling results, and evaluate ecosystem health in the watersheds. The Contractor shall interface with the NNSA M&O Contractor for a nest box monitoring network in the canyons of the Pajarito Plateau (Section J, Attachment J-6).

The Contractor shall implement DOE Order 458.1, *Radiation Protection of the Public and the Environment*, in the remediation activities. The Contractor shall coordinate with the NNSA M&O Contractor such that the radiation protection program is not in conflict with NNSA M&O Contractor's site-wide implementation plan. The Contractor shall conduct technical reviews of tribal risk assessments and work plans. The Contractor shall also develop ecological preliminary remediation goals (EcoPRGs). The Contractor shall develop an interface agreement with the NNSA M&O for radiation protection program and provide a copy to EM-LA.

The Contractor shall maintain the ECORISK Database which contributes ecological screening levels (ESLs) used to assess potential ecological risk for a SWMU, AOC, consolidated unit, or aggregate. This database shall include screening levels for use by the projects, to identify chemicals of potential ecological concern and receptors to investigate in the field and all of the supporting information including literature sources, exposure parameters, uncertainty factors, equations, and calculation results to document the derivation of ESLs. The Contractor shall provide updates based on changes in LANL, NMED, DOE, or EPA guidance; changes to transfer factors and other components of the calculations as required, and revised or new toxicity information from scientific literature.

C.3.4.5 Potential Release Site Database

The Contractor shall manage and maintain the Potential Release Site (PRS) Database, the electronic repository which contains official archived information regarding the location, description, spatial PRS boundary data, operational history, status, and investigation activities specific to each SWMU and AOC. PRS includes information, related deliverable information, and related

investigation and remediation activities. The Contractor shall provide information requested, communicate information to *Final Site-Wide Environmental Impact Statement for Continued Operation of the Los Alamos National Laboratory (SWEIS)*, LANL, DOE/EIS-0380, May 2008, personnel for inclusion into the annual update of the *SWEIS Yearbook* (Section J, Attachment J-7).

The PRS Database provides a dynamic resource that supports regulatory reviews, regulatory analyses, reporting activities, permitting activities, management activities and that accommodates a variety of information requests to support the activities of (DOE) (HQ and the Los Alamos Site Office), other Organizations such as LANL Legal Counsel, permits and requests for permit modifications, individual investigation and remediation projects, and institutional ExID and Project Requirements Identification System (PRID) requests.

The Contractor shall use the PRS Database to provide annual updates to the 2016 Consent Order Appendix A and identify the current status by progress in the RCRA process, by campaign progression, and by NMED acceptance of activities. The Contractor shall provide these annual updates to EM-LA on a schedule before the end of each Fiscal Year and updated following Congressional appropriation bill approval, as a minimum, in accordance with the 2016 Consent Order, Section VIII.C, Campaign Approach, Annual Planning Process.

C.3.4.6 Land Transfer

The Contractor will support land transfer activities (such as independent verification requirements), as appropriate, under Public Law (PL) 105-119 for the conveyance/transfer of land, as directed by EM-LA. Because NA-LA is the lead for land transfer, EM-LA shall coordinate with NA-LA and shall specify to the Contractor appropriate cleanup levels to be implemented in cleanup activities on transfer parcels, specifically at TA-21 and Rendija Canyon parcels which are the only remaining parcels destined for land transfer by NA-LA to the County of Los Alamos.

C.3.4.7 Other Environmental Sampling and Monitoring Programs

The Contractor shall support Nest Box Monitoring Network activities in the canyons of the Pajarito Plateau. This program has been expanded over the last several years to provide information to the Human Health and Ecological Risk Assessment Programs of both the previous EM contractor and the NNSA M&O Contractor. The Contractor shall participate as requested in the sample collection and analysis and provide results for other site-wide reports (such as ASER).

The Contractor shall collect and provide environmental sampling data and other information collected that is related to soil, air, biota surveillance and monitoring to the NSNA M&O Contractor such that it can be used in assessing the impacts of operations on the environment and natural resources.

C.3.4.8 Other Environmental Reporting Programs

The Contractor shall collect non-radiological air emission information during the conduct of the EM work scope activities such as decontamination, demolition, excavation, contaminant disturbances, sample collection, waste movement, temporary power generation, soil-vapor extraction, equipment cleaning, etc. The Contractor shall coordinate the development of non-radiological air permitting applications, permits, and reports per the Clean Air Act (CAA), New Mexico implementing regulations, and reporting per the National Emission Standards for Hazardous Air Pollutants (NESHAP) with the NNSA M&O Contractor (who has primary responsibility for LANL). The Contractor shall coordinate the preparation and submittal of applications, permits, and reporting with the NNSA M&O Contractor such that LANL site-wide permits and reporting is correctly administered. See the Airnet information and coordination with the NNSA M&O Contractor in Section J, Attachment J-6, that includes eleven Airnet stations between TA-21 and TA-54 Area G and three stacks at TA-54, Area G. The Contractor shall develop the necessary documents specific for this contract's activities and provide these documents to the NNSA M&O Contractor for coordination or submittal to the appropriate regulatory authority as follows:

- construction new source review permit applications shall be submitted to the NMED-Air Quality Bureau (AQB) by the Contractor;
- no permit required determinations shall be submitted to the NMED AQB by the Contractor;
- exemption requests shall be submitted to NMED AQB by the NNSA M&O Contractor;
- asbestos/demolition notifications shall be submitted to the NMED AQB by the Contractor, the Contractor shall copy the NNSA M&O Contractor, and the Contractor shall coordinate quarterly reporting with the NNSA M&O Contractor to the NMED-HWB; and
- Title V operating permit revisions necessary for EM work scope shall be coordinated and submitted to the NMED AQB by the NNSA M&O Contractor.

The Contractor shall collect radionuclide (or radiological) air emission information from the necessary EM work scope activities and locations of EM work scope required by NESHAP and provide to the NNSA M&O Contractor for consolidated LANL site-wide reporting. The Contractor shall coordinate and prepare any necessary pre-construction approval requests and submit to the NNSA M&O Contractor for submittal to the USEPA Region 6.

The Contractor shall collect data and records for work scope activities under this contract on refrigerants, volatile and semi-volatile chemicals used, toxic substances/chemical inventory, insecticides and fungicides and rodenticides, cultural resource impacts and use, emergency planning communications, etc., to support site-wide compliance reports, etc., required by the Toxic Substances Control Act; Federal Insecticide, Fungicide and Rodenticide Act; Emergency Planning and Community Right-To-Know Act of 1986; and cultural resource

management laws and regulations. The Contractor shall enter their chemical usage information into the LANL Chem DB database. The Contractor shall provide the necessary information to the NSNA M&O Contractor, as necessary to meet consolidated LANL site-wide report schedules and Administrative Records requirements. The Contractor shall participate in the product peer review of the necessary reports.

The Contractor shall conduct site-wide monitoring, surveillance, and reporting for liquid effluents, drinking water, storm water, and groundwater flows or discharges only from EM sites or facilities to demonstrate compliance with the Clean Water Act, Safe Drinking Act, New Mexico Water Quality Control Commission regulations, and other water quality requirements. The Contractor shall coordinate implementation of the annual sampling plan for County of Los Alamos drinking water supply wells on LANL property (See Sections C.5 and C.7). The environmental monitoring program shall provide for on-site effluent monitoring; both on- and off-site environmental surveillance to measure both radiological and non-radiological constituents; and both on- and off-site erosion control monitoring, as required for specific contractor operations. Monitoring and surveillance includes both the continuous recording of data and the collecting of soil, sediment, water, air, and other samples at specific times. The Contractor shall evaluate and analyze this data, as requested. The Contractor shall coordinate the EM activities with the NNSA M&O Contractor activities such that the program is effectively managed for DOE.

C.3.4.9 Waste Management

The Contractor shall establish a waste management program for all environmental management waste streams that complies with DOE Order 435.1, *Waste Management*, requirements, U.S. Department of Transportation (DOT) requirements, and NMED requirements. This program shall include any program certification requirements such as for access to the National Nuclear Security Site (NNSS) in Nevada and to WIPP for TRU wastes. The Contractor may negotiate for temporary use of the NNSA M&O Contractor's certification program until the Contractor's program is established.

C.3.5 Quality Assurance Program

C.3.5.1 Quality Assurance

The Contractor shall establish and maintain a quality assurance (QA) program that meets the *Quality Implementation Plan (QIP)*, EM-LA, P 00.02, Revision 0, October 27, 2015, and the *EM Quality Assurance Program*, EM, EM-QA-001, Revision 1, June 11, 2012, and meets the applicable requirements specified in H.66, *Quality Assurance (QA) for Work Affecting Nuclear Safety*. The Contractor shall submit the *Quality Assurance Plan (QAP)* to EM-LA within 90 days of NTP for review and acceptance. EM HQ also will participate in the review and acceptance of the QAP.

C.3.5.2 Training

The Contractor shall provide or obtain sufficient training to maintain the competencies necessary for all personnel assigned to the Contract work scope. The Contractor shall obtain mandatory training services from the NNSA M&O Contractor as listed in Section J, Attachment J-6. The Contractor shall flow the applicable training requirements down to all levels of self-performed work and all tiers of subcontracted work performance. The Contractor shall retain training records to support verification of personnel training as required.

The Contractor may obtain certain training programs from the NNSA M&O Contractor. This may include, but not be limited to the following:

- General Employee Training
- Training for information and other systems managed by M&O.

The Contractor shall ensure that all employees attend safety and security training once within 30 calendar days of beginning performance on this Contract and at least once annually thereafter. Contractor shall ensure that every employee is instructed to safely and competently perform the work.

C.3.5.3 Standard Operating Procedures

The Contractor shall establish or adopt, existing SOPs for obtaining quality samples of various media. The Contractor shall ensure the SOPs are in accordance with applicable NMED and regulatory requirements. The Contractor shall submit the all *SOPs for sampling and future revisions* as deliverables to EM-LA for review and acceptance prior to implementation.

C.3.5.4 Document Control

The Contractor shall develop, implement and maintain comprehensive and sound Document Control processes ensuring efficient tracking, retrieval, revision control and distribution of documents, including drawings. The LLCC Contractor shall provide a systematic and deliberate approach to the management of documents; define the points at which Documents are Controlled, and makes documents available electronically via the Electronic Document Management System (EDMS).

C.3.5.5 Records Management

The LLCC Contractor shall manage all records (regardless of media) generated/received in the performance of the Contract, including records obtained from a predecessor contractor [historical records maintained on-site and at a FRC] in accordance with:

- 44 U.S.C. 21;
- 44 U.S.C. 29;

- 44 U.S.C. 31;
- 44 U.S.C. 33;
- 44 U.S.C. 36;
- 36 CFR Chapter XII, Subchapter B, *Records Management*;
- DOE O 243.1B, "*Records Management Program*";
- Presidential Memorandum M-12-18, "Managing Government Records";
- and
- Any other DOE requirements as directed by the Contracting Officer.

The Contractor shall be responsible for records management and document control in support of its operation, which includes historical record collections stored on-site and at the FRC. All records subject to the management of the Contractor (e.g., records in support of its operation), are to be inventoried, scheduled and dispositioned in accordance with Federal laws, regulations, DOE Directives and approved schedules, and an approved Records Management Plan. The Records Management Plan (see Section J, Attachment J-2, Summary of Contract Deliverables) shall be submitted to the Government for approval within 60 days of the NTP, and updated thereafter when changes occur.

The Contractor shall develop and implement records management controls to ensure that the identification, maintenance and disposition of all records (regardless of media), including electronic and email, are managed utilizing an Electronic Records Management System (ERMS) in accordance with Federal and DOE requirements and guidelines for all records.

The Contractor shall develop and implement a process to ensure that electronic records submitted to the Records Management system are scanned or converted to meet National Archives and Records Administration (NARA) requirements. The Contractor shall develop an Image Quality Statistical Sampling Plan that is based on an industry standard (See Section J, Attachment J-2), and submit to EM-LA for approval within 60 days after NTP. All records (regardless of media) must be scheduled, arranged, and cutoff by collections (e.g., case file, project, chronologically, numerically, alphabetically, etc.) for proper disposition in accordance with the NARA-approved DOE Records Disposition Schedules, <http://energy.gov/cio/guidance/records-management/disposition-schedules>. The Contractor shall provide a web search capability for the ERMS to allow record searches. This search capability shall be made available to DOE and other site EM contractors as authorized by the Government.

The Contractor shall ensure records identified as QA records under *Quality Assurance Requirements for Nuclear Facility Applications*, American National Standards Institute (ANSI)/American Society of Mechanical Engineers (ASME), Nuclear Quality Assurance (NQA)-1-2008, March 2008, with 2009 Addenda, are:

- categorized (lifetime/non-permanent);
- managed in accordance with NQA-1-2008 and 36 CFR Chapter XII, Subchapter B; and
- maintained for traceability to the applicable item, activity or facility.

The Contractor shall develop and implement a plan to incorporate the processing of newly generated and historical records from potentially contaminated areas and those records stored in records vaults to ensure the prompt transfer of records to the records vault and/or release for storage at an FRC/NARA. Contaminated records, depending on retention period, can be reproduced to allow for retention of the copy as the "record" and destruction of the contaminated copy.

The Contractor shall respond to records management data calls by NARA and DOE, as requested and process record requests for the Freedom of Information Act (FOIA), the Privacy Act, the former worker medical screening program, the Chronic Beryllium Disease Prevention Program, congressional inquiries, legal discoveries, and other record requests (i.e., training, personnel, exposure, project, incident reports, visitor logs, etc.).

The Contractor shall ensure records that contain personally identifiable information (PII) are maintained in Privacy Act Systems of Records, in accordance with Federal Acquisition Regulation (FAR) 52.224-2, Privacy Act, and DOE Order 206.1, *Department of Energy Privacy Program*.

The Contractor shall implement records management requirements for the creation, maintenance and storage of audiovisual records in accordance with 36 CFR § 1237 and 36 CFR § 1235.42 and any updated NARA requirements/guidance.

The Contractor shall develop and implement a vital (also known as essential records) records program, including a vital records inventory in accordance with 36 CFR § 1223, Managing Vital Records, and DOE Order 243.1B, *Records Management Program*.

The Contractor shall develop and implement site-wide recordkeeping requirements that reflect adequate and proper documentation of all Contractor (and subcontractor) records generated / received (regardless of media) in the performance of their contracts as required by Federal regulations found in 36 CFR, Subchapter B, *Records Management*. The Contractor shall manage records contained in electronic information systems by incorporating recordkeeping controls into the system or export the records into the current ERMS in accordance with 36 CFR Part 1236, Electronic Records Management. The Contractor must design and implement migration strategies to counteract hardware and software dependencies of electronic records whenever the records must be maintained and used beyond the life of the information system in which the records are originally created and captured. The Contractor shall provide a list of all electronic information systems to DOE annually utilizing the format provided by DOE, including Contractor-owned records.

The Contractor shall develop and maintain up-to-date EM records inventories, as well as EM program file plans and systems that provide for the identification, location, arrangement, assignment of disposition authority, and retrieval of all categories (record series) of records created and received.

The Contractor shall maintain and preserve all records, including the historical records collection (regardless of media) stored on-site and at the FRC. The Contractor shall be responsible for receipt of records, scheduled verification/validation or scheduling of records, importing into the ERMS, storage/preservation, indexing (paper), retrieval, copying and final turnover to DOE.

The Contractor shall develop and implement a Records Disposition Plan, which shall include processing records to storage (e.g., on-site, FRC) and the destruction process for records and information content. The Contractor shall disposition all records in accordance with the NARA-approved DOE Records Disposition Schedules and applicable federal laws and regulations. Disposition activities include scanning to electronic (permanent to NARA), transferring of paper records to an FRC, maintain electronically in an ERMS, and/or destroy once retention has been met and proper approvals obtained.

- 1) Ensure proper DOE Records Disposition Schedule assigned, box, index, complete transfer paperwork, and obtain DOE Records Management Field Officer (RMFO) approval prior to sending transfer paperwork and/or shipping inactive temporary records to a FRC and/or permanent records to the NARA.
- 2) Complete destruction certificate and submit to DOE RMFO for review and appropriate approvals prior to destruction.

C.3.5.6 Issue Management and Tracking

The Contractor shall provide an issue management system that effectively documents issues, documents corrective action plans, and documents issue closure. The Contractor shall ensure EM-LA can utilize the system as well as the Contractor.

C.3.6 Distributed Technical Management and Support

C.3.6.1 Program Management

The Contractor shall provide the necessary program management, oversight and control necessary to effectively execute the contractor work scope. **The Contractor shall distribute this support to each PWS section as necessary to execute that section.** The Contractor shall not use Program Management for one segment to manage another segment, i.e., from C.6, Drilling, for managing C.4, CH-TRU.

C.3.6.2 Technical Support

The Contractor shall provide technical support to ensure that a strong technical basis for decision-making has been established and implemented to support execution of work. Technical support includes investigation into commercial and DOE technologies applicable to remediation problems, white papers on

regulatory and technical issues relative to this contract EM work scope, obtaining independent subject matter expert support, and documenting information upon which decision-making is based. In addition, the Contractor shall develop strategies to improve work product quality, consistency, and cost effectiveness

The Contractor shall provide necessary technical support including for technology development including analytical analyses and for technical training, conferences and papers.

C.3.6.3 Regulatory Management

The Contractor shall comply with the applicable regulatory and other requirements in the performance of work under this contract including:

- Environmental laws, regulations, and executive orders (Section J, Attachment J-1, List A),
- Environmental state and local requirements (see Section C.1.9),
- DOE Directives (see Section J, Attachment J-1, List B),
- Existing permits (see Section J, Attachment J-16),
- Existing regulatory documents (see Section C.1.12), and
- Existing Site management documents (see Section C.1.13).

The key list of applicable regulatory and other requirements is identified in this section. This list is inclusive and not exclusive; the Contractor shall comply with all of the necessary and applicable Federal, State, and County of Los Alamos regulations. The Contractor shall integrate across the programs to ensure that deliverables are met, effective use of resources is provided, rework is minimized, required sequences are maintained, and resultant costs are minimized.

The Contractor shall prepare and submit to EM-LA and subsequently to either NMED or EPA all required regulatory and supporting documentation necessary to obtain regulatory approvals necessary to complete all work under this Contract. This document may include permits from one NMED bureau necessary to support approval of a work plan by another NMED bureau. In the case of the regulatory documents for which the NNSA M&O Contractor is responsible (such as the Hazardous Waste Facility Permit), the Contractor shall support the developing of the documents by providing the technical information and data regarding EM-LA activities, as necessary, to the NNSA M&O Contractor.

The Contractor shall proactively work with EM-LA to resolve technical issues arising out of regulator comments and direction.

NOTE – regulators may provide permittee direction where the Contractor has permit primacy, but may not provide direction that infringes on this contractual relationship with EM and EM-LA.

C.3.6.4 Permits and Compliance Documents

The Contractor shall comply with, or assist the Government as appropriate with, all applicable site environmental permits and compliance documents, including supporting reapplications as necessary. The current permits and compliance documents are included in Section J, Attachment J-16. The Contractor shall pay all associated fees and filing costs.

The Contractor shall support (after appropriate coordination with all involved LANL entities) site-wide level regulatory reports, consent order and agreement tracking and closure information, and site-wide permit applications (including permitting operations or facilities included in the Site Treatment Plan). The Contractor shall maintain the RCRA Administrative Record and utilize the existing Information Repository and RCRA databases for all 2016 Consent Order work scope and provide all necessary other RCRA records to the NNSA M&O Contractor in a timely and routine manner to allow the maintenance of the RCRA Administrative Record under the appropriate permit.

NOTE: The Contractor is only responsible for facility-specific regulatory compliance, record keeping, and permit applications at facilities the Contractor manages.

Facility-specific issues or actions related to current or ongoing facility-specific permit applications, releases to the environment, and compliance issues are the responsibility of the contractor managing the facility.

Although not specifically regulatory in nature, the Contractor shall provide access to facilities, documents, and meetings to the New Mexico Environment Department, Oversight Bureau to allow EM-LA to meet the Agreements-in-Principle (AIP) - EM-LA will have LANL lead for managing the AIP and associated funding instrument. This effort is with the New Mexico Environment Department for providing non-regulatory oversight of EM legacy cleanup.

Although not specifically a requirements document, the 2012 *Framework Agreement, TA-54, MDA-G Transuranic Waste Removal*, establishes the relative priorities of each of the work segments under this contract. The Contractor shall comply with these priorities as follows:

- a) Surface-stored combustible CH-TRU shall take precedence on the subsequent activities – as EM directs through the program splits by Program Baseline Summaries (PBSs) identified in this contract.
- b) Groundwater protection activities
- c) Surface water protection activities
- d) Protection of drinking water supplies

Section J, Attachment J-16, has various existing agreements of mutual interest and involvement by NA-LA and EM-LA and designates NA or EM as the predominant lead on behalf of DOE. NA-LA and EM-LA agree to review each

agreement, jointly determine warranted revisions, if any, and prepare draft revisions of each agreement instrument for subsequent review and approval by appropriate NNSA and EM management.

To the extent that any listed agreement requires DOE funding, and until such time as a revised / new agreement is in place, NA-LA and EM-LA agree to continue their respective funding amount or fair share amount consistent with recent past practice to the fullest extent legally practicable.

Although the Contractor will not have been a party to signing these MOUs/MOAs, or agreements; the Contractor shall conduct business to comply with or allow EM-LA to comply with these documents.

C.3.6.5 Environmental Services

The Contractor shall support an environmental monitoring, analysis, and assessment program, to detect impacts of EM operations and to comply with DOE orders, regulations, and agreement requirements and coordinate with the NNSA M&O contractor (Section J, Attachment J-6) to prevent duplication of monitoring efforts and ensure the LANL site monitoring program is technically based and adequate to identify impacts from operations.

The environmental monitoring program shall provide for on-site effluent monitoring; both on- and off-site environmental surveillance to measure both radiological and non-radiological constituents; and both on- and off-site erosion control monitoring, as required for specific contractor operations. Monitoring and surveillance includes both the continuous recording of data and the collecting of soil, sediment, water, air, and other samples at specific times. Evaluation and analysis of such data will be performed, as necessary. Further, the Contractor shall install additional or modify existing monitoring locations as required or requested by DOE and/or regulatory agencies. The Contractor shall also conduct other monitoring, sampling, or inspection work as required by existing or future agreements with DOE or regulatory agencies.

C.3.6.6 Habitat and Cultural Resource Management

The Contractor shall comply with the following program plans and shall assume applicable responsibilities in these plans to comply with the Endangered Species Act for candidate species on the LANL, e.g., the Mexican spotted owl, in the execution of EM work scope.

- *Threatened and Endangered Species Habitat Management Plan for Los Alamos National Laboratory*, LANL, LA-UR-14-21863, 2014,
- *Biological Resources Management Plan for Los Alamos National Laboratory*, LANL, LA-UR-07-2595, April 2007,
- *Biological Assessment of the Continued Operation of Los Alamos National Laboratory on Federally Listed Threatened and Endangered Species*, LANL, LA-UR-06-6679, 2006,

- *A Plan for the Management of the Cultural Heritage at Los Alamos National Laboratory*, LANL, LA-UR-04-8964, March 2006 (see Section J, Attachments J-24),
- *Candidate Conservation Agreement with the U.S. Fish and Wildlife Service* (Section J, Attachment J-16).

Work regarding habitat and cultural resources shall be coordinated with NA-LA and the NNSA M&O Contractor to ensure that EM activities are performed in accordance with the plan interpretations and that the controls are acceptable to EM-LA. Work conducted for cultural resources compliance shall be performed by a professional archeologist meeting the Secretary of the Interior standards.

C.3.6.7 Natural Resource Damage Assessment Support

The Contractor shall support DOE EM and EM-LA for the purpose of complying with the Natural Resource Damage Assessment requirements under Section 107(a) and 120(a) of *Comprehensive Environmental Response, Compensation, and Liability Act of 1980* (CERCLA). The Contractor shall prepare presentations and briefings on environmental remediation activities relative to potential restoration activities and provide monthly meeting support for EM-LA presentation to the NRDA Trustee Counsel. The Contractor shall support assessments and potential contract scopes for assessment by future independent DOE prime contractors only as directed by the Contracting Officer.

C.3.6.8 National Environmental Policy Act Support

The Contractor shall determine early in the planning stage of any proposed activity whether it may trigger agency compliance with the NEPA and inform EM-LA in writing of the proposed action. The Contractor shall use the Integrated Planning Tool (PRID and EXID) to make initial NEPA determinations (See interfaces in Section J, Attachment J-6). For proposed actions, NEPA values must be addressed to the extent practicable and documentation of how those values are addressed shall be provided to EM-LA for a determination and approval by the NEPA Compliance Officer before the action proceeds.

The Contractor shall submit all NEPA information to EM-LA by the Contractor in a manner and extent that allows DOE to comply with NEPA requirements and to make a NEPA determination. The proposed activity may not proceed until all NEPA requirements have been satisfied. The proposed activity shall be compliant with DOE NEPA published at 10 CFR 1021, NEPA Implementing Procedures, and the DOE's NEPA Policy. The Contractor shall adhere to all requirements and conditions, including the implementation of mitigation measures, identified in any applicable NEPA decision document or categorical exclusion upon which a NEPA determination is based.

The Contractor shall provide support to NA-LA, the NNSA M&O Contractor, or an NNSA NEPA Contractor for the periodic review of the Site-Wide Environmental Impact Statement for LANL (SWEIS). The Contractor shall also provide program descriptions and analytical information on potential environmental impacts from

this contract's work activities, when requested through EM-LA. The Contractor shall coordinate decisions and records for the EM program activities with the NNSA M&O Contractor to ensure the activities are within the analyzed bounds of the SWEIS.

C.3.7 Other Program Requirements

C.3.7.1 Personal Property Management

The Contractor shall manage all assigned government-owned accountable and non-accountable personal property in accordance with the requirements listed below and in 41CFR101 and 41CFR109 (EM-LA is not responsible for any real property). The Contractor shall control classified equipment and material, if applicable in accordance with DOE Order 471.6, *Information Security* and high-risk property in accordance with DOE Personal Property Letter, Issue Number 970-3, Revision 1, February 3, 1998. Destruction or "rendering useless" of any component, equipment, and material, which are surplus to the DOE, is the responsibility of the Contractor.

This includes establishing a system to track the assignment and status of high-risk property specifically assigned to the Contractor. Prior to providing property for disposition, the Contractor shall characterize the property, maintain characterization records and provide those records at the time of property transfer.

C.3.7.2 Information Technology and Cyber Security

The Contractor shall provide an IT infrastructure that includes servers, desktop and mobile workstations, telecommunications, network infrastructure and all other IT functions necessary to support the activities and requirements of this Contract. The Contractor shall protect any Sensitive Unclassified Sensitive Information (SUI) to include Unclassified Controlled Nuclear Information (UCNI) generated, processed, and stored within its facilities, under its administrative control, and/or within subcontracted areas of work performance. Information Security (IS) and Operations Security (OPSEC) procedures shall be developed to comply with DOE Policy 205.1B– Department of Energy Cyber Security Program, the DOE-EM Risk Management Approach Implementation Plan (RMAIP), and with EM-LA requirements for IS and OPSEC. The Contractor shall develop these security procedures before the end of the transition period and provide to EM-LA for acceptability review.

The Contractor shall be pro-active regarding cyber threats and IT systems shall be protected based on evolving threats in accordance with the *Federal Information Security Management Act of 2002* (FISMA). The Contractor shall complete a Federal Information Processing Standards (FIPS) Publication 199 Risk Assessment for each system it intends to operate, and deliver the completed assessment(s) to the Contracting Officer and to the DOE Authorizing Official (AO) for each system within 180 calendar days after completion of Contract Transition. The Contractor shall obtain an Authorized to Operate (ATO)

designation from the DOE Authorizing Official. The Contractor's IT Systems covered under this Contract shall operate in accordance with all terms and conditions specified in the corresponding ATO and shall not operate if a Denial of Authorization to Operate (DATO) has been issued. Subsequent maintenance of the System ATO's shall be contingent upon the Contractor's successful completion of regularly scheduled Continuous Monitoring (CM) Assessments. Regular CM Assessments are scheduled by the AO, usually on an annual basis. The AO may also schedule non-routine CM Assessments based on specific cyber security incidents or internal self-assessment results.

Where the Contractor stores or processes federally-owned data on commercially-provided IT systems (typically referred to as "Cloud" systems, the Contractor shall use only those commercial systems which have been authorized and certified for such use through the Federal Risk and Authorization Management Program (FedRAMP). The Contractor shall document such systems in the appropriate System Security Plan (SSP).

The Contractor shall make provisions in its SSP(s) for its supporting subcontractors' IT systems. The Contractor may apply a graded approach to the application of the requirements of this Contract, and the requirements of any SSP under which a supporting subcontractor may operate.

Major concerns addressed in DOE's cyber security and IT policies are the handling of SUI (to include personally identifiable information (PII), protecting all information and information systems from unauthorized access, and reporting to the DOE Joint Cyber Coordination Center (JC3) any significant attempts or successful intrusions into these systems by unauthorized individuals. The Contractor shall also implement OMB Circular No. A-130, *Management of Federal Information Resources*, Appendix III, Security of Federal Automated Information Resources, November 28, 2000 (https://www.whitehouse.gov/omb/circulars_a130_a130appendix_iiihttps://www.whitehouse.gov/omb/circulars_a130_a130appendix_iii) Implementation Guide.

Applications purchased or developed to support the mission under this contract shall be able to run on mandatory IT baseline security configurations without any deviations and must comply with the appropriate controls as documented in *Security and Privacy Controls for Federal Information Systems and Organizations*, National Institute of Standards and Technology (NIST), Joint Task Force Transformation Initiative Task Force, Special Publication 800-53, Revision 4, 2014 (or subsequent approved revisions). The Contractor shall deploy compensating controls on legacy applications while the applications are in production; such applications shall be replaced as soon as feasible as determined by the AO. All production legacy applications shall be documented in the requisite System Security Plan. The Contractor shall prepare a Plan of Action and Milestones (POAM) and submit to the AO for each legacy application to be replaced. The Contractor shall give priority to the use of federally available enterprise applications and licenses, if they exist, over the direct purchase of commercial products, or the development of custom IT solutions to implement the Contract; including enterprise solutions to provide cyber security.

The Contractor's Cyber Security personnel and privileged IT users, such as systems administrators, may be required to obtain a DOE Q clearance under this Contract. All Cyber Security personnel and IT personnel who have Incident Response and Contingency Planning responsibilities shall have a DOE Q clearance.

IT Sustainability (Green IT)

Data Center Optimization

Planning for Federal Sustainability in the Next Decade, if applicable, improve data center efficiency by installing and monitoring advanced energy meters in all data centers by FY 2018, and establish a power usage effectiveness (PUE) target of 1.2 to 1.4 for new data centers and less than 1.5 for existing data centers."

Electronic Stewardship

- 1) The Contractor shall deliver, furnish for Government use, or furnish for Contractor use at a Federally controlled facility, only personal computer products, imaging equipment, and televisions that, at the time of submission of proposals and at the time of the award, were EPEAT® silver-registered or gold-registered.
- 2) The Contractor shall ensure that energy-consuming products are energy efficient (i.e., ENERGY STAR® products or FEMP-designated products) at the time of contract award, for products that are:
 - a. delivered;
 - b. acquired by the Contractor for use in performing services at a Federally-controlled facility;
 - c. furnished by the Contractor for use by the Government; or
 - d. specified in the design of a building or work, or incorporated during its construction, renovation, or maintenance (unless the product is not listed or otherwise approved in writing by the Contracting Officer).
- 3) The Contractor shall ensure that all electronic products (that were furnished for Government or Contractor use are no longer needed) are reused, donated, sold, or recycled using environmentally sound management practices at end of life.

IT System Inter-connectivity

The Contractor shall provision its IT infrastructure with coordinated access to the necessary information for contract oversight activities that will be performed by the following entities.

- EM-LA staff of approximately 60 Federal and support service personnel; and
- NMED-Oversight Bureau personnel in their office on Diamond Drive (approximately 10 computers, a plotter, and several printers).

The Contractor shall make provisions for user and data access between the following systems and applications which are administered by the following operators:

	System Name	Owner	Access (Client-server, web, etc.)	Platform (Oracle, MS, SQL, etc.)	Purpose or Use
1.	ArcGIS Desktop Geographic Information System (GIS)	Environmental Systems Research Institute (ESRI)	Client-Server	GIS	Industry standard GIS software. Used for environmental/geographical data analysis, mapping and modeling.
2.	Earthvision	Dynamic Graphics	Client-Server	GIS	3D geologic/subsurface modelling software.
3.	MKS Toolkit	Martis Kurn Systems	Desktop	Unix Shell	Provides UNIX functionality to the Windows OS. Earthvision needs the MKS Toolkit in order to function.
4.	Hummingbird Exceed	Martis Kurn Systems	Desktop	X Windows System	Allows Earthvision to access an X windows server. Some modules of Earthvision require the Motif Unix windows manager.
5.	Grid Convert	Freeware open software	Desktop	GIS	Converts raster elevation grid data generated in Golden Software's Surfer to ESRI Grid format. Essentially this is simply translational software.
6.	CDF Player	Wolfram Research	Freeware	GIS	A viewer for NetCDF files.
7.	ArcPad Studio	Environmental Systems Research Institute (ESRI)	Desktop	GIS	GPS software for the Trimble GPS units. Serves as an interface for GPS/GIS data.
8.	Font Viewer	Freeware open software	Desktop	GIS	A viewer for looking at system fonts. Useful when designing maps and deciding on what fonts to select.

	System Name	Owner	Access (Client-server, web, etc.)	Platform (Oracle, MS, SQL, etc.)	Purpose or Use
9.	Opera	Freeware open software	Web browser	GIS	--
10.	NT Lite	Freeware open software	Desktop	GIS	Packs and unpacks .iso images
11.	CorpsCon6	Freeware open software	Desktop	GIS	Land surveying coordinate conversion utility.
12.	PathFinder Office	Trimble	Client-Server	GIS	Differentially corrects GPS data obtained in the field.
13.	Fugro Viewer	Freeware open software	Desktop	GIS	A viewer for inspecting LiDAR data.
14.	7Zip	Microsoft WinZip	Desktop	GIS	An alternative file zip utility
15.	ArchHydro	Environmental Systems Research Institute (ESRI)	Client-Server	GIS	Add-in for ArcGIS that is used to analyze GIS data for hydrological purposes -- Stormwater program
16.	Geomorphic Change Detection	LANL EES Program	Client-Server	GIS	Add-in to analyze LIDAR data.
17.	Environmental Information Management System (EIMS) / IntellusNM	LOCUS Technologies, Inc.	Software as a Service (SaaS), hosted via Web Browser, unified cloud-based.	MS SQL with a 'user-friendly' interface	--
18.	AWD SOLIDS - Automatic Waste Determination (for Solids)	LANS	Integrated into EIMS	MS SQL	Previously used and still available.
19.	NOI - Notice of Intent for Land Disposal of Water	LANS	Integrated into EIMS	MS SQL	Previously used and still available
20.	AWD LIQUIDS - Automatic Waste Determination (For Liquids)	LANS	Integrated into EIMS	MS SQL	Previously used and still available
21.	Integrated Review Tool (IRT)	LANS	Web-based application	--	--
22.	Project Requirements Identification (PRID)	LANS	Web-based application	GIS backed	--
23.	Excavation Identification System (ExID)	LANS	Web-based application	GIS backed	--

	System Name	Owner	Access (Client-server, web, etc.)	Platform (Oracle, MS, SQL, etc.)	Purpose or Use
24.	Environmental Management System (EMS)	LANS	Web-based application	Oracle	--
25.	Waste Compliance Action Tracking System (WCATS)	LANS	Web-based application	Oracle	--
26.	Los Alamos Material Control and Accountability System (LAMCAS)	LANS	Web-based application	Oracle	--
27.	Correspondence and Communications Tracking System (CCATS) - Deliverables Tracking Database	LANS NIE Server	Client-Server	Linked to SharePoint, Microsoft Project Database.	
28.	DOCCAT (Document Catalog)	LANS	Web application	Incorporated into SharePoint.	--
29.	Hydrogeologic Data Repository	LANS	Part of LOCUS Technologies EIMS – Web	MS SQL with a 'user-friendly' interface	--
30.	Electronic Public Reading Room (EPRR)	LANS	Web-based application	Java	It uses java, css, javascript, xslt for searching/presentation. The search engine is solr. The data is stored in the Library's repository (aDORe).
31.	Facility Information Management System (FIMS)	DOE	Web-based application	Oracle 11G client software; MS ACCESS custom development	Nation-wide system
32.	Chem Database	LANS	Web-based	ACCESS database	--
33.	Training Database, UTrain	LANS	Web-based	--	--
34.	Radiation Protection IT System	LANS	Client-Server	ACCESS database	--
35.	Potential Release Sites (PRS) database	LANS Resides on DATASRV2	ACCESS front end for data entry and maintenance. Webbased reporting. Linked to	MS SQL data platform.	--

	System Name	Owner	Access (Client-server, web, etc.)	Platform (Oracle, MS, SQL, etc.)	Purpose or Use
			SharePoint for documents.		
36.	RESSLIB - Lotus Domino Records Management and Document Control System	LANS	COTS application	migrated to Documentum	--
37.	Base Flows 05.xls; GFI Water Level Master 15.xls; PMR Water Levels 109.xls; PMR Time Plots 23.xls; PMR PreGas with Tables 70.xlsm	LANS	Desktop	Excel spreadsheet with VBA macros. Imports data from ACCESS.	--
38.	Land App Queries	LANS	Client-Server	ACCESS database.	--
39.	Storm Water Tracking System/Erosion Reporting Application (SWTS)	LANS	Client-Server	MS SQL	Integrated into EIMS
40.	Multi-Sector General Permit Discharge Monitoring report application	LANS	Client-Server	MS SQL	Integrated into EIMS
41.	Individual Permit Discharge Monitoring Report	LANS	Client-Server	MS SQL	Integrated into EIMS
42.	Maintenance Connection (MainConn)	Maintenance Connection	COTS Cloud hosted application. Standalone. COTS Mobile Application for MainConn for cloud access from iPad	Maintenance Connection (MC) database, Version 7.0. and iPad IOS software.	Used to manage, assign, and track work for BMPs and Storm water sampling equipment. Maintenance Connection uses a hierarchical structure to identify each Permitted Feature as a child of a rain gage, each SMA as a child of Permitted Feature, and each Station, Site, and BMP as a child of an SMA. Classifications can be used to define the general characteristics of any assigned assets. Program also collects data in field for inspections of BMP control measures, sampling, and general inspections.

	System Name	Owner	Access (Client-server, web, etc.)	Platform (Oracle, MS, SQL, etc.)	Purpose or Use
43.	Hydstra (to manage discharge and precipitation data)	Kisters	COTS application Client Server	MS SQL	Surface water data management software. Archives stage data as discharge. Feet height to cubic feet per second. Manages precipitation data, Depth of precip every 5 mins. (also has capability to store information from sewer programs).
44.	Xconnect (to manage stormwater radio telemetry from dataloggers)	Sutron	COTS application, resides in Hydstra	ACCESS database interface; currently being reprogrammed to MS SQL.	Used to manage discharge and precipitation radio telemetry data (i.e., raw data), remotely program Sutron dataloggers, and manage the telemetry system. Stormwater program. Located on "Ground Control" server.
45.	Perl (to analyze and plot data)	Freeware open software	Client-Server	Free standing software	Computing software
46.	Python (to analyze and plot data)	Freeware open software	Client-Server	Free standing software	Computing software
47.	Julia (to analyze and plot data)	Freeware open software	Client-Server	Free standing software	Technical computing software
48.	Mathematica (to analyze and plot data)	Wolfram	Client-Server	Free standing software	Mathematical software
49.	R (to analyze and plot data)	Freeware open software	Client-Server	Free standing software	Statistical software
50.	Matlab (to analyze and plot data)	Matlab	COTS application	Free standing software	Mathematical software
51.	Stanislaw Marczk's Excel/Visual Basic Spreadsheets	LANL EM Program	Desktop	Excel spreadsheet with VBA macros.	Used to screen water and sediment data against standards for the Annual Surveillance Environmental Report (ASER) used for the Stormwater program.
52.	TR-55	USDA	Desktop	Spreadsheet model	A spreadsheet model used to develop rainfall/runoff relationships for the Stormwater program.

	System Name	Owner	Access (Client-server, web, etc.)	Platform (Oracle, MS, SQL, etc.)	Purpose or Use
53.	HEC-HMS (Hydrogeologic Modeling System)	USACOE	Desktop	Free standing software	Simulate the complete hydrologic processes of watersheds for the Stormwater program.
54.	HEC-RAS (River Analysis System)	USACOE	Desktop	Free standing software	Perform one-dimensional steady-flow, one and two-dimensional unsteady flow calculations, and sediment transport calculations for the Stormwater program.
55.	Paul Mark's Armchair Inspector Program automated software	LANL EM Program	Desktop	ACCESS database; currently being reprogrammed to MS SQL.	Automated software used to determine if gaging stations sampled and to review the health of the gaging stations.
56.	Greg Erpenbeck's Storm Water Tracking System (SWTS) Scripts in Perl	LANL EM Program	Desktop	MS SQL	Automated software used to determine if gaging stations sampled and to review the health of the gaging stations.
57.	Orval Hart's EIM Storm Water Tracking System Scripts	LANL EM Program	Desktop	Oracle; currently being reprogrammed to MS SQL.	Used to pull precipitation data from the Weather Machine and XConnect and determine if there were any permit-driven precipitation threshold exceedances.
58.	Orval Hart's Waternet Webpage on the LANL Environmental Webpage	LANL EM Program	Web-based page HTML	Visual Studio	Used by Buckman Direct Diversion (BDD) control room to examine the photos of gaging stations E050.1, E060.1, and stand-alone camera location E062 (downstream of E050.1 and E060.1) for flow confirmation; used by San Ildefonso to examine discharge data from gaging station E099 (required because this data is being transmitted real-time via radio telemetry to BDD); used internally to examine data from discharge data from gaging stations E050.1 and E060.1.
59.	Xiaoguang Yang's RTU (Remote Telemetry Unit) GUI website	LANL EM Program	Web-based page	Visual Studio and GoogleEarth Interface	GIS-based communications website that shows real-time data from SMA sites.

	System Name	Owner	Access (Client-server, web, etc.)	Platform (Oracle, MS, SQL, etc.)	Purpose or Use
60.	Mike Proicou's RTU Firmware	LANL EM Program	on RTUs, copies on desktops	"C" and Assembly languages	Allows RTUs to interface between the ISCO and the mesh network.
61.	Vinod Kulathumani's RTU Firmware	LANL EM Program	on RTUs, copies on desktops	"C" and Assembly languages	Allows RTUs to interface between the ISCO and the mesh network.
62.	Mike Proicou's ISCO monitoring service	LANL ISR Program	Server based	C Sharp and Visual Studio	Program connects RTU information to Xiaoguang Yang's RTU GUI website
63.	SigmaPlot	Systat	Desktop	Excel background	Statistical software
64.	Surfer 8	Scientific Software Group	Desktop	GS Scripiter - a Visual Basic-compatible programming environment	3-D mapping. Plots diagrams, maps, contours and images used in Stormwater and Groundwater Programs.
65.	AutoCAD	AutoDesk	Client-Server	Free standing software	Open CAD files and see surveys. Draw and measure dimensional scales, piles, blocks, berms, and splash pads.
66.	Civil3D	Autodesk	Client-Server	Free standing software	
67.	Alp 19.2	Oasys	Client-Server	Free standing software	Predicts pressure, horizontal movements, and shear forces on piles.
68.	HY-8	Federal Hwy Admin (free)	Desktop	Free standing software	Culvert Analyses program. Analyses hydraulic situation and culvert shapes.
69.	Visual Slope V6	Visual Slope	Server based	Free standing software	Slope Stability program. Analyses of slope failures.
70.	Win-Situ	In-Situ Inc.	Server based COTS	Free standing software	Groundwater elevation. Used to communicate with pressure transducers. Able to download and view pressure transducer data. The transducers also measure volume in the GW storage tanks.
71.	Well CAD 5.1.1403	Advance Logic Technology (ALT)	Server based COTS	Free standing software	Process and display borehole geophysical logs. The tools measure natural gamma and electrical conductivity for geological formations. Converts borehole geophysical logs to LAS format.

	System Name	Owner	Access (Client-server, web, etc.)	Platform (Oracle, MS, SQL, etc.)	Purpose or Use
72.	Matrix	Mount Sopries	Client-Server	Free standing software	Software for communicating with the tool. Drives the borehole tools to the correct depth and rate.
73.	Multi meters	YSI	Equipment based	Free standing software	Use for groundwater field measurements. Measures pH, conductivity, dissolved oxygen, and temperature.
74.	ECO Risk Database	ECO Risk	Client-Server	ACCESS database.	Ecological screening levels and documentation for informational purposes.
75.	PMR exceedances v25	LANS	Client-Server	Excel spreadsheet with VBA macros.	Program uses a data export from PMR Report in EIMS to screen data to groundwater and surfacewater standards; Provides various Consent Order report formats.
76.	Settlement Report	LANS	Client-Server	Excel spreadsheet with VBA macros.	Program uses a data report export from the Groundwater Settlement Reporting Tool in EIMS and formats it for monthly data review and reporting.
77.	All Analyses, Rejected, QC	LANS	Client-Server	Excel spreadsheet with VBA macros.	Program uses a data feed from EIMS for purposes of providing a quick turn formatted data set for project-internal use; separates data (All Analysis, Rejected, QC)
78.	html_tag_producer v04	LANS	Client-Server	Macro for Excel developed by Stas Marczak.	This macro generates analyte concentration labels to be used on environmental sampling maps.
79.	eRedBook 3.1.011	Halliburton	Client-Server	Free standing software	well borehole volume calculations
80.	POREGAS		Client-Server	Macro	--
81.	TA16RDX	LANS EES Program	Client-Server	Windows	Plots Data
82.	FEHM (Finite Element Heat Model)	LANS EES Program	Client-Server	Unix, Linux (Ubuntu, Redhat), Microsoft Windows, Apple OS X	Groundwater flow, gas phase flow, and contaminant transport modeling - high resolution - main workhorse code

	System Name	Owner	Access (Client-server, web, etc.)	Platform (Oracle, MS, SQL, etc.)	Purpose or Use
83.	MADS	LANS EES Program	Client-Server	Unix, Linix (Ubuntu, Redhat), Microsoft Windows, Apple OS X	Used for decision analysis, uncertainty quantification, and sensitivity analysis.
84.	AMANZI	Internal (LANL plus other Nat. Labs)	Client-Server	Unix, Linix (Ubuntu, Redhat), Microsoft Windows, Apple OS X	Groundwater flow and contaminant transport modeling. This is a high-resolution model.
85.	PFLOTRAN	LANS EES Program	Client-Server	Unix, Linix (Ubuntu, Redhat), Microsoft Windows, Apple OS X	Groundwater flow and contaminant transport modeling. This is a high-resolution model.
86.	LaGrit	LANS EES Program	Client-Server	Unix, Linix (Ubuntu, Redhat), Microsoft Windows, Apple OS X	Numerical mesh generation for groundwater models.
87.	PHREEQC (pH-REdox-EQuilibrium)	USGS	Desktop COTS	Unix, Linix (Ubuntu, Redhat), Microsoft Windows, Apple OS X	Geochemical modeling
88.	RESRAD (RESidual RADioactive materials)	Argonne National Lab	Desktop COTS	Windows	Environmental radiological dose assessment
89.	ProUCL (Upper Confidence Limits)	USEPA	Desktop COTS	Windows	Statistical software for environmental data sets

Additional systems may be added as the project and business needs change.

Any IT and electronic communication and control equipment that will be transferred from the LCBC to the Contractor shall be identified in the property inventory.

C.3.7.3 Site Planning Efforts

The Contractor shall provide technical and progress information to support Site strategic planning efforts including site planning tools, documents and activities including developing the *Long-Term Strategy for Environmental Stewardship and Sustainability* and the *Site Ten Year Plan*. The Contractor shall tailor its investigation and environmental remediation schedules, and conduct its activities so as not to interfere with the Manhattan Project National Historical Park.

C.3.7.4 Coordinated Information Management

The Contractor shall design, develop and implement an integrated information management system to support DOE, NMED, and EPA regulatory commitments and contract goals. The information management system shall use a mix of cloud based and locally hosted data systems to manage schedules, priorities, resources, and reviews of various specifications and design documents provided by information management staff and subcontractors. The system shall manage and coordinate the overall technical business processes; sample planning and management; field data collection and upload; laboratory data upload; data editing; geographic information system (GIS) database, information, tabular and map reporting, and data reporting personnel.

C.3.7.5 Environmental Information Management System & Public Access

The Contractor shall input its environmental sampling data into the existing Environmental Information Management System (EIMS) database. The Contractor shall take over and manage the existing contract with Locus Technologies, the provider of the database containing the environmental sampling data (Section J, Attachment J-7 and Section J, Attachment J-6). The database provides the capability to organize, manage, and report sampling, analytical and subsurface data in an external Cloud-based data system. EIMS' capability includes analytical chemistry data management, including auto validation, Electronic Data Deliverable (EDD) error checking, multiple EDD format uploads, and customizable valid values. The Contractor shall adopt the EIM's sample planning module with preprinted Chain-of-Custody forms, work lists, and bottle labels. EIMS interfaces with analytical laboratories to streamline data EDD uploads. It has a customizable permission levels and menus, with secure access, data reporting and data visualization capabilities to export multiple formats including Excel, Text, HTML, and Extensible Markup Language (XML). EIMS also has built-in commonly used statistical functions for trend, forecasting, compliance, and exceedance analysis. EIMS' web-based GIS module allows users to view and print data on maps with a graphical interface. The EIMS' process flow is identified in Section J, Attachment J-11, GFS/I.

EIMS includes roughly fifteen million total data points of which the environmental management work scope provided approximately 96% of the entries. Approximately one to one and a half million data points are generated annually. The Contractor shall NOT attempt to recover old data generated between 1970 and the advent of the 2005 Consent Order for entry into EIMS. The Contractor

shall include all environmental data collected under the 2016 Consent Order in EIMS and shall allow the NNSA M&O Contractor and the NMED Oversight Bureau access to record all other environmental data collected at LANL to be input into the same cloud-based system.

The Contractor shall ensure that Intellus New Mexico (IntellusNM), (the cloud based, environmental database application <http://www.intellusnm.com/http://www.intellusnm.com/>), which is a component of EIMS) remains operational and accessible for EM-LA, NA-LA, the NNSA M&O Contractor, and the NMED Oversight Bureau to use. IntellusNM is a publicly available, fully searchable data website that directly interfaces with the EIMS database. All environmental analytical data is managed and processed in EIMS, then, the data in EIMS are automatically transformed by nightly replications into IntellusNM.

The Contractor shall ensure that the IntellusNM database also makes analytical results provided in periodic monitoring reports (PMRs) and monthly notifications available to the public. The Contractor shall ensure that IntellusNM results are flagged to comply with the *Protocol for Protecting Confidential Pueblo Information* included in the Memorandum of Agreement between the DOE and the Pueblo de San Ildefonso (see Section J, Attachment J-16) regarding the release of analytical data collected from groundwater and base-flow samples at locations within Pueblo of San Ildefonso boundary.

Within EIMS (and subsequently accessible through IntellusNM), the Contractor shall maintain the Comprehensive Well Inventory database for all wells and boreholes across LANL. This database is the starting point for sample planning with location data. The Contractor shall allow the NNSA M&O Contractor and the NMED Oversight Bureau continued access for sample planning purposes of their own.

C.3.7.6 Analytical Laboratories

The Contractor shall establish contracts such that all sampling can be processed through independent and off-site analytical laboratories. The Contractor may still collect screening samples for in-process field screening activities, but shall not use these screening results for compliance activities under the 2016 Consent Order, IP for Storm water, or radiological sampling information that will be provided to NMED regarding TRU waste operations. The Contractor shall utilize the NNSA M&O Contractor's analytical contracts with ARS and Southwest Research Institute (SWRI) until separate contracts can be established (See Section J, Attachment J-6 for interfaces with the NNSA M&O Contractor and Section J, Attachment J-7 for the analytical laboratory contractors).

The Contractor shall make whatever arrangements are necessary with the NNSA M&O Contractor until separate and equivalent contractual arrangements are established directly with any necessary analytical laboratories. The Contractor shall ensure that specified analytical methods meet minimum detection limits (MDLs) to satisfy State of NM standards and EPA target action levels for the IP.

The Contractor shall require the analytical laboratories to input the sample results directly into IntellusNM through EDD through possible multiple EDD format uploads. The Contractor shall manage the data received from analytical companies, conduct monthly data review meetings, and provide one day and 30 day notifications, as required, to the NMED-HWB of review results in accordance with the 2016 Consent Order requirements (to include modifications).

The Contractor shall use commonly accepted analytical methods for the chemical analysis of water samples called for under federal statutes (such as the Clean Water Act) and approved by EPA. The Contractor shall be responsible for obtaining analytical services that support monitoring activities with samples for laboratory analysis submitted to accredited contract laboratories. The Contractor shall maintain laboratory subcontracts that are in compliance with DOE, NMED and all other regulatory requirements.

Unless EM-LA specifically allows an exemption, the Contractor shall only use accredited analytical laboratories that have successfully completed a Department of Energy Consolidated Audit Program (DOECAP) audit within the required audit period. The Contractor shall support the biannual DOECAP audits of analytical laboratories used for environmental sampling. Additionally, laboratories performing analyses in support of the Contractor for industrial hygiene programs must be American Industrial Hygiene Association (AIHA) accredited; and laboratories supporting personnel monitoring programs must be Department of Energy Laboratory Accreditation Program (DOELAP) approved.

C.3.7.7 Use of Commercial Treatment, Storage, and Disposal Facilities

Unless EM-LA specifically allows an exemption, all commercial Treatment, Storage, and Disposal Facilities (TSDF) contracted for the Contractor's hazardous and M/LLW programs must be licensed, permitted, and have successfully completed a Department of Energy Consolidated Audit Program (DOECAP) audit within the required audit period. The Contractor shall support the biannual DOECAP audits of TSDF's used for waste management.

Additionally, the Contractor shall evaluate and give first consideration to the DOE EM Consolidated Business Center waste contract vehicles and receive written approval from the CO to not use these contract vehicles prior to awarding any direct subcontracts or tasks to commercial TSDF's.

C.3.7.8 Energy Employees Occupational Illness Compensation Program Act

The Contractor shall support activities regarding the *Energy Employees Occupational Illness Compensation Program Act* (EEOICPA), as directed by EM-LA.

The EEOICPA establishes a program to provide compensation to current and former employees of the DOE, its contractors and subcontractors, companies that provided beryllium to DOE, and atomic weapons employers. Under

EEOICPA, the DOE has a requirement to verify employment histories, provide medical records, and provide radiation dose records and other information pertinent to National Institute for Occupational Safety and Health (NIOSH) radiation dose reconstruction and U.S. Department of Labor (DOL) Subtitle B and Subtitle E case preparation for anyone who applies for compensation under EEOICPA.

The Contractor shall establish a program and respond to the requirements of the EEOICPA for all employees for which the Contractor may have records. These activities shall include:

- 1) Perform the work necessary to complete EE-5 Employment Verification Forms requested by DOL for the EEOICPA Subtitle B program.
- 2) Perform the work necessary to provide personnel exposure information requested by NIOSH as part of the EEOICPA Subtitle B program:
 - a) Research and retrieve records needed to complete claims forms;
 - b) If necessary, work with corporate entities or unions to verify employment of former site workers;
 - c) Provide visitor personnel exposure or information requested;
 - d) Complete declassification, as needed, of records required for the processing of claims form;
 - e) Complete and sign off on all necessary claims forms associated with the request; and
 - f) Return completed forms and records requested to NIOSH through the DOE Secure Electronic Records Transfer (SERT) system.
- 3) Perform the work necessary to complete Document Acquisition Requests (DARs) submitted by DOL as part of the EEOICPA Subtitle E program:
 - a) Research and retrieve records needed to complete claims forms;
 - b) If necessary, work with corporate entities or unions to verify employment of former site workers;
 - c) Complete declassification, as needed, of records required for the processing of claims;
 - d) Complete and sign off on all necessary claims forms associated with the request; and
 - e) Return completed forms and records requested to DOL through the DOE SERT system.
- 4) Perform the work necessary to provide records requested by NIOSH or DOL as part of a site characterization or other special project under the EEOICPA program:
 - a) Complete declassification, as needed, of records requested by NIOSH or DOL for site characterization research projects; and

- b) Coordinate all work with the site EEOICPA POC and the Office of Worker Screening and Compensation Support (AU-14) as applicable.
- 5) The Contractor shall respond to any other inquiries and perform special projects as required by the EEOICPA and approved by the Office of Worker Screening and Compensation Support (AU-14).
- 6) Perform other necessary EEOICPA related records work, as needed.
- 7) Maintain and appropriately arrange EEOICPA case files on all claims processed and ensure properly scheduled in accordance with the NARA-approved DOE Records Disposition Schedules.
- 8) Maintain local records to track the activities under EEOICPA and submit monthly financial reports through the DOE SERT system.

The response time for tasks (1) through (3) is 60 days from receipt of request.

The Contractor shall comply with the requirements of Section C.3.2.5, Safeguards and Security, and C.3.5.4, Document Control, and C.3.5.5, Records Management, and for the review and release of all records.

The Contractor shall not contest a state workers' compensation claim or award determined to be valid pursuant to Subtitle D of the EEOICPA.

The Office of Former Worker Screening Programs has developed a list of records that are essential for DOE to fulfill its role under EEOICPA and the Former Worker Medical Screening Program. This list is not all-inclusive, but provides sufficient information to allow the Contractor to understand the types of records, including those under the Privacy Act Systems of Records that are needed by the Government. Also included are records requirements to ensure records preservation.

The Contractor shall interface with the NNSA M&O Contractor for information on employees that were previously NNSA M&O Contractor employees including obtaining historical information and sharing current information with the NNSA M&O Contractor to settle claims.

C.3.8 Infrastructure

General infrastructure support will be provided by the NNSA M&O Contractor to the Contractor. The NNSA M&O Contractor maintains site roads including snow removal, weed control, lighting, and sign maintenance up to the EM-owned areas and facilities. The NNSA M&O Contractor maintains other site grounds that are outside of the EM facilities and structures as identified in Section J, Attachment J-6.

The Contractor shall maintain and improve EM-owned infrastructure inside the EM-owned or operationally controlled areas and facilities, as needed, to support EM operations. This only includes infrastructure for which EM is responsible and that is not

otherwise provided and maintained by the NNSA M&O Contractor as landlord, such as road spurs to well pads, stormwater control structures, purpose-built lagoons (e.g., chromium), etc. The Contractor shall coordinate planning and implementation of maintenance and improvement activities with the NNSA M&O Contractor, as necessary.

C.3.8.1 EM Operational Areas

The Contractor shall maintain the areas around EM operations as mapped in “*EM Operational Areas and Road Maintenance*” map_16-0025-05_EM_Features.pdf. This includes road maintenance on EM-controlled roads; snow removal within EM operationally controlled areas, removing noxious weeds, maintaining firebreaks and reducing fire loading, and other general maintenance. The NNSA M&O Contractor provides maintenance of areas around other EM work areas within the LANL boundaries. The Contractor shall develop and maintain an Interface Agreement with the NNSA M&O Contractor specifically for landlord responsibilities in Area 54.

The Contractor shall control work within all EM Operational Control Areas to implement DOE Conduct of Operations requirements including work authorization, daily work planning and authorization, access controls, fencing for access control, etc. The Contractor shall provide incident commander, safety officer, operations officer, entry teams, decontamination, safety, and rehab off-site or in completely EM operationally controlled areas such as TA-21. For EM Operational Control Areas, the Contractor shall interface with the NNSA M&O Contractor for Doppler radar and fire hazard warnings.

C.3.8.2 EM-Maintained Roads

The Contractor shall maintain and improve roads for which EM is responsible as identified on “*EM Operational Areas and Road Maintenance*” map_16-0025-05_EM_Features.pdf which includes improved roads and “*Interim Facility-Wide Groundwater Monitoring Plan Sample Locations*,” map_16-0025-04_DOE_IFGWMP locations.pdf which includes road spurs to individual wells, well pads, and gage stations”. These roads typically are roads for which no other LANL organizations have a use. Activities may include repairing erosion, removing snow, removal of noxious weeds, providing lighting, maintaining signage, and other activities as needed to ensure sample crews can access the wells and cleanup sites.

The Contractor shall also plan, develop, perform grading and establish new roads, as needed for EM, such as well access roads. The Contractor shall interface with the NNSA M&O Contractor in locating and maintaining these new roads. The NNSA M&O contractor maintains all other site roads.

C.3.8.3 EM-Owned Facilities

The Contractor shall operate and maintain the EM-owned buildings and structures as listed in *Memorandum of Understanding between National Nuclear Security Administration (NNSA) Los Alamos Field Office (NA-LA) and*

Department of Energy Environmental Management Los Alamos Field Office (EM-LA) for Transition of Legacy Environmental Cleanup Work at Los Alamos from NNSA to EM, Facilities Supplement, List of EM Buildings and Structures. This list includes space that the Contractor shall provide for CCP personnel at TA-54 Area G to support the EM legacy mission. The facilities located within TA-54 Area G will be maintained by the NNSA M&O Contractor in FY2017. However, on October 1, 2018, those facilities identified within Area G necessary for continued operations will be formally transferred to the Contractor, thus requiring the performance of maintenance by the Contractor that was previously conducted by the NSNA M&O Contractor. A revised list of Area G facilities to be transferred are identified on Section J, Attachment J-12.

The Contractor shall maintain needed facilities, equipment, and roads within EM facilities throughout the performance period to function at the same level and in the same condition, less normal wear and tear at the contract effective date. The Contractor shall provide the information updates necessary to support FIMS data reporting and management. FIMS reporting for EM-owned facilities is the responsibility of the Contractor and for NNSA-owned facilities is the responsibility of the NNSA M&O Contractor.

The Contractor shall obtain utility services from the NNSA M&O contractor for facilities listed in the MOU Facilities Supplement, List of EM Buildings and Structures. Utility services must provide adequate building safety and operational support.

The Contractor will maintain the grounds within TA-54 including all wildfire fuel mitigations within the TA-54 Area G Operating Area as required by the NNSA M&O contractor Emergency Management Operations and the Safety Basis requirements for Area G.

C.3.8.4 General Facility Management

The Contractor shall obtain services that include, but are not limited to: locksmith services, housekeeping or custodial services including pest control, non-radioactive solid waste disposal (i.e., trash) and recycling; daily mail; space planning and utilization; and moving of furniture and equipment for all EM facilities within this PWS. This scope also includes obtaining materials and services for maintaining print shop capability, copiers, and graphics.

Although EM-LA will provide for office space at the Pueblo School complex (which is the current office space of the LCBC contractor) and trailers for office space in Area-G, the Contractor shall provide minor facility maintenance that is outside the scope of the facility owner and documented in the facility lease agreements. The Contractor shall identify the expected quantities of spaces to allow EM-LA to determine whether additional space will be provided as GFS/I in Section J, Attachment J-11. The access control devices on the doors to the Pueblo complex are administrative controls for personnel access and not security requirements. If the Contractor chooses to retain these devices for facility

administrative purposes, they shall isolate them from any NNSA M&O systems and shall make access provisions that includes the EM-LA personnel.

The Contractor shall also provide support in Area-G for five Federal or support contractor staff to oversee Area-G operations. The Contractor shall also provide offices, furniture, computers and IT equipment, and telephones for WIPP Central Characterization Project (CCP) personnel located in Area-G.

C.3.8.5 Core Facility

The Contractor shall provide a facility for the safe storage of environmental cores and samples that meets preservation requirements of the American Society for Testing and Materials (ASTM) D5079-08, *Standard Practices for Preserving and Transporting Rock Core Samples* (publicly assessable). The current core facility houses 315 boreholes, with an additional 85 or so out for examination, and an additional recent 50 chromium cores still to be inventoried. The Contractor may share the existing Core Facility that is operated by the NNSA M&O Contractor and stores both cores from environmental activities which are the responsibility of the Contractor and cores from non-environmental activities which are the responsibility of the NNSA M&O Contractor. In this case, the Contractor shall consider the lowest cost option for DOE, not just for this contract. The current core facility is a warehouse section approximately 65 feet by 45 feet with five columns of shelves 14 feet high, each column containing 25 shelves, and each shelf containing 50 core boxes. The Contractor shall make the cores available to site geologists to support investigatory activities.

The Contractor shall also maintain a database of the core data; the current database being a Microsoft Access97 platform.

C.3.8.6 Fleet Operations and Management

The Contractor shall provide or obtain fleet operations and maintenance services for vehicles transferred from the LCBC Contractor to the Contractor. The Contractor shall include up to six vehicles transferred from EM-LA that are to be dedicated to EM-LA. Replacement vehicles will be coordinated and obtained through the Government Services Agency (GSA).

C.4 CONTACT-HANDLED TRANSURANIC WASTE DISPOSITION

The Contractor shall manage and disposition legacy CH-TRU waste at LANL TA-54 Area G. The CH-TRU wastes stream is included in the Section J, Attachment J-17, *CH-TRU Waste Stream Quantities and Details*. The Contractor shall also manage and disposition the NNSA-owned newly generated CH-TRU that is already within Area G, on a cost recovery basis from the NNSA M&O Contractor. The Contractor shall also manage and disposition some future quantity to be determined of newly-generated CH-TRU expected to be generated by the NNSA M&O Contractor under a contract change for an IDIQ CLIN and on a cost recovery basis from the NNSA M&O Contractor.

The Contractor shall ensure safe and compliant storage and shipping of CH-TRU waste containers, containers that have been re-characterized from TRU waste to M/LLW, secondary waste generated from Area G operations, and empty TRU waste containers that result from repackaging or remediation of TRU waste containers. This scope includes locating containers in above grade storage at TA-54 Area G and movement of containers to support remediation, characterization, and shipping within the Safety Basis.

This scope includes coordinating with the NNSA M&O Contractor to support administrative road closures for transferring containers to and from the Radio-assay and Nondestructive Testing (RANT) Facility for shipments to WIPP.

The Contractor is NOT responsible for remote-handled TRU waste processing except for reporting inventory, operational oversight and control as the Area G operator, and providing data on below grade TRU inventories. The contractor is also NOT responsible for operations of the RANT Facility used as the TRU waste shipping facility, or the LANL TRU Waste Storage Facility (TWF) (the last two of which will be the responsibility of NNSA). NNSA will actually be the shipper of record for EM CH-TRU waste shipments to WIPP.

C.4.1 Contact Handled-Transuranic Waste Operations

CH-TRU operations scope includes the following waste streams retrieval and processing for final disposal. Some CH-TRU waste inventory may not meet the definition of TRU waste and will require offsite disposition as M/LLW through DOE approved off-site treatment, storage, and disposal facilities (TDSF). The TA-54 Area G waste inventories are broken down to the following subcategories:

- Above Grade Drum Remediation
- Oversized Container (OC) Remediation
- Trenches A-D Retrieval and Remediation
- Pit 9 Retrieval and Remediation
- Corrugated Metal Pipes (CMP) Retrieval and Remediation
- Other Retrievals - Retrieval and Remediation
- MLLW and Low Level Waste (M/LLW) Treatment and Disposal

The Contractor shall manage receipt, preparation, handling, and outgoing transfer of containers, maintain a waste inventory in coordination with the NNSA M&O contractor, manage secondary wastes, store materials and wastes, and provide general worker

safety, industrial hygiene, nuclear safety, and radiological protection activities to execute this scope, as necessary.

The Contractor shall process and remediate CH-TRU waste to meet the WIPP Waste Acceptance Criteria (WAC) and shipment to WIPP. The Contractor will standup, operate, and maintain sufficient CH-TRU waste processing lines in Area G to address CH-TRU processing of those inventories, as required.

CH-TRU activities are typically conducted in Nuclear Hazard Category Class 2 and Class 3 TRU waste processing lines, as applicable. Buildings 412 and 375, Dome 231, and other facilities within Area G may be utilized by the Contractor. The Contractor shall modify facilities and waste processing lines to address the various TRU waste inventories through the processing evolutions of the CH-TRU waste campaigns.

WIPP requirements include, but are not be limited to, venting/head space analysis, absence of prohibited items, and ensuring radioactivity and fissile gram quantities meet the WIPP WAC. In addition to the field survey data, the Contractor shall collect, analyze and summarize waste generator records and other records in a report that provides a basis for planning the waste retrieval activities including critical lifts and the mitigation of job hazards. The Contractor shall address key parameters in the report for each waste package for waste/waste package characteristics and location conditions.

Drum venting includes installation of WIPP-approved filter(s), headspace gas analysis to verify drums meet Area G Safety Basis requirements for vented drums, and testing to ensure hydrogen is below the Lower Flammability Limit before transportation to Hazard Category II facilities within Area G for drum remediation or repackaging. Some drum venting equipment is currently in use and will be available.

In handling these CH-TRU wastes, it shall be necessary for some of the personnel to have "L" or "Q" security clearances.

C.4.1.1 Above Grade Drum Remediation

The Contractor shall process and remediate the TRU waste drum inventory that are currently stored above ground at LANL TA-54 Area G. This scope includes but is not limited to preparing, sorting, segregating, surveying and non-destructive analysis, processing, and characterization of the drums and their content to meet requirements for disposals at the WIPP or otherwise as M/LLW. WIPP requirements include, but are not be limited to, venting/head space analysis, absence of prohibited items, and ensuring radioactivity and fissile gram quantities meet the WIPP WAC.

The Contractor shall conduct non-destructive assay of the drums to determine whether they contain sufficient TRU waste quantities to be managed as TRU for disposition at WIPP or may be managed as M/LLW.

The Contractor shall prescreen and characterize waste containers to identify and segregate those that meet the definition of TRU waste from drums that are M/LLW. The Contractor shall conduct in-process assays of containers for

splitting waste contents into TRU and M/LLW. The Contractor shall assay, sort, and disposition empty drums and secondary wastes.

C.4.1.2 Oversized Container Remediation

The Contractor shall perform remediation of several types of TRU waste Oversized Containers (OC) that are not approved for disposal of TRU waste at WIPP.

These OC must be processed and remediated before final characterization, certification, and disposition as CH-TRU waste at WIPP and/or as M/LLW can occur. OC include fiberglass-reinforced plywood (FRP) boxes, corrugated metal boxes, other than standard waste boxes (SWBs), direct-loaded SWBs, and thick-walled steel containment vessels called "Bolas Grandes" containment spheres are approximately 3 ft in diameter and 6 ft in diameter with gross weights ranging from approximately 2,400 pounds to 17,600 pounds that must be remediated.

The contents of the OC's may include other containers such as drums, containment vessels, gloveboxes, metal cans, pipes, and tanks. OC's characterized as M/LLW shall be repackaged and/or the contents subject to visual examination to ensure that the waste meets the waste acceptance criteria for the off-site TSDF that will receive and process the waste for final disposition.

The Contractor shall prescreen and characterize waste containers to identify and segregate those that meet the definition of TRU waste from drums that are M/LLW. The Contractor shall conduct in-process assays of containers for splitting waste contents into TRU and M/LLW. The Contractor shall assay, sort, and disposition empty drums and secondary wastes.

C.4.1.3 National Nuclear Security Administration Owned Newly-Generated Contact Handled-Transuranic Waste

C.4.1.3.1 NNSA-Owned CH-TRU Already Accepted into Area G

The Contractor shall perform remediation of several types of newly generated NNSA-owned CH-TRU waste that are not approved for disposal of TRU waste at WIPP that is already accepted by EM-LA and co-located within TA-54 Area G. The Contractor shall remediate this NNSA-owned CH-TRU through the SSSR process. This scope includes but is not limited to SSSR activities such as preparing, sorting, segregating, surveying and non-destructive analysis, and characterization of the containers and their content to meet requirements for disposals at the WIPP or otherwise as M/LLW.

The Contractor shall collect the costs associated with the handling of the NNSA newly generated CH-TRU and be paid through contractual agreements with the NNSA M&O Contractor, and provide to EM-LA for information only. An estimate of the quantity of these materials is included in the total waste quantities in Section J, Attachment J-17.

C.4.1.3.2 NNSA-Owned CH-TRU Not Yet Identified and Not in Area G

The Contractor shall perform remediation of several types of newly generated NNSA-owned CH-TRU waste that are not approved for disposal of TRU waste at WIPP and that have not been currently identified by NNSA and are not within Area G at this time. The Contractor shall receive, store, and remediate this currently unknown waste stream through the SSSR process. This scope includes but is not limited to SSSR activities such as preparing, sorting, segregating, surveying and non-destructive analysis, and characterization of the containers and their content to meet requirements for disposals at the WIPP or otherwise as M/LLW.

Since this waste stream is not currently identified, the Contractor shall not include this waste stream in their proposal. The total quantity of waste to be processed will be based on NNSA's emerging needs and the Contractor's excess capabilities during the contract period. Therefore, this section shall only be authorized by the Contracting Officer under the IDIQ task orders referenced in Section C.14.5. The Contractor shall collect the costs associated with the handling of the NNSA newly generated CH-TRU and be paid through contractual agreements with the NNSA M&O Contractor, and provide to EM-LA for information only.

C.4.1.4 Trenches A-D Retrieval and Remediation

The Contractor shall retrieve and remediate CH-TRU in Trenches A-D consisting of high plutonium-239 equivalent (PE) curie (Ci) content TRU. The Contractor shall repackage drums for which integrity was compromised ("failed containers") and that were placed within reinforced concrete "casks" that had closure lids and subsequently placed below grade, over pack, and double pack retrieved containers as necessary to achieve a safe configuration, and stage the over packed and double packed containers for turnover to operations for processing and disposition. See Section J, Attachment J-17 for a detailed background of the container/casks in Trenches A-D.

The Contractor shall prepare the site including, but not limited to relocation of above grade containers and excess materials, site grading (approximately 2 acres), excavation of overburden covering the buried waste (approximately 75,000 ft³, e.g. approximately 75% of total over burden), and establishing safety basis controls, including barriers, as needed.

Any high efficiency particulate air (HEPA) filtered containments that may be required shall be determined as necessary to execute the retrieval. The containment design and equipment selection, procurement, installation methods, and operations and maintenance activities will be subject of technical review by EM-LA. Based on the inspection and radiation survey the method of retrieving the waste container shall be approved by EM-LA.

Generally, casks containing structurally sound drums with no external contamination will be retrieved directly from the buried cask using lifting

equipment. Retrieved containers will be inspected for identifying information. All drums will be over packed or double packed and vented to yield a safe configuration.

The Contractor shall process the Trenches A-D wastes to meet waste disposal criteria, as necessary. This waste stream will have to be integrated with the other wastes to be processed to ensure material-at-risk (MAR) limits are maintained. Trenches A-D CH-TRU waste processing and remediation must meet the WIPP WAC and shipment to WIPP.

The Contractor shall restore the site to an interim but acceptable condition including backfilling the former cask locations and excavated area, removal from the site of all equipment and temporary structures including safety basis controls that are no longer needed, and grading and contouring the general site area. Spoil material may be available from a local pile.

C.4.1.5 PIT 9 Retrieval and Remediation

The Contractor shall retrieve the CH-TRU in Pit 9, drums (30-gal, 55-gal, 85-gal and 110-gal), boxes (various sizes), and other various containers. See Section J, Attachment J-17 for a detailed background of the drums and containers stored in Pit 9.

The Contractor shall prepare the site including relocation of containers and materials currently located on site, site grading (approximately 4 acres), excavation of overburden covering the buried waste (approximately 260,000 ft³), and establishing safety basis controls including barriers as needed.

Waste retrieval activities may require HEPA filtered containments that may require relocation as the retrieval campaign progresses. Any HEPA filtered containment design and equipment selection, procurement, installation methods, and operations and maintenance activities will be subject of technical review by EM-LA.

The Contractor shall retrieve the Pit 9 CH-TRU waste containers and in situ repackaging waste from failed containers and over pack and double pack retrieved containers as necessary to achieve a safe configuration. It is assumed that structural integrity of approximately 15% of the drums will be impaired and thus will require special handling including, but not limited to, in situ repackaged waste.

The Contractor shall process the Pit 9 wastes to meet waste disposal criteria, as necessary. Pit 9 CH-TRU waste processing and remediation must meet the WIPP WAC and shipment to WIPP.

This waste stream will have to be integrated with the other wastes to be processed to ensure MAR limits are maintained and shipments to WIPP are optimized with containers are fully loaded.

The Contractor shall restore the site to an interim but acceptable condition including backfilling the trench and excavated area, removal of all equipment and temporary structures including safety basis controls that are no longer needed, and grading and contouring the general site area. Spoil material may be available from a local pile.

C.4.1.6 Corrugated Metal Pipes Retrieval and Remediation

The Contractor shall excavate and retrieve the Corrugated Metal Pipes (CMPs) from below grade storage under about six feet of cover soil. The CMPs were buried in 1986 and the current conditions are unknown. The CMPs are filled with cement from a batch treatment process that mixed Portland cement with several liquid waste streams containing americium and plutonium. Each CMP is approximately 30-inch diameter by approximately 20 feet long, weighing 12,000 to 14,000 pounds as reported in *Corrugated Metal Pipe Category of Transuranic Waste Stored Below Ground within Area G*, LANL, EP2013-5171, LA-UR-13-26921, August 2013.

The Contractor shall appropriately manage the 2,000 to 2,500 cubic yards of earthen cover for potential use as backfill material.

Post retrieval, the Contractor shall process the CMPs CH-TRU wastes to meet waste disposal criteria, as necessary. This waste stream will have to be integrated with the other wastes to be processed to ensure material-at-risk (MAR) limits are maintained. CMPs CH-TRU waste processing and remediation must meet the WIPP WAC and shipment to WIPP.

The Contractor shall restore the site including backfilling the excavated pit with the original cover material plus additional fill from an existing soils stockpile in TA-54 Area G and grade and contour the site to a nominally initial grade, over seeded, and silt fencing installed.

C.4.1.7 Other Retrievals and Remediation

The Contractor shall retrieve CH-TRU waste packages from shafts 262-266, 235 and 302-306. The waste packages are stored in eleven vertical lined shafts which extend above grade and have concrete caps or steel plates covering the top of the shafts. These waste containers and the configuration are described in *Hot Cell Liners Category of Transuranic Waste Stored Below Ground within Area G* and include the following:

- Hot Cell Liners - Five rectangular boxes approximately 6-ft by 6-ft by 11-ft having a maximum gross weight of about 6,200 pounds.
- Tritium Canisters - Five large canisters, similar in configuration to a remote handled (RH)-TRU canister, weighing up to approximately 2,700 pounds each.

Post retrieval, the Contractor shall process the shaft wastes to meet waste disposal criteria, as necessary. This waste stream will have to be integrated with

the other wastes to be processed to ensure material-at-risk (MAR) limits are maintained. This shaft waste processing and remediation is designated SSSR with the objective to meet the WIPP Waste acceptance criteria and shipment to WIPP. Following the retrieval, the Contractor shall restore the site including backfilling the shafts, replacing any necessary concrete caps or steel plate covers on top of the shafts.

The Contractor shall provide field surveys, data collection, and preparation of a report addressing the conditions of the waste packages and Hot Cell Lines shafts 302-306 and Tritium Canister shafts 262–266.

C.4.1.8 Mixed Low-Level Waste and Low-Level Disposal

During CH-TRU operations, the Contractor will re-characterize waste that have been identified as TRU waste but after further analysis are determined to be LLW or M/LLW (depending on the availability of information on hazardous constituents). As a result, the disposal path for the waste changes from the Waste Isolation Pilot Plant (WIPP) to an off-site LLW disposal facility or off-site M/LLW TSDF. The quantity of TRU waste that is re-characterize to M/LLW is expected to increase during processing of TRU waste containers that are retrieved from below grade inventories. Much of the TRU waste in below grade storage was placed into storage when the segregation limit for TRU waste was less than the concentration of TRU isotopes in the current definition of TRU waste. The current definition of TRU waste also excludes waste contaminated with isotopes such as uranium-233 that was previously required to be segregated and stored as TRU waste. Overall, it is expected that approximately 30% of the TRU waste drums and the oversized waste containers that are retrieved from below grade storage will be re-characterize to M/LLW.

The Contractor shall ship M/LLW, typically resulting from re-characterization of TRU waste and from secondary waste processing operations, to off-site TSDFs. Additionally, it may be more efficient to decontaminate oversize items and containers to levels below TRU levels of contamination than to size reduce and repackage the containers. Approximately 90% of the oversize containers stored below grade might be decontaminated to/or re-characterize as M/LLW.

Unless EM-LA specifically allows an exemption; all commercial TSDFs contracted for the Contractor's hazardous and M/LLW programs must be licensed, permitted, and have successfully completed a Department of Energy Consolidated Audit Program (DOECAP) audit within the required audit period.

The Contractor shall use DOE national Treatment, Storage, and Disposal contracts where cost effective to do so. If using commercial treatment and/or disposal options, the Contractor shall prepare the DOE M 435.1-1, *Radioactive Waste Management Manual*, exemption requests for use of commercial disposal facilities, and provide to EM-LA to obtain approval.

C.4.2 Safety Basis Development and Implementation

C.4.2.1 Initial Operations under Basis of Interim Operations

The Contractor shall take over initial TRU waste safe storage activities to maintain the current status of CH-TRU in TA-54 Area G under the current or revised Basis of Interim Operations (BIOs). This includes weekly monitoring and RCRA status inspections. CH-TRU processing operations will continue under the existing BIOs and safety analyses. The current BIOs and safety basis documents include the following [CH-TRU Ref-3 through Ref-8]:

- *Basis for Interim Operation for Technical Area 54 Area G*, LANL, January 2014.
- *Technical Safety Requirements for Technical Area 54 Area G*, LANL, January 2014.
- *Safety Evaluation Report for TA-54, Area G*, LANL, Revision 2.1, February 2014.

The Contractor shall be responsible for maintaining the above safety basis documents as necessary to meet the operational and nuclear safety needs for continued safe storage and CH-TRU waste processing activities.

The following documents are for reference only as they only apply to formerly used facilities that are NOT transferring to the Contractor and are NOT available for use. These documents may provide an understanding of what was, as a jumping off place for providing comparable functions within Area G.

- *Basis for Interim Operation for Waste Characterization, Reduction, and Repackaging Facility*, LANL, November 2011.
- *Technical Safety Requirements for Waste Characterization, Reduction, and Repackaging Facility*, LANL, November 2011.
- *Safety Evaluation Report*, LANL, SER WCRRF.01, Revision 2, November 2011.

C.4.2.2 Readiness Activities

Prior to commencing CH-TRU retrievals for Trenches A-D, Pit 9, CMPs, and Other Retrievals, the Contractor shall conduct or participate in the Readiness Assessments (RAs) that will be conducted in accordance with DOE Order 425.1D, *Verification of Readiness to Start Up or Restart Nuclear Facilities*.

The Contractor shall conduct management self-assessments (MSAs) and contractor RAs as necessary and discuss the results with EM-LA. The Contractor shall prepare for and support EM-LA or EM HQ RAs and/or operational readiness reviews (ORRs) under the direction of EM-LA. The Contractor shall cooperate with EM-LA and provide support for its readiness assessments. The Contractor shall practice and simulate waste retrieval, processing, and shipping operations using non-radioactive materials and

mockups to attain proficiency, refine work plans, and to ensure there are no gaps in the Nuclear Safety Management Programs. The Contractor's scope includes fabrication and assembly of mockups, as needed. The Contractor shall correct all deficiencies and findings from readiness activities assigned for its action.

If the LLCC organization, programs, and procedures are significantly different than the current LCBC organization, programs, and procedures, then a readiness review could be required prior to resuming operations.

Operational Readiness shall be required for all Area G TRU waste operations in "cold" or "warm" standby for more than one year. A list of activate TRU waste operations and stand-by operations can be found in Appendix J-12.

C.4.2.3 New Documented Safety Analysis

FOR INFORMATION BUT NOT PROPOSAL – EM-LA has separately contracted for development of a new Documented Safety Analysis (DSA) and Technical Safety Requirements (TSR). When completed, EM-LA will provide the new DSA and TSR to the Contractor as GFS/I (listed in Section J, Attachment J-11) as a Contract Change. The Contractor will be provided the opportunity to review the proposed change, develop an implementation plan and cost estimate, and negotiate with EM-LA on the scope and timing of the contract change.

Following successful execution of an agreed to change, the Contractor shall, concurrent with operations under the existing BIOs and safety basis, develop the new suite of implementing operating procedures, and develop and implement the controls necessary to implement the new DSA and TSRs without adversely affecting existing operations. The new DSA and TSRs will be subject to modification to facilitate and enable decommissioning, remediation, and waste management activities based on the Contractor's specific approach. These controls are expected to include both administrative and physical controls. Activities shall include performance of TSR-required surveillances and In-Service Inspections (ISIs).

Following the appropriate readiness activities for the new DSA and TSRs, the Contractor shall operate the necessary facilities and process CH-TRU using the new DSA, TSRs, implementing controls, and operating procedures. The Contractor shall then maintain the DSA and TSRs to reflect any changing conditions or needs in compliance with 10 CFR 830(b).

The Contractor shall NOT propose to anything other than the current BIO and safety basis documentation.

C.4.3 Contact Handled-Transuranic Waste Operations Support

C.4.3.1 Support Services

The Contractor shall provide support activities for all CH-TRU activities at TA-54 Area G, and shipping and safe storage (SS&S) operations at TA-54. The Contractor's support shall be provided for the following functions:

- Engineering for maintaining systems, structures, and components;
- Engineering for procurement reviews, modifications, Unreviewed Safety Question (USQ) support, maintenance work package reviews, and procedure development;
- Engineering for site layout, site preparation, drainage, traffic control, excavations requirements, and storm water control, and site restoration;
- Radiological Protection and Health Physics for all aspects of compliance with the LANL radiation protection program, including oversight of radiological control technicians, review of procedures, development of new radiological engineering controls, surveys, postings, dosimetry, source controls, and bioassay materials and equipment;
- Environment, Safety and Health subject matter expertise and oversight;
- Waste management coordination and technical support to manage M/LLW;
- QA for procurements, procedure reviews, receipt inspections, disposition of non-conforming items, and other aspects of adhering to QA programs;
- Work execution/procurement to interface with the maintenance organization, procurement team, project scheduler, and other logistical activities;
- Emergency management planning and conduct of emergency response activities including, but not limited to, drills and exercises;
- Regulatory compliance planning, execution, and tracking activities; and
- Decontamination services for equipment that is being released from the area or being tasked for other purposes.

C.4.3.2 Above Ground Container Retrieval, Handling and Storage Operations

The TA-54 operations center is available to support operations at Area G and can be manned during waste handling operations. The Contractor shall oversee access into the facilities in accordance with the Conduct of Operations requirements for CH-TRU.

The Contractor shall conduct operations and maintenance and provide equipment and supplies for placement, movement, and transport activities to retrieve below-ground waste containers, store, prepare, over-pack, characterize, and ship above-ground waste containers. Typical activities include, but are not limited to:

- Loading and offloading transport vehicles for incoming and outgoing waste containers at Area G.
- Administrative road closures for transferring containers to/from RANT, if RANT is continued to be used, or to another facility providing this function.
- Packaging and transport of waste containers to/from a facility in TA-54 Area G with the functions that used to be performed at WCRRF at TA-50 (that is no longer available for use).
- Over-packing CH-TRU waste containers stored above ground that have degraded over time. Containers may require over-packing into 85-gallon drums or SWBs due to integrity issues and to ensure safety and compliance with regulatory requirements.
- Retrieval, placement, and transport of drums, SWBs, and FRP containers to/from stacked storage arrays; this includes banding and un-banding pallets of stored drums and activities such as forklift movements, loading and unloading, and transport via trucks or other means. Special safety provisions are specified to handle and transport unvented drums.
- Over-pack containers (e.g., drums into SWBs) at TA-54 Area G and package the drums selected for loading into the TRUPACT-IIs. The containers shall be delivered to the RANT facility for loading, if RANT is continuing to be used, or to another facility providing this function.
- Transport to, off-loading, and inspecting containers during the receipt process at the RANT, if RANT is continued to be used, or to another facility providing this function. The Contractor is responsible (activity and cost) for the road closure for the movement of waste to RANT. The Contractor will execute this scope in coordination with the NNSA M&O Contractor. The Contractor will not have a role in the daily operation of RANT.

Note: Under the LLCC Contract, the Contractor will transport the certified TRU Waste to the RANT Facility which will be operated by the NNSA M&O where the payloads will be assembled. The Contractor shall pay its share for the maintenance and operation of RANT through cost reimbursement with the NNSA M&O Contractor.

- The LANL M&O Contractor will have the role of “Shipper of Record” to WIPP. TRU waste shipments to WIPP will consist of both NNSA Newly Generated TRU waste and EM Legacy TRU waste to optimize payloads. CCP will develop the payloads in consultation with both the NNSA M&O Contractor and the Contractor.

C.4.3.3 Waste Isolation Pilot Plant Central Characterization Project Support

The Contractor shall provide the services to support CH-TRU waste operations for the legacy and EM-managed newly-generated CH-TRU already accepted into TA-54, Area G that are performed by others including the WIPP Central

Characterization Program (CCP) as identified in Section J, Attachment J-7 and in the WIPP CCP Interface Agreement.

The Contractor shall support CCP activities such as CH-TRU waste characterization, certification, shipping operations, and vent/sample headspace gases in CH-TRU waste containers. CCP staff labor will be paid directly by EM-LA and not by the contractor.

C.4.4 Disposal of LLW in Pit 38 for NNSA

The Contractor shall operate the last LLW disposal Pit 38 at Area G for a period of three years (FY2018-FY2020) for disposal of LLW received at the gate of Area G from the NNSA M&O Contractor. The Contractor shall not utilize Pit 38 otherwise for EM-generated LLW without specific EM-LA approval. Following completion of LLW disposal, the Contractor shall close Pit 38. The Contractor shall build an operational cover over Pit 38 and the adjacent Pit 37 in the fourth year (FY2021) that will remain in place until the Area G remedy is implemented under the 2016 Consent Order. Pit 37 and part of Pit 38 have been minimally covered with headspace materials.

The remaining disposal capacity of Pit 38 is approximately 2,500 m³ of capacity for disposal of **higher activity LLW** meeting the requirements established in Table 3-1 (Attachment 3) of the *LANL Waste Acceptance Criteria Solid Low-Level Waste (LLW)*, P930.1. An additional 6,000 m³ of capacity is estimated to remain in Pit 38 for disposal of **lower activity LLW** meeting the requirements established in Table 3-2 (Attachment 3) of the LANL WAC.

The Contractor shall interface with the NNSA M&O Contractor for the radiological safety basis for Pit 38 that is contained in the *Performance Assessment and Composite Analyses (PACA)*. The Contractor shall collect the costs associated with the handling of the operating Pit 38 and closing Pits 37 and 38 and be paid through contractual agreements with the NNSA M&O Contractor, and provide the cost information to EM-LA for information only.

C.4.5 Facility and Equipment Maintenance

The Contractor shall maintain all facilities including, but not limited to, processing and storage facilities, roads, lighting, fencing, and grounds required at the TA-54 Area-G in proper-working condition. Maintenance of facilities involves routine repairs and upkeep of ancillary offices, storage buildings, roadways, and the surrounding grounds and includes, but is not limited to, vegetation trimming and grass mowing, janitorial services, pest control, and painting.

The Contractor shall maintain equipment that is needed for, but is not limited to, processing and operations, inspections, calibrations, lubrication, and replacement of moving parts including main facility support systems such as heating, ventilation, and air conditioning, communication systems, computer network, and fire protection systems.

C.4.6 Facility Modifications and Upgrades

The Contractor shall conduct or support as needed on-going modifications and upgrades to nuclear facilities used for management of CH-TRU waste. The Contractor shall perform modifications and upgrades to these facilities if needed to address changes to the nuclear safety basis documents and resulting requirements (Section C.4.2.2). Anticipated modifications and changes include upgrades to fire detection and fire suppression systems, establishment of new Defined Areas that require additional radiological controls and liquid flow controls, and changes to ventilation systems required to process CH-TRU waste. Facility modifications and upgrades may require coordination under the Hazardous Waste Facility Permit with NMED.

C.4.7 Facility Evaluation for Continued Use

The Contractor shall conduct facility evaluations of the facilities in TA-54 Area G that balance the continued operational needs for the CH-TRU processing and storage, the changes and planned changes in maintenance requirements and costs, changes in access and risks to other continued operations in order to determine whether unnecessary facilities can be excessed for demolition. Because specific facilities in TA-54 Area G that might be excessed for demolition cannot be known at this time, specific facility demolition will be accomplished under the Indefinite Quantity/Indefinite Delivery (IDIQ) task orders, Section C.14.

C.4.8 Completion Reporting

The Contractor shall prepare and submit to DOE project completion reports for waste stream retrievals including Other Retrievals, Trenches A-D, CMPs, and Pit 9. The completion reports shall include verification that Key Performance Parameters and Project Completion Criteria as described in Project Execution Planning have been met, the project background, project scope, project highlights, schedule, cost summary, performance metrics, lessons learned, safety performance, abnormal events, and project photographs.

C.4.9 Waste and Waste Analysis and Control

The Contractor shall provide management of the all wastes inventory located at Area G, including planning, prioritization, and scheduling of container movements, characterization, processing, and disposal shipments to WIPP. The Contractor shall coordinate with the LANL M&O to duplicate, split off an EM copy, and maintain the LANL Waste Compliance and Tracking System (WCATS) information for EM managed wastes (see Section J, Attachment J-6 for interfaces with the NNSA M&O Contractor).

WCATS is the software application that has been specifically designed to manage LANL's waste from cradle to grave. The system provides the proper support needed for characterization, generation, processing, and shipment of all waste created at LANL including EM managed wastes. WCATS provides extensive support for representing waste storage and disposal facilities, buildings, rooms, and grid layouts to support waste and radioactive material inventory management including CH-TRU, MTRU, LLW, MLLW,

and other solid waste). Field operations are conducted with mobile personal digital assistants.

Additionally, the Contractor is responsible for developing and implementing site-specific TRU waste program documents (plans) that address applicable requirements and criteria pertaining to packaging, characterization, certification, and shipping of defense TRU waste to WIPP for disposal. The Contractor shall provide technical support for Acceptable Knowledge (AK) report development, maintain waste records, and waste transfers for WIPP certification.

The Contractor shall conduct nuclear material inventory control at TA-54 Area G, including responding to data and information requests from authorized internal and external clientele. The Contractor shall utilize the Los Alamos Material Control and Accountability System (LAMCAS) to track and report shipments of materials that have radiological content that might require tracking (see Section J, Attachment J-6 for interfaces with the NNSA M&O Contractor).

C.4.10 Remote-Handled Transuranic Waste

Although the Contractor shall NOT be handling or processing RH-TRU, the Contractor shall maintain the repository of information on RH-TRU, support EM-LA in preparation of draft documents for potential NEPA documents, potential exemption requests, possible preliminary project plans, draft specifications for facilities necessary to handle RH-TRU, and operational protocols for handling and processing RH-TRU.

C.5 GROUND WATER MONITORING PROGRAM

The Contractor shall plan, manage, integrate, and execute all groundwater monitoring and sampling in accordance with a variety of programs listed below including maintenance to keep the structures operable and equipment in good working order. Should there be problems with the sampling program, the Contractor shall determine the criteria for potential replacement groundwater monitoring locations for wells, boreholes, and surface structures to be installed under Section C.6, Drilling. This scope includes all water-level monitoring, packer pressure transducers monitoring, all periodic sampling events, and analytical laboratory support (see Section J, Attachment J-6 for NNSA M&O subcontract interfaces and Section J, Attachment J-7 for other contractor interfaces) necessary to comply with the various sampling plans.

This program does NOT include installation of wells and boreholes (Section C.6), surface water (Section C.7), Research Department Explosive (hexahydro-1,3,5-trinitro-1,3,5-triazine) (RDX) (Section C.8), or Chromium remediation (Section C.9).

All program management, project management, document control records management, project controls, environmental information management and interfaces with NNSA M&O activities required to execute this section shall be provided to accomplish this Section and included in the cost basis of this Section CLIN. This support shall not be provided from under any other Section in this contract (outside this CLIN) in order to provide "all in costs" for this work scope.

C.5.1 Groundwater Monitoring Process

The most significant requirement for monitoring groundwater are identified in the 2016 Consent Order, Section XII, *Groundwater Monitoring*.

C.5.1.1 Sample Planning

The Contractor shall plan for sample collection including examination of the current sampling program plan, planning field sampling to meet the three-week long campaign requirements, sample bottle identifiers (IDs) and labels, sequencing collection, facilitating any subcontractor activities, checking monitoring well water levels using telemetry, checking packer pressures provided by telemetry equipment, etc. utilizing the EIMS' Sample Planning module (see Section J, Attachment J-11, GFS/I, for the EIMS Mind Map).

The Contractor shall include data quality objectives (DQOs) in the planning to optimize the efficiency of the project's data collection, analysis, and assessment processes, and improve the quality and defensibility of project technical data.

C.5.1.2 Sample Collection

The Contractor shall use current LANL SOP for groundwater sampling or develop equivalent sampling procedures to collect groundwater samples from alluvial, intermediate, and regional wells using electric gear-driven submersible pumps (GSPs), bladder pumps, Bennett pumps, Baski pumps, hand bailers, or any other method not previously included.

The Contractor shall follow industrial standards common to environmental sample collection and field measurements that allow meeting NMED quality requirements.

C.5.1.3 Purge Water and Waste Management and Disposal

The Contractor shall handle and dispose of purge water, contact wastes, decontamination fluids, and returned samples waste streams in accordance with a procedure set that the Contractor shall develop that meets State of New Mexico requirements. The Contractor may blue sheet, use, or replicate the NNSA M&O Contractor procedures set, which includes LANL Procedure P-409, *Waste Management*; LANL Procedure *Management of Environmental Programs Waste*, Revision 0, EP-DIR-SOP-10021, March 2012; LANL Procedure P-930-1, *LANL Waste Acceptance Criteria*; LANL Procedure P-930-2, *Waste Certification Program*, and the current version of the Interim Plan.

Approximately 125,000 gallons of purge water are anticipated to be generated across the seven watersheds annually based on a quarterly monitoring frequency of existing wells and should be escalated based on additional well construction listed in Section C.4, Drilling. All purge water from both existing and new wells shall be managed in accordance with the Notice of Intent (NOI) Decision Tree, approved by the NMED-GWQB, and Discharge Permit-1793. Radionuclide data shall also be reviewed and compared to current groundwater background levels to complete radioactive waste determinations.

The contact waste stream consists of personal protective equipment (PPE) (nitrile gloves), dry decontamination towels (paper towels), bailers, plastic or glass bottles, tygon tubing, discharge hoses, and other solid waste that comes into contact with potentially contaminated environmental media. The decontamination fluid waste stream consists of de-ionized water from decontamination activities including rinse waters. The volume of groundwater samples returned from analytical laboratories is anticipated to be small and infrequent, in that there are rarely returned samples.

C.5.1.4 Subcontract Issuance and Management

The Contractor shall establish and maintain any subcontracts necessary to accomplish the field sampling campaigns within the schedules specified in the *Interim Facility-Wide Groundwater Monitoring Plan for the 2016 Monitoring Year, October 2015-September 2016* (IFGMP), LANL, EP2015-0085, 2015. These subcontracts shall require limitations on the deviations that might be contractor or subcontractor caused.

C.5.1.5 Sampling Analytical Laboratories

The Contractor shall send collected samples required for compliance activities to contracted independent laboratories and shall ensure analytical laboratories return the data to EIMS. The Contractor shall review the analytical data from all

groundwater monitoring conducted under the 2016 Consent Order received back from analytical laboratories during the previous month by the fifteenth day of each month and shall notify NMED of any exceedances of six criteria in accordance with 2016 Consent Order, Section XXVI, Quality Assurance/Data Management/Data Review.

The Contractor shall coordinate all audit activities with DOE/Albuquerque Operations Office Analytical Management Program auditors of programmatic commercial analytical laboratories and shall interact with DOE/HQ on National EDD, analytical, and auditing efforts (Section J, Attachment J-11, GFS/I). The Contractor shall visit analytical laboratories to resolve issues of mutual concern and perform data package audits to review data quality on LANL data.

C.5.1.6 Data Availability to Projects

Following the data review, the environmental data in EIMS shall be made available to groundwater monitoring project personnel, other project personnel, and interested members of the public. The Contractor's groundwater monitoring program personnel shall support inquiries by the Contractor's other project activities for interpretive and evaluation purposes when groundwater information is needed by the other projects.

C.5.1.7 Hydrogeologic Data Repository and Geologic Framework Model

The Contractor shall maintain the Hydrogeologic Data Repository (database) of data obtained from previous well and borehole installations and new well and borehole drilling activities collected under PWS Section C.6. The Contractor shall include all available construction and geophysical testing information collected by the Contractor and the NNSA M&O Contractor for well and borehole activities across LANL. The Contractor shall maintain a Geologic Framework Model (GFM) of subsurface hydrogeological structures for subsurface remediation analyses and for well and borehole drilling activities. The Contractor shall provide requested data and model information to the NNSA M&O Contractor when requested. (See Section J, Attachment J-6, #9)

C.5.2 Groundwater Monitoring Programs

C.5.2.1 Interim Facility-Wide Groundwater Monitoring Plan

The Contractor shall implement the IFGMP to fulfill the requirement in 2016 Consent Order, Section XII, Groundwater Monitoring. The Consent Order anticipates that monitoring plans for specific areas will change as the groundwater investigation objectives in 2016 Consent Order, Section IX, Cleanup Objectives and Cleanup Levels, are met. The IFGMP includes area-specific monitoring groups within seven major watersheds within the LANL boundary:

- Los Alamos/Pueblo Canyons,
- Sandia Canyon,
- Mortandad Canyon,

- Pajarito Canyon, and
- Water Canyon/Cañon de Valle,
- the combined watersheds of Ancho/Chaquehui/Frijoles Canyons, and
- White Rock Canyon.

The IFGMP shall also collect baseline data in areas outside the LANL boundary that have been affected by past Laboratory operations to ensure water leaving the LANL boundaries does not pose an unacceptable risk.

The Contractor shall collect and analyze groundwater samples at specific locations and for specific constituents to fulfill the requirements of the 2016 Consent Order. Groundwater-level data will also be collected to understand the occurrence and movement of groundwater including alluvial groundwater (shallow, near-surface) in the bottom of the canyons, intermediate-perched groundwater, and regional aquifer groundwater beneath the Pajarito Plateau.

The IFGMP describes all groundwater, base flow (persistence surface water), spring sample collection and the objectives for monitoring, the locations of sampling stations, the frequency of sampling, and the field measurements taken at each location.

During sampling, the Contractor shall notify NMED of the sampling schedule and allow the NMED Oversight Bureau to collect or split samples during normal sampling campaigns.

The Contractor shall collect, maintain within environmental and time parameters, package, and then ship all samples to the designated off-site analytical laboratory in a timely manner to allow the laboratory to conduct analyses within proper holding times.

There have been minimal changes to the IFGMP requirements from monitoring year to monitoring year. Typical variability in sampling requirements changes as dictated by NMED as about a 3% change from year to year. New wells or boreholes monitoring changes added each year will increase the IFGMP. In FY2013, these changes included the addition of biennial sampling for low level tritium, perchlorate, metals, volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs) at specified wells and all general surveillance monitoring group wells not already sampled for certain constituents; increase semiannual to annually sampling for metals, VOCs, SVOCs, HE and general inorganics at specified wells; and quinquennial sampling of high explosives (HEs), polychlorinated biphenyls (PCBs), dioxins/furans at all wells is specified monitoring groups. In FY2014, these changes included increasing sampling events from semiannually to quarterly at approximately 10 wells, increasing sampling events from annually to semiannually at specific wells, increasing sampling events to annually at approximately 10 wells, and adding multiple wells to the watch list. In FY2015, these changes included quarterly sampling at approximately 10 wells for VOCs and low-level tritium.

C.5.2.2 County of Los Alamos Drinking Water Supply Wells

The Contractor shall prepare an annual sampling and analysis plan (SAP) for monitoring the County of Los Alamos drinking water supply well waters (within and near LANL property) based on previous sample results, recent and localized groundwater investigation results, and changes in drinking water regulations. The Contractor shall collect and analyze well water at the wellhead sample locations and report the results to the County of Los Alamos to ensure that water pumped for public consumption is in compliance with the Safe Drinking Water Act and NMED water quality requirements. Although this function is the responsibility of the NNSA M&O Contractor, the Contractor must support this function in accordance with the mandatory and optional services agreements in Section J, Attachment J-6. Off-site sampling is performed in coordination with Los Alamos County well operations.

C.5.2.3 City of Santa Fe Drinking Water Supply Wells at the Buckman Well Field

The Contractor shall prepare an annual SAP for monitoring the City of Santa Fe drinking water supply wells at the Buckman well field based on previous sample results and changes in drinking water regulations. The Contractor shall collect and analyze well water at the wellhead sample locations and report the results to the City of Santa Fe to ensure that water pumped for public consumption is in compliance with the Safe Drinking Water Act and NMED water quality requirements. The Contractor shall complete all groundwater sample collection at the City's Buckman well field; off-site sampling is performed under the annual SAP with the City of Santa Fe.

C.5.2.4 Pueblo de San Ildefonso Drinking Water Supply Wells

The contractor shall complete all groundwater sample collection at San Ildefonso in accordance with the annually updated and approved SAP, Appendix A under the "Memorandum of Understanding [MOU] for Environmental Monitoring" among DOE, the Bureau of Indian Affairs, and the Pueblo of San Ildefonso. As agreed to among the Pueblo, the Bureau of Indian Affairs (BIA), and EM-LA, the sampling described in Appendix A to the MOU will be performed by the Contractor and coordinated with DOE EM-LA and NA-LA, NNSA M&O Contractor and Pueblo-designated personnel. All activities shall be conducted in accordance with the June 2015 MOA and protocols. Failure to notify the Pueblo in a timely manner may result in the Pueblo's denying the request or determining an alternate date for sample collection. For any groundwater sample, with the exception of storm water samples (because of insufficient volume), the Pueblo may obtain a split sample as outlined in Section 6.d. of the May 28, 2014 Protocol for Protecting Confidential Pueblo Information (the Confidentiality Protocol).

C.5.3 Reporting and Deliverables

The Contractor shall plan, track, and deliver products required under the IFGMP, providing deliverables to EM-LA within the timeframes specified in Section J, Attachment J-2, Summary of Contract Deliverables, before the required deliverable due date for DOE review and action.

C.5.3.1 Monthly Data Review Notifications

The Contractor shall notify the NMED orally within one business day after review of the analytical data from all groundwater monitoring received from analytical laboratories during the previous month and submit written notification by the fifteenth day of each month, in accordance with the 2016 Consent Order, Section XXVI, Quality Assurance/Data Management/Data Review. Written notification shall be a letter report that includes in table format: the date or dates of the sampling event, an identification of the well or spring, the location of the well or spring, the depth of the screened interval of the well or zone sampled, a list of the analytical data that triggered the reporting requirement, any known issues with sample quality, and the specific category for which the data is reported under 2016 Consent Order, Section XXVI. The Contractor shall include NA-LA and the NNSA M&O Contractor on all notifications. Exceptions to the 1d and 15d notifications are the data collected from Pueblo, County of Los Alamos and City of Santa Fe wells which have a hold period for making this information public. The 1d and 15d notifications will be made upon expiration of the review period of data (typically 60 days).

C.5.3.2 Periodic Monitoring Reports

The Contractor shall prepare and provide PMRs of analytical results obtained from groundwater, base-flow, and spring samples collected under the IFGMP, in accordance with 2016 Consent Order, Section XII, Groundwater Monitoring. The Contractor shall submit PMRs quarterly on November 30, February 28, May 31, and August 31 and include period monitoring events concluded 120 days before the submittal dates. The Contractor shall submit electronic reports of results to the Pueblo of San Ildefonso, Los Alamos County, and City of Santa Fe. The City of Santa Fe shall also be send quarterly letter reports. The Contractor shall comply with the MOU and protocol requirements for data review for the Pueblo de San Ildefonso data.

The Contractor shall report any deviations from planned IFGMP scope identified during sampling campaigns in the appropriate PMR. The Contractor shall maintain a watch list of groundwater monitoring locations that have follow-up actions required because of concerns about the reliability and representativeness of water quality form those wells. The Contractor shall keep EM-LA and NMED-HWB appraised of watch list items.

C.5.3.3 Annual Update to the Interim Facility-Wide Groundwater Monitoring Plan

The contractor shall prepare an annual update of the IFGMP in accordance with the 2016 Consent Order, Section XII, *Groundwater Monitoring* and based on monitoring data obtained over the previous year and a search for new regulatory/statutory requirements. The updated IFGMP will specify the locations of alluvial, intermediate-perched, and regional groundwater as well as base flow and surface water monitoring to be sampled at and near the LANL; frequencies at which the sampling will be conducted, and identifies the analytics that will be analyzed for each sampling event.

The Contractor's groundwater monitoring shall comply with the 2016 Consent Order, the NNSA-owned RCRA Hazardous Waste Facility (HWF) Part B Permit, Atomic Energy Act (AEA), Toxic Substances Control Act (TSCA), and DOE Order 458.1, Radiation Protection of the Public and the Environment.

C.5.3.4 Annual Update to the County of Los Alamos Sample and Analysis Plan

The Contractor shall prepare an annual update to the County of Los Alamos Water-supply Wells SAP in coordination with Los Alamos County and with the participation of EM-LA. Although the Contractor shall prepare the SAP, it shall only be approved by EM-LA and the County of Los Alamos.

C.5.3.5 Annual Update to the City of Santa Fe Sample and Analysis Plan for the Buckman Well Field

The Contractor shall prepare an annual update to the City of Santa Fe Buckman Well Field Water-supply Wells SAP in coordination with the City of Santa Fe and with the participation of EM-LA. Although the Contractor shall prepare the SAP, it shall only be approved by EM-LA and the City of Santa Fe.

C.5.3.6 Annual Update to the Appendix A Sample and Analysis Plan for the Pueblo of San Ildefonso

The Contractor shall prepare an annual update to the Pueblo de San Ildefonso SAP, Appendix A to the MOU, dated 1996, among DOE, the BIA, and the Pueblo de San Ildefonso (Pueblo), prior to the beginning of the monitoring year (January-December). Although the Contractor shall prepare the SAP (Appendix A), it must be approved by EM-LA and the Pueblo de San Ildefonso Department of Environment and Cultural Preservation (DECP).

C.5.3.7 Triennial Update to General Facility Information Document

The Contractor shall prepare triennial updates to the General Facility Information (GFI) document based on the next required submittal in 2017 (by the LCBC Contractor) as required by modification submitted Jan 23, 2012 [EP2012-0009].

The scope of the report is also provided in this section and is a one-time submittal, unless new information becomes available.

C.5.3.8 Annual Update to Groundwater Aquifer Contaminant Maps and Fact Sheets

The Contractor shall prepare annual updates to the LANL regional aquifer contaminant maps and other fact sheets for submittal to EM-LA. The Contractor shall prepare a spreadsheet with the data to support these maps, prepare and submit a database update form, and update a booklet type document describing the contaminant plumes. These updates shall be developed, reviewed, and provide to EM-LA by March 1st each year.

C.5.4 Operations and Maintenance

The Contractor shall operate and maintain the network of groundwater monitoring wells that are being monitored in compliance with the IFGMP in accordance with Monitoring Well Maintenance Plan (EP2013-0067), which also includes maintenance activities to allow access to the wellhead for groundwater sampling activities.

C.6 DRILLING

The Contractor shall plan, manage, integrate, and execute the drilling and installation of a variety of wells and boreholes of different types. Drilling wells and boreholes is contingent on the accurate specifications and needs as defined by the other projects and programs activities.

Wells and boreholes are difficult at LANL because of the very complex hydrogeology that varies across LANL, which is represented in Drilling Fact Sheets & Location Maps, and well completion reports in the LANL Electronic Public Reading Room that provide detailed information on borehole drilling, geophysical information and well construction.

All program management, project management, document control records management, project controls, environmental information management and interfaces with NNSA M&O activities required to execute this section shall be provided to accomplish this Section and included in the cost basis of this Section. This support shall not be provided from under any other Section in this contract in order to provide "all in costs" for this work scope. The steps included in drilling include planning, possibly subcontracting, drilling operations, well/borehole examinations, cutting sampling, waste management, well design, well construction, well completion, development, cap completion, and reporting.

C.6.1 Drilling Process

C.6.1.1 Drilling Planning

The Contractor shall determine within the Section what required input needs to be received from the individual project teams (related to other work scopes within other sections of this contract) and request any additional specification required

to fully define the work scope to be performed under this section of the contract. The Contractor shall then develop drilling work plans (DWP) under this section to include methods of construction and well configuration based on aquifer configuration, intended well use, and local experience drilling in the vicinity of the proposed location and NMOSE regulations for any of the specified drilling. The project or program requesting drilling (under other sections of this contract) shall provide the specific specifications, drilling location, and performance criteria for those drilling activities.

The Contractor shall develop a preliminary design for the proposed and anticipated well in the DWP. DWPs shall be submitted to EM-LA for approval before submittal to NMED for approval. The Contractor shall also develop a Spill Prevention and Control Countermeasures (SPCC) Plan and a Storm Water Pollution Prevention Plan (SWPPP) for each drilling activity.

C.6.1.2 Drilling Operations

In addition to the NMOSE requirements for drilling a well, the Contractor shall perform all drilling, borehole, and well installation and operations in accordance with NMED's requirements and methods selected to optimize the potential of completing the well without the use of drilling additives in, or immediately above, the target zone of saturation. The Contractor may use fluids and additives to facilitate drilling provided they are consistent with those previously approved or are specifically approved by NMED for used in the drilling program at LANL and have been characterized geochemically. The Contractor shall complete and maintain records, detailing the type, amount, and volume of drilling fluid used, depth of drilling fluid added to the borehole, amount in storage in the borehole, and recovery volume of drilling fluid.

The Contractor shall notify EM-LA and NMED electronically when and where the ground water level is identified during drilling operations.

C.6.1.3 Well Examination (Open Hole)

The Contractor shall examine all wells, completed GW detections, and open borehole conditions including lithological logs of cuttings, water-level measurements, video logs, geophysical logs and driller's observations. The geophysical suite shall include, but is not limited to, the following tools: Triple Detector Lithodensity; Accelerator Porosity Sonde; natural and spectral gamma logs (Hostile Environment Natural Gamma Sonde), and Elemental Capture Spectroscopy Sonde.

C.6.1.4 Cutting Sampling

The Contractor shall collect bulk cuttings samples at specified intervals from ground surface to total depth (TD) for archiving in core boxes. The Contractor shall also collect sieved fractions (>#10 and >#35 mesh) from ground surface to total depth in chip trays along with un-sieved (whole rock) cuttings for archiving.

Cuttings shall be screened for radiological constituents before removal from the site.

C.6.1.5 Waste Management and Disposition

The Contractor shall manage all investigation-derived waste (IDW) (drill cuttings, drilling water, development water, purge water, decontamination water, and contact waste) in accordance with RCRA requirements, NMED regulations, DOE orders, and LANL requirements. Drill cuttings shall be managed in accordance with the NMED-approved Decision Tree for Land Application of IDW Solids from Construction of Wells and Boreholes. Drilling, purge, and development waters will be managed in accordance with the NMED-approved NOI Decision Tree for Drilling, Development, Rehabilitation, and Sampling Purge Water. Both decision trees are provided in Section J, Attachment J-11, GFS/I. Any changes to the decision tree must be reviewed and concurred in by NA-LA and the NNSA M&O Contractor.

C.6.1.6 Design Final Well Configuration and Construction

The Contractor shall prepare a final well configuration design and obtain EM-LA and NMED approval before well installation. The Contractor shall complete construction in accordance with the approved design. Installation of all wells shall be considered complete when the well casing has been installed to its final position and the casing rim can be measured relative to the ground surface.

The Contractor shall finish the surface completion construction for monitoring wells as either flush-mounted wells or above-ground completions in accordance with 2016 Consent Order Appendix F requirements, including installation of a locking protective casing around the well casing (riser) to prevent damage or unauthorized entry.

C.6.2 Well Development and Water Sampling

The Contractor shall develop wells in accordance with the 2016 Consent Order Appendix F and NMED requirements within 30 days of the completion of well installation. The Contractor shall apply appropriate techniques (including both mechanical and chemical means) designed to bring the well to its maximum discharge capacity with attendant optimization of well efficiency, specific capacity, stabilization of aquifer material, and control of sand and suspended solids. The Contractor shall measure water-quality parameters during development and sampling, and IF unable to bring the water-quality parameters within specified measurement limits, the Contractor shall discuss chemical well development with EM-LA and NMED to obtain NMED approval. The Contractor shall consider well development complete when target water-quality parameters are met. The target water-quality parameters are turbidity <5 nephelometric turbidity units, TOC <2 ppm, and other parameters stable.

During development and initial sampling, the Contractor shall collect groundwater samples from the completed well between 10 and 60 days after well development for the full suite of constituents including radionuclides, metals/cations, general inorganic

chemicals, high explosives, volatile organic compounds, and stable isotopes. During development and initial sampling, the Contractor shall allow the NMED Oversight Bureau to collect or split samples during development and during normal sampling, respectively. The Contractor shall collect subsequent groundwater samples under the IFGMP. The Contractor shall use the Laboratory's borehole video camera and natural gamma, and induction tools in the open borehole, if conditions allow. The suites run and timing of geophysical logging will depend on borehole conditions.

The Contractor shall conduct aquifer testing and hydraulic testing to identify if the well is in a significant water-producing horizon.

C.6.3 Reporting and Deliverables

The Contractor shall develop and provide to EM-LA for approval and subsequent delivery to NMED (for their approval) the following reports or provide the following notifications:

1. DWPs including proposed methods, any additives, and the proposed well design.
2. Notifications of observed water level and notification of reaching total depth of drilling.
3. Final Well Configuration Design following well or open hole examination and evaluation.
4. Well completion summary Fact Sheet within 30 days of completion of each regional aquifer well.
5. Well Completion Report within 120 days clock for regional aquifer wells beginning 30 days after well completion. Details of all drilling and well construction for alluvial and intermediate depth wells shall be included in site- or canyon-specific investigation reports (IRs).

The current knowledge on hydrology is represented on the Fact Sheets and Well Completion Reports for existing wells contained in the EPRR. These documents can be found using simple searches.

C.6.4 Known Specific Well Activities

C.6.4.1 Monitoring Wells (4" Inner Diameter at Depth)

The Contractor shall drill all wells in compliance with the 2016 Consent Order Appendix F to obtain acceptable quality groundwater samples. EM-LA will determine the relative priority and timeframe instead of the completion date included in existing DWPs prepared under the previous contract.

Construct Regional Aquifer Well R-61r (Replacement)

The Contractor shall drill a replacement regional aquifer well R-61r to monitor water quality in the regional aquifer and to help define the vertical and lateral extent of chromium contamination known to exist in the vicinity of wells R-42 and R-28, in accordance with the NMED-approved DWPs, *Drilling Work Plan for*

Regional Aquifer Well R-61-r, ESHID-600175, 2015-02-02. Timing of the installation of this well should be coordinated with the Chromium Plume Control Interim Measure and Chromium Plume-Center Characterization project as the exact location of the well may be dependent upon information collected during IM and Characterization operations. For planning purposes it is anticipated that this well would be installed the first half of FY2018.

Construct Regional Aquifer Well R-54r (Replacement)

The Contractor shall drill a replacement Regional Aquifer Monitoring Well R-54r in Pajarito Canyon, south of Material Disposal Area (MDA)-L, in accordance with the NMED-approved DWP *Submittal of the Drilling Work Plan for Replacement Regional Aquifer Well R-54rr*, ESHID-600287, 2015-03-11. The primary objective is to determine if contamination is present at this location. A secondary objective is to improve the detection efficiency for contaminants originating from S-Site Canyon and Fishladder Canyon.

Construct Perched Intermediate Well R-55ir (Replacement)

The Contractor shall drill a replacement Perched-Intermediate Monitoring Well R-55ir (Replacement) in Canada del Buey, adjacent to R-55, in accordance with the NMED-approved DWP *Submittal of the Drilling Work Plan for Replacement Perched Aquifer Well R-55ir*, ESHID-600286, 2015-03-11. The primary objective is to determine if contamination is present at this location. A secondary objective is to improve the detection efficiency for contaminants originating from S-Site Canyon and Fishladder Canyon.

Construct Perched-Intermediate Monitoring Well R-26i

The Contractor shall construct a Perched-Intermediate Monitoring Well R-26i in accordance with the NMED-approved DWP *Work Plan - Drilling Work Plan for Perched-Intermediate Well R-26i*, ERID-223029, LA-UR-12-23300, EP2012-0174. The primary objective is to determine if PCE detected in groundwater samples collected from R-26 PZ2 is present at this location. A secondary objective is to replace piezometer R-26 PZ2 with a properly constructed monitoring well to better evaluate the geochemistry of perched intermediate groundwater at the R-26 well location. The contractor should plan for installation in the first half of FY2018.

Construct Perched-Intermediate Monitoring Well R-10i

The Contractor shall construct a Perched-Intermediate Monitoring Well R-10i in accordance with the NMED-approved DWP *Work Plan for R-10i* *Work Plan for R-10i*, LA-UR-11-02184, 2011. The primary objective is to determine if nitrate contamination is present at this location. The Contractor shall discuss acceptable timeframe and coordination requirements for the contraction with the Pueblo de San Ildefonso and EM-LA. The Contractor shall prepare any

necessary access agreements that EM-LA will need to sign with the Pueblo and shall make payment of fees for this well. (SIMR-2 on Pueblo lands resulted in fees totaling approximately \$300,000.)

Construct Regional Aquifer Monitoring Well R-65

The Contractor shall construct regional Aquifer Monitoring Well R-65 in accordance with *Drilling Work Plans for R-64 and R-65*, LA-UR-11-00186, 2011.

Construct Regional Aquifer Monitoring Well R-59

Although a DWP for R-59 was developed in 2010, the Contractor shall evaluate the history of interactions around TA-50 and MDA-C and propose conditions for location of R-59, see, *Drilling Work Plan for Regional Aquifer Well R-59*, LA-UR-10-06502. NMED has approved six extension requests for providing a recommended location based on a lack of reason and in-opportune timing and priority. The Contractor shall prepare a revised DWP for well R-59 and a proposed location and timing of construction. The Contractor shall base the final well design on hydrogeological conditions encountered during drilling and submit a revised well design document to EM-LA and subsequently to NMED for approval. The Contractor shall not drill R-59 within the hazardous waste site boundary and a Radiation Work Permit shall not be necessary for the drilling activities. This well will support the CME and therefore anticipated installation is FY2019.

Additional Monitoring Wells

Additional monitoring wells may be authorized by the Contracting Officer under Section C.14, Additional Assignments, under CLINs 0004, 0007, or 0010.

C.6.4.2 Core Holes and Piezometers

Bore Hole Sandia Wetland Borehole 1

The Contractor shall drill an investigation borehole that includes collecting and analyzing core and pore water from beneath the Sandia Wetland Borehole 1, *Drilling Work Plan for an Investigation Borehole beneath the Sandia Canyon Wetland*, ERID-525192. NMED has directed the Laboratory to drill a borehole and collect core to 400-ft depth at the location to further investigate a resistivity anomaly. Prior to drilling this borehole, the contractor shall determine if data from groundwater monitoring well R-67 has supported no longer needing this well and will work with NMED to remove this required borehole.

Additional Core and Bore Holes

When specified by the Contracting Officer, the Contractor shall collect core samples from core holes and shall drill boreholes and install piezometers. There are no specific locations for other core holes, boreholes, or piezometers at this time. These additional core holes and piezometers will be authorized by the

Contracting Officer under Section C.14, Additional Assignments, under CLINs 0004, 0007, or 0010.

C.6.4.3 Additional Injection or Extraction Wells

The Contractor shall drill additional injection or extraction wells at locations determined by analysis of the groundwater remediation projects (e.g., chromium and RDX) as specified by the Contracting Officer. The performance criteria for additional wells are not currently known; however it is anticipated that they will be similar to those installed for the Chromium Plume Control Interim Measure and Chromium Plume-Center Characterization. Information related to these extraction and injection wells can be found on the EPRR. These additional injection or extraction wells will be authorized by the Contracting Officer under Section C.14, Additional Assignments, under CLINs 0004, 0007, or 0010.

C.6.4.4 Technical Area-21 Westbay Wells and Sampling System Reconfiguration

The Contractor shall reconfigure monitoring wells that include the Westbay well sampling system components and remove those Westbay well sampling system components. The Westbay well sampling system is proprietary information and will require the vendor's support. The Contractor shall deflate any packers, remove any necessary casings, remove any necessary sampling strings, conduct any logging of the holes, recommend any screens to be retained or those to be abandoned, and provide a revised well and sampling system design for EM-LA and NMED approval. The Contractor shall install purgeable sampling systems that will allow meeting 2016 Consent Order water quality requirements for each well screen required to be kept by NMED in accordance with Appendix F and Section IX, Cleanup Objectives and Cleanup Levels. The Contractor shall isolate each productive screened interval; if any formerly dry screened intervals begin producing water after the Westbay system is removed, the Contractor shall also isolate them.

The Contractor shall reconfigure four wells in the TA-21 monitoring network as follows:

1. R-5 currently has four Westbay intermediate zone/regional aquifer screens and shall finally include a two-pump Baski sampling system with dedicated transducers to sample the intermediate and upper regional aquifer screens.
2. R-7 currently has three intermediate zone/regional aquifer screens and shall finally include a single pump system to sample the regional aquifer screen. An inflatable packer will be installed below the lower intermediate zone screen to prevent any potential future perched water from reaching the regional aquifer, with transducers placed above and below the packer to monitor water levels.
3. R-8 currently has two regional aquifer screens and shall finally include a single pump system to sample a single retained regional aquifer screen.

4. R-9i currently has two intermediate zone screens and shall finally include a single pump system to sample a single retained intermediate aquifer screen.

C.6.4.5 Well Screen Reconfiguration or Rehabilitation

The Contractor shall reconfigure regional aquifer well R-22 in accordance with the NMED-approved *Work Plan for Regional Aquifer Groundwater Monitoring Well R-22*, Revision 1, LA-UR-12-20585, EP2012-0105, ERID-214994. This work plan includes plugging and abandoning the lower screens in the well (screens 4 and 5), constructing a single screen well in current screen 3 zone, installing a dedicated sampling system, packing off screens 1 and 2 from screen 3, developing screen 3, and removing cross flow prior to sampling for representative groundwater.

The Contractor shall rehabilitate regional monitoring well CdV-R-37-2 to comply with NMED requirements and the 2016 Consent Order and Appendix F guidance. This monitoring well was reconfigured once already as documented in the *Well Reconfiguration of CdV-R-37-2 Field Summary Report*, LA-UR-13-27284, EP2013-0185, ERID-250073, but does not meet the data quality objectives of NMED or the needs of EM-LA. The Contractor shall develop a rehabilitation plan, obtain EM-LA approval, submit the plan to NMED, and resolve technical comments before conducting the rehabilitation.

C.6.4.6 Plug and Abandonment

The Contractor shall plug and abandon (P&A) an assortment of known wells and boreholes in accordance with 2016 Consent Order, Appendix F, II.D, Well Abandonment, and the NMOSE regulations as a workload leveling activity; this scope is not a high priority item. The Contractor shall prepare a plugging plan, obtain EM-LA approval, and subsequently submit to NMOSE before well abandonment, shall conduct borehole video logging to ensure location and quality of casing perforations, and shall pressure grout the well or hole (by use of packer or grout shoe) from TD to surface with a neat cement grout. Grout shall be placed in lifts, with only one to two screened intervals grouted per lift. The Contractor shall leave the existing concrete pad intact and the well and protective casing cut flush with the top of the existing well pad, placing concrete from 2 ft below ground surface (bgs) to top of pad elevation to complete the backfill of the well. A surveyed brass cap already exists in the 5' x 10' pad that is to be left in place. The Contractor shall manage waste generated during well abandonment in accordance with NMED regulatory requirements. Specific wells and boreholes include the following:

1. Alluvial groundwater monitoring wells SCA-4 and SCP-1abc in Sandia Canyon that have been compromised by erosion of the stream channel in coordination with the LANL-Wide P&A Program.
2. Regional aquifer well R-25 which will include the removal of the proprietary Westbay casing string, packers (26) and ports (43) from the

stainless steel well casing followed by selective perforation of casing intervals above and below screens 1 thru 8.

3. Following replacement and verification of acceptable water chemistry and acceptable quality requirements from a replacement regional aquifer, the contractor shall plug and abandon the existing wells: R-54, R-55i, and R-61.

C.7 SURFACE WATER MONITORING

The Contractor shall conduct a Storm Water Surface Water Monitoring and Sampling Program, in accordance with the IP for Stormwater with the EPA and NMED requirements, at the array of surface water monitoring stations including gage stations. This program shall include all planning activities, operations, sampling collection, sample shipment, analytical laboratory analyses, and maintenance to keep the structures operable and equipment in good working order.

All program management, project management, document control records management, project controls, environmental information management and interfaces with NNSA M&O activities (identified in Section C.3) to accomplish this Section shall be included in the cost basis of this Section CLIN and shall not be provided from outside this CLIN in order to provide "all in costs" for this work scope. The Contractor shall not provide any associated support under any other section in this contract.

C.7.1 Surface Water Monitoring Programs

The Contractor shall perform surface water monitoring in accordance with the IP, the 2016 Consent Order for Los Alamos and Pueblo Canyons and Sandia Canyon Wetland monitoring, and the *Memorandum of Understanding Between the U.S. Department of Energy and the Buckman Direct Diversion [BDD] Board Regarding Water Quality Monitoring*, which includes provisions of information for the Buckman Direct Diversion Project.

The Contractor shall plan sampling utilizing the EIMS sample planning module (See Mind Map in Section J, Attachment J-11, GFS/I) including an examination of the current sampling plan, planning field activities sample bottle IDs and labels, sequencing collection, facilitating any subcontractor activities, checking sample collection status using telemetry where available, etc.

The contractor shall follow guidelines for field procedures from the U.S. Geological Survey (USGS) water sample collection methods and industrial standards common to environmental sample collection and field measurements.

The Contractor shall meet all sampling hold times, environmental preservation requirements, packaging and shipping requirements. The Contractor shall ensure all analytical laboratory contracts met analyses and method requirements and provide EDD of data directly into EIMS.

The Contractor shall manage the data received from analytical laboratories and conduct monthly data review meetings. The Contractor shall provide one day and 30 day

notifications, as required, to the NMED-HWB of review results in accordance with the 2016 Consent Order, Section XXVI, Quality Assurance/Data Management/Data Review.

C.7.1.1 National Pollutant Discharge Elimination System Individual Permit for Stormwater

The Contractor shall collect and analyze surface water samples at specific locations and for specific constituents in accordance with the NPDES IP for Stormwater number NM0030759. This IP addresses only those storm water discharges associated with SWMUs and AOCs listed in Appendix A of the Permit. (This IP does not address storm water discharges associated with current conventional industrial activities at the LANL facility that might be caused by the NNSA M&O Contractor. Storm water discharges associated with current conventional industrial activities by the NNSA M&O Contractor are covered under EPA's NPDES Multi-Sector General Permit (MSGP) for storm water discharges from industrial activity.) The Contractor shall measure stream flow rates within each watershed in conjunction with sampling events. The following table below indicates the number of IP samples collected from 2011 to 2015.

Year	# IP Samples Collected	TAL Exceedances Detected	Notes
General Info	High variability in rain fall across LANL; current permit allows only complete samples to be collected; renewal permit allows for partial samples	Number of samples is not a predictive factor; TAL exceedances depend on flow, intensity, and controls; Analysis of site-related versus background/baseline done in IP review process	Collected samples at all sites with adequate flow under current permit; 250 samplers deployed at SMAs- samplers covering multiple sites within an SMA
2011	106 samples at 73 SMAs	68 SMAs were reported with TAL exceedances	First sample season under IP
2012	22 samples at 20 SMAs	18 SMAs were reported with TAL exceedances	Drought during 2012
2013	89 samples at 81 SMAs	72 SMAs were reported with TAL exceedances	1,000-year Flood Event Recorded
2014	38 samples at 32 SMAs	32 SMAs were reported with TAL exceedances	
2015	13 samples at 11 SMAs	9 SMAs were reported with TAL exceedances	Confirmed to date; sample season ends November 30, 2015

IP = Individual Permit.
LANL = Los Alamos National Laboratory.
SMA = site monitoring area.
TAL = target action levels.

The Contractor shall prepare annual updates to the Sampling Implementation Plan required under the renewal IP, implement sampling and analytical scope, and sample base flow and surface water locations identified.

The Contractor shall monitor compliance under the NPDES IP and report compliance metrics to EM-LA. NMED performs a certain number of Compliance Evaluation Inspections (CEIs) each year for the EPA Region VI to provide EPA with information to evaluate the Permittee's compliance with the NPDES permit. This inspection report is based on information provided by the Permittee's representatives, observations made by the NMED inspectors, and records and reports kept by the Permittee and/or NMED. The Contractor shall prepare responses to this CEI to EM-LA for redistribution to EPA and NMED-SWQB.

C.7.1.2 Sediment Sampling in Los Alamos and Pueblo Canyons and in Sandia Canyon

The Contractor shall implement the surface water protection monitoring program as required under the 2016 Consent Order in accordance with the latest version of:

- *Monitoring Plan for Los Alamos and Pueblo Canyon Sediment Transport and Mitigation Project* and
- *Monitoring Plan for Sandia Wetland and Vicinity* included in the September 2011 *Work Plan and Final Design for Stabilization of the Sandia Canyon Wetland* (LA-UR-11-5337).

The Contractor shall interface with and coordinate surface water and sediment sampling with the NNSA M&O Contractor to accomplish the monitoring program scope. The Contractor shall develop and submit an annual stormwater performance report for the combined Los Alamos and Pueblo Canyons and for the Sandia Canyon Wetland, and include cross section surveys, base flow measurements, and piezometer monitoring data. The Contractor shall revise the monitoring plans annually based on the results of the last monitoring period. The Contractor shall conduct maintenance or make changes in the installed controls as necessary to achieve the performance objectives of the monitoring plans. The Monitoring Plan for Los Alamos/Pueblo Watershed Sediment Transport and Mitigation Project is due to NMED by April 30.

C.7.1.3 Canyon Performance Monitoring

The Contractor shall conduct surface water monitoring in accordance with the 2016 Consent Order, Section IX.H, Surface water screening levels, and the latest version of a Surface Water Monitoring Plan.

C.7.1.4 Sampling at the Early Notification System in Lower Los Alamos and Pueblo Canyons

The Contractor shall support sampling of stormwater flows and maintenance of sampling and flow measurement and verification equipment at the Early Notification System (ENS) in Lower Los Alamos and Pueblo Canyons. The ENS notifies the Buckman Direct Diversion (BDD) operations center of floods that may contain contaminated sediments that the BDD chooses to avoid diverting. The Contractor shall support biannual technical meetings with BDD staff, provide analytical support to BDD (if requested), and provide support to the DOE in the execution of the *Memorandum of Understanding Between the U.S. Department of Energy and the Buckman Direct Diversion [BDD] Board Regarding Water Quality Monitoring* (MOU). The MOU provides for implementation of several measures that provide for additional protection of water quality for diverted surface water from the Rio Grande which is a primary regional drinking water supply.

The ENS integrates gaging stations located between LANL and the Rio Grande: E050.1 in Los Alamos Canyon, E060.1 in Pueblo Canyon, E-062.1 in the narrow confluence of Los Alamos and Pueblo Canyons (visual verification of flow only), and E099 in Guaje Canyon (water flow notification only). Gage stations E060.1 and E050.1 are also part of the Los Alamos/Pueblo Canyon Watershed Sediment Transport Mitigation Project monitoring.

The Contractor shall also provide technical support to assure ENS system functionality, provide telemetry of field data and images, obtain release of Pueblo de San Ildefonso information for Lower Los Alamos Canyon (largely related to E099) in accordance with the MOU and Protocols with the Pueblo, and to coordinate monitoring approaches between LANL and BDD.

C.7.2 Reporting and Deliverables

The Contractor shall review analytical data from all surface water monitoring conducted under the 2016 Consent Order received during the previous month. The Contractor shall include the sampling results in the IP deliverables or in the following deliverables to EM-LA for subsequent delivery to the EPA, NMED, or BDD:

1. The Contractor shall notify NMED monthly (in accordance with the MOA/Protocols with the Pueblo as appropriate), with EM-LA authorization, of any surface water exceedances of six criteria in accordance with 2016 Consent Order, Section XXVI, Quality Assurance/Data Management/Data Review. These shall be coordinated with the groundwater PMRs in Section C.5.3.2.
2. Annual submittal of the monitoring report for the Los Alamos/Pueblo Canyon Watershed Sediment Transport Mitigation Project (a performance monitoring report) under the 2016 Consent Order to document the effectiveness of sediment and stormwater controls installed over the past several years, due to NMED on April 30 of each year.
3. Annual submittal of the Sandia Canyon Wetland Performance Report to document the effectiveness of the wetland, due to NMED by April 30 of each year.

C.7.3 Inspection and Maintenance

The Contractor shall conduct all appropriate inspections and maintenance on surface water sampling locations and system equipment including providing technical oversight of fieldwork associated with monitoring on a site-specific scale to implement the IP for the 400+ individual SWMUs and AOC monitored at 250 Site Monitoring Areas (SMAs).

C.8 INDIVIDUAL PERMIT SURFACE WATER CORRECTIVE ACTION

The Contractor shall implement corrective actions for NPDES IP exceedances of proscribed Target Action Levels (TALs). This IP is currently being renewed by EPA. The Contractor shall utilize the IP Surface Water Monitoring and Sampling Program results collected under Section C.7 and determine appropriate corrective action pathway to compliance under the IP.

All program management, project management, document control records management, project controls, environmental information management and interfaces with NNSA O&M activities shall be provided with this section and costs for these activities shall not be allowed to be located in other sections.

C.8.1 Surface Water Results Screening and Determination of Corrective Actions

The Contractor shall conduct a screening of sample results collected following stormwater event results from the analytical laboratories as outlined in Section J, Attachment J-11, GFS/I. The Contractor shall conduct screening to determine whether TALs are exceeded, whether results are within background levels, whether results are from site contributions (i.e., run-on and run-off comparisons), and whether enhanced controls would possibly reduce the flow of contaminants. The Contractor shall review the current status of the IP sites and develop an approach to meet compliance and advance the schedule to satisfy the sites for release under the IP.

C.8.2 Corrective Action Pathways to Compliance

C.8.2.1 Construction of Stormwater Controls

The Contractor shall plan, evaluate alternatives, design, and construct enhanced stormwater controls to obtain Corrective Actions complete status for those sites with Target Action Level (TAL) exceedances that are from site contributing industrial materials, that are not from urban sources, and that are not from background contributions. The Contractor shall use a graded approach in determining control measures to be implemented based on the magnitude of the TAL exceedance when compared with the storm water background and/or TAL value. The Contractor shall coordinate the design and construction of stormwater controls with the NNSA M&O Contractor when within the LANL boundary.

The Contractor shall interface with the County of Los Alamos, USFS, and private property owners in executing some of the IP projects' site access agreements for construction and maintenance. The Contractor shall prepare for EM-LA any access agreements to allow installation of the appropriate stormwater controls. County of Los Alamos projects typically identify PCB sources from County property that are not attributable to site's SWMUs/AOCs resulting in schedule delays and cost impacts as the Contractor will have to provide supporting evidence.

Between FY2016 and FY2020 the typical projects anticipated to be implemented are distributed throughout the five watersheds based on a weighted distribution of the number of proposed sites contained within the March 2014 IP Permit

Renewal application, anticipated complexity of these sites relative to storm water basin characteristics, and current history of sample collection within the watershed. Between FY2021 and FY2023 a limited number of typical projects anticipated to be implemented are distributed in only the Los Alamos and Sandia Canyon systems based on their large urban footprint.

The Contractor shall group construction of enhanced controls into the following canyon areas:

- Possibly 38 SMAs in Los Alamos and Pueblo Canyons
- Possibly 24 SMAs in Sandia/Mortandad Canyons
- Possibly 24 SMAs in Pajarito Canyon
- Possibly 21 SMAs in Water/ Cañon de Valle
- Possibly 15 SMAs in Ancho/Chaquehui Canyons

C.8.2.2 Site Contributing Evaluation

The Contractor shall complete site contributing evaluation for those sites that have TAL exceedances, before considering construction of enhanced controls in order to determine whether the site is contributing or the contaminant being observed is from another source. If the Site Contributing Evaluation shows that the site is not contributing to the discharge and exceedance, the information will be provided to EPA with a request to delete the site from the IP. If the site contributing evaluation determines that it is contributing to the TAL exceedances, the Contractor shall proceed with additional corrective actions that might include construction of additional enhanced controls.

C.8.2.3 Background Comparison

The Contractor shall complete a background comparison including a review of the Site Discharge Pollution Prevention Plan (SDPPP) information previously prepared by the LCBC Contractor, background study completed by the LCBC Contractor and any associated site characterization sample data from under the 2016 Consent Order to determine whether stormwater sample exceedances are a result of background constituents. On the Pajarito Plateau, background levels of aluminum, arsenic, and manganese in the weathered natural volcanic tuff cause stormwater exceedances that cannot and should not be remediated under the IP. If the background comparison shows that the discharge and exceedance is related to background constituents, the information will be provided to EPA with a request to delete the site from the IP.

C.8.2.4 Alternative Compliance Requests

The Contractor shall prepare alternative compliance requests for those sites where other corrective actions pathways (previously identified above) cannot achieve compliance with discharge requirements without exceeding the maximum TALs. The Contractor shall submit these alternative compliance requests to EM-LA for approval before sending on to the US EPA.

Based on the IP screening result, it is anticipated that a minimum of 6-8 alternative compliance request packages will be prepared annually (diminishing after a couple of years). The Contractor shall prepare and post the full packages for public review, shall collect comments following the appropriate public comment period, provide responses to comments, and submit final alternative compliance packages to EM-LA for approval and subsequent submittal to the US EPA.

C.8.3 Individual Permit Renewal

The Contractor shall prepare and submit an application for the NPDES IP renewal at the end of the next expected permit renewal cycle; the current permit is expected to be renewed by the LCBC Contractor in April 2016 making the timeframe for developing the next draft IP in Fall 2020. The permit renewal application will request a number of modifications to the existing permit and may include, but not be limited to, reducing the sites/SMAs being regulated, reducing unnecessary analytical requirements, streamlining reporting requirements, simplifying the corrective action process, updating of TALs, providing for consistent regulatory requirements, and accounting for additional information which became available since the last application submittal to EPA. The Contractor shall prepare the draft renewal permit in coordination with EM-LA, NMED-SWQB and participating non-governmental organizations that currently include Communities for Clean Water such that the EPA would better consider a negotiated permit. The Contractor shall submit the draft renewal permit to EM-LA for approval and subsequent submittal to the US EPA.

The Contractor shall be aware that some enhanced controls constructed may not be able to be certified in accordance with Section E of the IP, and/or TAL exceedance(s) will not be related to the historical activities at the site or are from (1) non-developed background and (2) developed background, and/or (3) that the sites are below risk based soil screening levels as defined under the 2016 Consent Order.

C.8.4 Watershed Integration

The Contractor shall integrate IP controls installation with 2016 Consent Order cleanup such that installation of controls don't impact cleanup activities and installation is an effective measure for the timeframe between cleanup and controls. If site cleanup under the 2016 Consent Order will impact the timeline required for IP corrective actions, the Contractor shall prepare and submit to EM-LA for subsequent submittal to the EPA, extension requests under the IP force majeure provisions.

C.8.5 Deliverables

The Contractor shall prepare and submit several IP reports or plans to EM-LA for approval including the following:

1. IP annual update to the five volume SDPPP to include acceptance of all previous comments and red-line changes for newly updated information from this reporting period in accordance with Part I.D.2 and Part I.F of the Permit by May 1st of each

year (document in current Permit but date from draft renewal Permit) and post to the IP public website that shall be maintained by the Contractor.

2. IP Annual Report to provide the status of all relevant information on each and every site including physical configurations, latest sampling results, any exceedances, and planned actions for the following year in accordance with Part 1.H.2 of the Permit by March 1st for each calendar year and post to the IP public website that shall be maintained by the Contractor. This report shall include the previous Compliance Status Reports (CSRs) for each SMA in accordance with per Part I.H.1 of the Permit by March 1st for each calendar year (also called DMRs in Permit).
3. IP Annual update to the Sample Implementation Plan (SIP) due by March 1st (document from draft renewal permit).
4. Certification packages following construction of the enhanced controls prepared for EM-LA and Contractor certification signatures for each enhanced control measure in accordance with Section E.4 of the IP, Preparation of and Submittal of Certificate of Installation of Enhanced Controls.
5. Certification of completion of corrective action per IP Part I.E.2.
6. Alternative Compliance requests per IP Part I.E.3.(b)
7. Site Contributing Evaluations (required by draft renewal permit)
8. Run-on and Run-off Evaluations (required by draft renewal permit)
9. Annual inspection reports and evaluation of each IP site per Part I.G.1.
10. Post-storm inspection per Part I.G.2.

C.8.6 Reporting

The Contractor shall make the following reports:

- 24-hour oral reporting for exceedances of maximum TALs to EPA per IP Part II.B.
- Written submission of notice provided orally for exceedances of maximum TALs to EPA and of requirements specified in IP Part III.D.7 is required within 5 days from the time the Permittee becomes aware of the circumstances.
- Email notification to members of the public regarding compliance with the Permit (the email list of interested members shall be maintained by Contractor) per Part I.I.7(b).
- IP deliverables completion and posting to the IP website.

C.8.7 Posting to Individual Permit Public Website

The Contractor shall post the following specific documents and types of documents to the IP public website in accordance with the relevant section of the IP, as required per IP Part I.I.7.(a) (no timeline specified for posting to the website):

- Annual update to the SDPPP (IP Part I.D.2. and Part I.F)
- Inspection Reports for Annual inspection and evaluation of each IP site per Part I.G.1 and Post-storm inspection per Part I.G.2.
- CSRs for each SMA due March 1st (reporting period is a calendar year) per Part I.H.1 (also called DMRs in Permit)
- Annual Report due March 1st per Part 1.H.2 ** required to post to public website.
- Correspondence between Permittees and EPA
- Other relevant documents and data including the following:
 - Annual SIP due by March 1st. SIP is integrated into the proposed renewal permit
 - Certification of completion of installation of control measures within 30-days of completion of installation per IP Part I.E.1(c)
 - Certification of completion of corrective action per IP Part I.E.2.
 - Requests for Alternative Compliance per IP Part I.E.3(b)
 - Decision process documentation to address TAL exceedances detected; signature process with EM-LA will assure oversight and agreement with approach determined

C.8.8 Technical and Operations Support

The Contractor shall facilitate semi-annual technical and public meetings per IP Part I.I.7.(c) for planning updates and results of any potential new contaminants. The technical meetings shall include the Contractor, EM-LA, and the Intergovernmental Organization Communities for Clean Water. The public meetings shall include the Contractor, EM-LA, and the Intergovernmental Organization Communities for Clean Water, the NMED Surface Water Quality Bureau, and the NMED oversight Bureau.

The Contractor shall facilitate annual CEIs by NMED-SWQB to assess compliance under the IP. The Contractor shall prepare responses to the CEI reports including defense of compliance and any efforts to support defense against or implementation of an enforcement order. Any activities for CEI or an Enforcement Order stemming from contractor's negligence or poor performance would be the responsibility of the contractor but shall be completed to the satisfaction of EM-LA.

C.8.9 Operation and Maintenance

The Contractor shall maintain all baseline and enhanced controls relied upon to prevent exceedances and to control discharges under the IP. The Contractor shall include sediment removal, realignment of rocks and logs, sampler adjustment, and replacement of non-permanent controls such as wattles. The Contractor shall maintain the capability and capacity of the controls for future rain or storm events. Retired baseline controls that have not been shown to contribute to preventing exceedances are not required to be maintained.

C.9 RDX GROUNDWATER REMEDIATION

The Contractor shall address remediation of a high explosives (largely RDX) plume in the intermediate groundwater located beneath Cañon de Valle. RDX concentration in the regional groundwater are below regulatory standards but are trending up. Surface corrective measures have been underway at Cañon de Valle to remove surface source of RDX and address RDX in the alluvial groundwater during which time additional investigation of the perched and deep intermediate groundwater plume have occurred. The Contractor shall perform activities that include (a) closeout of the surface and alluvial water system corrective measures implementation plan (CMIP) and (b) development of subsurface groundwater corrective measures evaluation (CME) report, development of a CMIP for groundwater, and implementation of the approved remedy.

All program management, project management, document control records management, project controls, environmental information management and interfaces with NNSA M&O activities shall be provided to accomplish this scope and included in the cost basis of this Section CLIN and shall not be provided from outside this CLIN in order to provide "all in costs" for this CLIN. The Contractor shall not provide any associated support under any other section in this contract.

C.9.1 RDX Remedy Selection and Closeout

C.9.1.1 RDX Surface Water Springs Treatment

Under the *Corrective Measures Implementation for Consolidated Unit 16-021(c)-99*, LA-UR-07-4715, Revision 1, July 2007, granulated activated carbon treatment systems were installed at three springs associated with the RDX plume. The Contractor shall continue operation of the springs' treatment and collect post-treatment samples from each spring monthly until performance criteria established in the surface water CMIP are achieved or, when operation of the spring's treatment systems is moved to the groundwater CME, until the performance criteria in the CME is met. The Contractor shall comply with any of the provisions of an NPDES permit and any NMED-GWQB response to the Notice of Intent (NOI) to discharge prepared by the previous contractor and issued by the appropriate regulatory organization. The three springs included are Burning Ground, Sanitary Wastewater Systems Consolidation, and Martin Springs. Post treatment data will be reported in the associated Period Monitoring Report under the IFGMP. If

C.9.1.2 RDX Surface Water and Groundwater Integration

The previous contractor will have initiated discussions with NMED to integrate any remaining surface water corrective measures with the intermediate and regional groundwater corrective measures evaluation. The Contractor shall resolve any technical issues raised during NMED review to allow for the subsequent NMED approval.

The Contractor shall address all technical issues remaining for the integration for both surface water and groundwater in one combined CME that shall be developed and submitted to EM-LA for subsequent submittal to NMED to meet

the regulatory requirements and arrive at the appropriate remedies to reduce risk to the regional aquifer at TA-16. The Contractor shall determine the remaining scope to evaluate and remediate the RDX contamination remaining at Cañon de Valle activities.

The Contractor shall prepare and submit a remedy completion report (RCR) for the surface corrective measure implementation (CMI) and submit to EM-LA for subsequent submittal to NMED. This RCR shall document the close out of the surface water CMI and reflect the transfer to the Groundwater CME. Until the surface CMI is closed out, the Contractor shall continue to submit Annual Progress Report for Corrective Measures Evaluation/Corrective Measures Implementation for Consolidated Unit 16-021(c)-99 due every year by November 30.

C.9.1.3 RDX Groundwater Intermediate and Regional Characterization

The Contractor shall continue characterization activities of the RDX in perched intermediate and regional groundwater at TA-16 including the pumping and treatment of contaminated groundwater from perched-intermediate wells CdV-16-4ip and CdV-16-91i to determine the viability and effectiveness of the pump and treatment technology and approach. The Contractor shall treat and disposition the extracted groundwater in accordance with work plans approved by NMED-GWQB under discharge permits issued by NMED-GWQB (DP-1793). The Contractor shall continue characterization activities operations until the Contractor can demonstrate that the characterization requirements for the CME are met or the Contractor can obtain regulatory and EM-LA approval to do so.

C.9.1.4 RDX Groundwater Geochem/Hydrology Studies Technologies Screening

The Contractor shall complete in-situ, bench, and pilot studies of intermediate and deep groundwater at consolidated unit 16-021(c)-99, the building TA-16-260 outfall - focusing on the contaminated intermediate and deep groundwater monitoring wells. The Contractor will model groundwater to predict performance of potential remedies that are to be included in the CME. The Contractor shall evaluate the existing model and ensure that models used in support of the CME meet the appropriate quality assurance requirements for model validation. The studies and modeling shall include monitored natural attenuation (MNA), engineering evaluation of the feasibility of pump and treat, and other active treatment options. The Contractor shall use these activities to propose potential media cleanup standards, points of compliance and objectives of the remedial actions. The Contractor shall review and analyze all studies and identify any additional studies required to complete the CME.

The current modelling approach includes the following: pumping test analyses utilize two open-source codes developed at the Laboratory: WELLS (<http://wells.lanl.gov>) and MADS (<http://mads.lanl.gov>). WELLS is applied to simulate the drawdowns caused by the pumping at wells. MADS is applied to (1)

deconstruct pumping drawdowns caused by different pumping wells and (2) estimate aquifer properties by matching the simulated and observed hydraulic heads at the observation wells. A three-dimensional unsaturated zone model was developed, but several characteristics are not yet included. The model currently does not represent (1) the ambient groundwater flow at the site, (2) the long-term water-level changes in the regional aquifer, and (3) the long-term concentration transients observed in the site monitoring wells. The model is calibrated using an automated calibration process employing the Levenberg-Marquardt optimization algorithm as implemented in the code MADS (<http://mads.lanl.gov>). The computer code LaGriT (<http://lagrit.lanl.gov>) was used to create the computational grids. The flow and transport simulations were performed with the Finite Element Heat and Mass Transfer code ([FEHM] <http://fehm.lanl.gov>) (Zyvoloski et al. 1996, 054421; Zyvoloski et al. 1997, 070147). FEHM was developed by researchers at the Laboratory and is capable of simulating three-dimensional, time-dependent, multiphase, non-isothermal flow, and multicomponent reactive groundwater transport through porous and fractured media. FEHM has been used in a wide variety of applications. The software is mature, has users throughout the world, and has been certified through the Yucca Mountain Project Software Quality Assurance Program. FEHM is available to the public and operates under various operating systems (Windows, MAC OS X, Linux, etc.).

C.9.1.5 RDX Groundwater Corrective Measures Evaluation

The Contractor shall complete and submit a CME Report to EM-LA for approval and subsequent submittal to NMED for intermediate and deep groundwater at consolidated unit 16-021(c)-99, the building TA-16-260 outfall in accordance with the 2016 Consent Order, Section XVI, Corrective Measures Evaluation. The Contractor shall review and analyze all studies as they identify remedial alternatives. The contractor shall complete modeling in support of a MNA remedy, and an engineering evaluation of the feasibility of pump and treat and other active treatment options in the CME.

The Contractor shall submit the draft CME report for an EM-LA and EM HQ Internal Remedy Review (which should be anticipated to be 10 working days) and address all comments in the CME report before issuance. The Contractor shall prepare and submit the CME for RDX to EM-LA for approval and subsequently to NMED. The Contractor shall facilitate NMED preparation of the Statement of Basis (SOB) including preparation of the Response to Comments (RTC) received from the public and presentations at public meetings.

C.9.1.6 RDX Well Determinations

If additional wells are required for any part of the RDX investigation or remedy, the Contractor shall determine the parameters and technical requirements for the well and the location. All further well development and well installation will be in accordance with Section C.6 Drilling.

C.9.2 RDX Corrective Measures Implementation Plan

Following the approval of the CME, a public comment period, and the formulation of a SOB by NMED, the Contractor shall develop a corrective measures implementation plan (CMIP) in accordance with the 2016 Consent Order, Section XVIII. The Contractor shall include in this CMIP a detailed engineering design and any post-closure monitoring system, and schedule for initiation and execution of the expected project for the remedy. The Contractor shall submit the CMIP to EM-LA for subsequent submittal to NMED for approval.

C.9.3 RDX Corrective Measures Implementation

Following EM-LA approval and upon receiving specific Contracting Officer direction to begin, the Contractor shall implement the CMIP to remedy groundwater contaminated with RDX in accordance with the CMIP. Potential corrective measures that may be applied to this problem consist of pumping and treatment of contaminated groundwater from extraction wells followed by reinjection to the subsurface; in-situ bioremediation; monitored natural attenuation, and possibly land application of treated water in accordance with DP-1793.

C.9.4 Final Remedy Operations

The Contractor shall operate the remedy and determine whether the remedy is performing as designed and anticipated. The Contractor shall adjust operations as necessary to obtain the requisite performance. The Contractor shall prepare and provide an annual report of remedy performance to EM-LA for approval and subsequently submittal to NMED. It is expected that the remedy operations will extend through the life of this Contract; therefore, the Contractor shall prepare a Corrective Measures Implementation report at the end of Option Period 2, if exercised.

C.9.5 Permitting for RDX Activities

The Contractor shall comply with the NMED-GWQB Discharge Permit DP-1793 issued on July 27, 2015 – 5-yr permit to treat groundwater and land apply the treated groundwater. The Contractor shall complete any necessary environmental assessments, floodplain assessments, inputs to preliminary and final NEPA determination document, and any mitigation action plans associated with the work. The Contractor shall obtain any OSE and injection well permits necessary.

C.9.6 Deliverables

The Contractor shall prepare and provide the following known deliverables to EM-LA for approval and subsequent submittal to NMED for approval:

1. Annual Progress Report for Corrective Measures Evaluation/Corrective Measures Implementation for Consolidated Unit 16-021(c)-99
2. RCR for the Surface CMI

3. CME Report within eight months of completion of any in-situ, bench, and pilot studies
4. CMIP
5. Remedy operational plan
6. Annual report of remedy performance within four months of the end of the monitoring period.

C.10 CHROMIUM GROUNDWATER REMEDIATION

The Contractor shall control migration of hexavalent chromium contaminated groundwater across the LANL boundary using a configuration of extraction wells and injection wells, complete plume-center characterization involving a series of field tests pertaining to processes within the aquifer, compile previously collected characterization study information, develop a CME Report for Chromium Plume Remediation, prepare a CMIP, and implement a final remedy.

All program management, project management, document control records management, project controls, environmental information management and interfaces with NNSA M&O activities shall be included in the cost basis of this Section CLIN and shall not be provided from outside this CLIN in order to provide "all in costs" for this CLIN. The Contractor shall not provide any associated support under any other section in this contract.

C.10.1 Chromium Groundwater Remediation (Operations)

C.10.1.1 Plume Control at Los Alamos National Laboratory Boundary

The Contractor shall execute the *Interim Measures Work Plan for Chromium Plume Control* (LA-UR-15-23126 May 2015 EP2015-0089) which describes proposed activities to control chromium plume migration in groundwater at the LANL boundary utilizing extraction and injection wells while long-term corrective action remedies are being evaluated. This work plan follows the *Interim Measures Work Plan for the Evaluation of Chromium Mass Removal*, April 2013, LANL 2013, ERID-241096, prepared in response to NMED requirements in a letter dated January 25, 2013 (NMED 2013, ERID-521862). This work plan directed an assessment of the potential for active long-term removal of chromium from the regional aquifer by pumping with a pilot extraction test well.

The Contractor shall prepare and submit to EM-LA for subsequent submittal to NMED an annual report of the performance of the interim measures (IM) for plume control.

C.10.1.2 Plume-Center Characterization

The Contractor shall also execute the *Chromium Plume-Center Characterization Work Plan* which describes activities to be conducted to further investigate the aquifer in the area of highest known concentrations (center) of the chromium

plume and to further characterize the nature and extent of the chromium (and related) contamination. This work plan also follows the *Interim Measures Work Plan for the Evaluation of Chromium Mass Removal*, April 2013, LANL 2013, ERID-241096, prepared in response to NMED requirements in a letter dated January 25, 2013 (NMED 2013, ERID-521862).

C.10.2 Continuation and Completion of Studies

The studies that the Contractor shall take-over in progress follow the *Interim Measures Work Plan for the Evaluation of Chromium Mass Removal*, April 2013, LANL 2013, ERID-241096 that was prepared in response to NMED requirements in a letter dated January 25, 2013 (NMED 2013, ERID-521862).

C.10.2.1 Geotechnical Studies

The Contractor shall review any in-process experiments and tests, and shall complete laboratory bench-scale experiments and column tests on the geologic core collected from the core holes drilled in fiscal year 2014. The Contractor shall compare mineralogy to formation outcrops, evaluate the capacity for attenuation in the Puye formation, and determine whether vertical stratification of chromium contamination is present. The Contractor shall use the data collected from these tests as a basis for recommending a remedy in the CME Report.

C.10.2.2 Monitored Natural Attenuation Studies

The Contractor shall complete work in support of understanding natural attenuation mechanisms and rates for Chromium and other subsurface contamination beneath Sandia and Mortandad Canyons including Laboratory Bench and Column Tests with Sonic Core and Field Testing with chromium (Cr) and nitrogen (N) Isotopes.

Laboratory Bench and Column Tests with Sonic Core

The Contractor shall continue conducting and complete sequential leach testing of selected sonic core samples to determine if there is any anthropogenic chromium either adsorbed or reduced on its surfaces using successively more aggressive leaching solutions, targeting adsorbed Cr(VI) first and then reduced Cr(III).

The Contractor shall continue conducting and complete batch chromium uptake experiments on selected sonic core samples by contacting water that is elevated in chromium concentrations with uncontaminated core and continue conducting batch desorption experiments on some of the samples used in batch uptake experiments by contacting Cr-free water with samples that clearly took up chromium.

The Contractor shall continue conducting and complete column experiments involving the evaluation of water that is elevated in chromium concentrations

through selected sonic core samples that are either low in chromium or devoid of chromium content.

Field Testing with Cr and N isotopes

The Contractor shall continue and complete collecting samples from cross-hole tracer tests for analyzing stable isotopes of Cr and N, and analyze the samples for stable N isotopes and isotope analyses for Cr in order to analyze porosity, which may affect Cr rebound in the aquifer.

C.10.2.3 Injection/Extraction Studies

The Contractor shall continue and complete studies of injection and extraction of treated waters and chromium contaminated water, respectively, in support of determining engineered solutions for remediating Chromium and other subsurface contamination (perchlorate) beneath Sandia and Mortandad Canyons.

Injection Studies and Tracer Tests

The Contractor shall continue and complete large column experiments continuously injecting treated water into columns packed with saturated zone material from core holes, measuring permeability changes of the columns and geochemistry changes in the column effluent. These studies gather data relevant to evaluate injectability of treated water into injection wells. The Contractor shall continuously inject treated water into injection wells during cross-hole tracer tests after the tracers have been injected and monitor water level changes in the wells to determine near-well permeability changes.

Laboratory Bio treatability Studies

The Contractor shall continue and complete batch experiments using solids collected from new core holes to better quantify biomass growth rates, changes in biodiversity, nitrate (NO₃) and Cr reduction rates, bio stimulant consumption rates, geochemical parameter changes (e.g., pH, oxidation-reduction potential, iron [Fe](II)), and mobilization of undesirable constituents (e.g., arsenic) as a function of bio stimulant identity and concentrations. The Contractor shall continue and complete batch experiments to evaluate effects of micronutrient additions (e.g., phosphorous [P] and N) under promising treatment conditions identified in the batch experiments above. The Contractor shall continue and complete a limited number of column experiments to evaluate rebound, longer term geochemical changes, longer term potential for mobilization of undesirable constituents, biofouling, and to refine kinetic data under the most promising treatment conditions identified in batch experiments.

Chemical Treatability Studies

The Contractor shall continue and complete laboratory experiments that complement the laboratory bio-treatability studies in that they evaluate the

influence of chemical supplements to bio stimulation to enhance the effectiveness of bio stimulants including the addition of:

- humic or fulvic acids to provide a long-lasting food source for microbes, or
- abiotic reductants (e.g., Fe (II), sulfide) to supplement bio stimulation.

Field Pilot Treatability Tests

The Contractor shall continue and complete field pilot treatability tests on the heels of the cross-hole tracer tests conducted under the tracer studies. The Contractor shall inject bio stimulants and perhaps other additives into CH-2 and CH-3 to induce reduction of NO₃ and Cr (VI) in the contaminated aquifer while continuing to pump R-28 and R-42 to recover tracers. The Contractor shall define test details in a field pilot treatability test plan and shall submit to EM-LA for approval and subsequently submitted to NMED.

C.10.3 Groundwater Modeling and Hydrology

The Contractor shall model and analyze the physical and geochemical processes impacting groundwater flow and contaminant transport in the geologic subsurface media (the vadose zone and the regional aquifer below the Sandia and Mortandad Canyons.). The Contractor shall focus the model on the potential preferential flow paths from the ground surface to the water table impacted by spatial distribution of the infiltration recharge on the ground surface as well as spatial distribution of the physical and chemical properties of the geologic strata including the zones of perched saturation within the vadose zone. Modeling shall address the physical and chemical mechanism impacting groundwater flow and contaminant transport in the regional aquifer as well and also explore the impacts of (1) groundwater infiltration, (2) groundwater recharge (water-table mounding) and (3) groundwater discharge (including water-supply pumping) on the groundwater flow and contaminant transport in the regional aquifer.

The Contractor modeling shall also address any unique impacts from Water-Supply Wells; evaluating water-supply pumping effects on the chromium plume and chromium concentrations (spatial and temporal), incorporate existing pumping records for the water-supply wells and the existing transients in the water-level observed in all the regional aquifer monitoring wells located in Mortandad and Sandia Canyons, and include the potential new Los Alamos county water supply well northwest of PM-1 (currently called PM-6).

The Contractor shall provide groundwater model that can meet quality assurance requirements for model validation sufficient that the model can be included in the CME for chromium, e.g., a Visual ModFlow model, Finite Element Heat and Mass Transfer Code, or PFlotran.

The Contractor shall output modeling results to support NEPA and NMOSE Application Processes including evaluation of the pumping effects of the chromium extraction wells on the water resources in the regional aquifer as well as modeling for offset requirements (including the water resources currently tapped by the County of Los Alamos water supply wells).

The current modelling approach includes the following: pumping test analyses utilize two open-source codes developed at the Laboratory: WELLS (<http://wells.lanl.gov>) and MADS (<http://mads.lanl.gov>). WELLS is applied to simulate the drawdowns caused by the pumping at wells. MADS is applied to (1) deconstruct pumping drawdowns caused by different pumping wells and (2) estimate aquifer properties by matching the simulated and observed hydraulic heads at the observation wells. A three-dimensional unsaturated zone model was developed, but several characteristics are not yet included. The model currently does not represent (1) the ambient groundwater flow at the site, (2) the long-term water-level changes in the regional aquifer, and (3) the long-term concentration transients observed in the site monitoring wells. The model is calibrated using an automated calibration process employing the Levenberg-Marquardt optimization algorithm as implemented in the code MADS (<http://mads.lanl.gov>). The computer code LaGrIT (<http://lagrit.lanl.gov>) was used to create the computational grids. The flow and transport simulations were performed with the Finite Element Heat and Mass Transfer code ([FEHM] <http://fehm.lanl.gov>) (Zyvoloski et al. 1996, 054421; Zyvoloski et al. 1997, 070147). FEHM was developed by researchers at the Laboratory and is capable of simulating three-dimensional, time-dependent, multiphase, non-isothermal flow, and multicomponent reactive groundwater transport through porous and fractured media. FEHM has been used in a wide variety of applications. The software is mature, has users throughout the world, and has been certified through the Yucca Mountain Project Software Quality Assurance Program. FEHM is available to the public and operates under various operating systems (Windows, MAC OS X, Linux, etc.).

C.10.4 Additional Well Need Determinations and Criteria

The Contractor shall determine whether additional wells are necessary for the chromium activities in accordance with this section. These additional wells may include extraction wells, injection wells, and source removal wells, and piezometers based on continuing characterization and evaluation of infrastructure performance (such as for fouling). The Contractor shall determine all necessary performance and location criteria to allow construction in accordance with the contract Section C.6 Drilling and chromium work plan schedules, and as specified by the Contracting Officer.

The Contractor shall assess any additional activities against the December 2015 *Finding of No Significant Impact and Mitigation Action Plan and the Final Environmental Assessment and Floodplain Assessment for the Chromium Plume Control Interim Measure and Plume-Center Characterization* prior to implementation. These additional injection or extraction wells will be authorized under Section C.14, Additional Assignments, under CLINs 0004, 0007, or 0010.

C.10.5 Corrective Measures Evaluation Report

The Contractor shall review all of the available data and study results and prepare a CME Report that evaluates potential remedial alternatives and recommends a remedy that will be protective of human health and the environment and attain the appropriate cleanup goals. The Contractor shall prepare and submit a CME to EM-LA for approval and subsequently to NMED in accordance with the 2016 Consent Order, Section XVI. The Contractor shall plan for EM-LA to have EM HQ perform an Internal Remedy

Review (IRR), which should take approximately 10 working days, and then shall resolve comments to EM-LA's satisfaction.

C.10.6 Statement of Basis

NMED will consider the CME recommendation and issue a SOB documenting the preferred remedy for public comment. The Contractor shall facilitate NMED-HWB review of the CME and development and issuance of a SOB including public meetings and public comment resolution. The Contractor shall support technical discussions with NMED and with stakeholders in conjunction with NMED public notice of the SOB.

C.10.7 Corrective Measures Implementation Planning

Following the approval of the CME Report, a public comment period, and the formulation of a SOB by NMED, the Contractor shall develop a CMIP in accordance with the 2016 Consent Order, Section XVIII.

C.10.8 Corrective Measures Implementation

After the final remedy is selected by NMED and direction is provided by EM-LA, the Contractor shall prepare a project CMIP for submittal to EM-LA for approval and subsequently to NMED. Following the approval of the CMIP, the Contractor shall implement the CMIP.

The Contractor shall provide for the design and implementation of the selected final chromium remedy project as directed by EM-LA through the Contracting Officer.

C.10.9 Final Remedy Operations

The Contractor shall operate the remedy as approved and determine whether the remedy is performing as designed and anticipated. The Contractor shall adjust operations as necessary to obtain the requisite performance. The remedy operations will extend through the life of this Contract; therefore, a remedy completion report will not yet be possible. The contractor shall prepare and provide to EM-LA for approval, for potential submittal to NMED, an annual report of remedy performance.

C.10.10 Permitting for Chromium Activities

The Contractor will comply with the NMED-GWQB Discharge Permit DP-1793 – 5-yr permit to treat groundwater and land apply the treated groundwater, the December 2015 Finding of No Significant Impact, the Mitigation Action Plan, the Final Environmental Assessment, the Floodplain Assessment for the Chromium Plume Control Interim Measure and Plume-Center Characterization, the DP-1835 for injection, the NMOSE permit requirements (monthly pumping amount reporting), and any other permits that may exist. The Contractor shall obtain any additional NMOSE, land application, and injection well permits necessary and shall be responsible for the preparation of any NEPA document necessary for a project remedy.

C.10.11 Deliverables

The Contractor shall prepare and submit the following deliverables to EM-LA for subsequent submittal to NEMD for approval:

1. Annual Progress Report for Corrective Measures Evaluation/Corrective Measures Implementation for Consolidated Unit 16-021(c)-99
2. RCR for the Surface CMI
3. CME Report within eight months of completion of any in-situ, bench, and pilot studies
4. CMIP
5. Remedy operational plan
6. Annual report of remedy performance within four months of the end of the monitoring period.

C.11 AGGREGATE AREAS

C.11.1 Consent Order Process

C.11.1.1 Historical information review

All available previous investigatory activities, such as RCRA investigations that were completed in ~1996, were documented in historical investigation reports (HIR) by aggregate areas by the previous contractor and are available in the EPRR. The Contractor will not have to generate any additional HIRs; they are for information.

C.11.1.2 Investigation work plan

The Contractor shall develop an investigation work plan (IWP) to characterize the aggregate area to determine nature and extent of contamination and provide EM-LA an opportunity to participate in the product peer review. The Contractor shall provide for EM-LA acceptance and signature in accordance with the review schedules identified in Section J, Attachment J-11, GFS/I.

C.11.1.3 Field investigations

The Contractor shall conduct field investigation activities in accordance with NMED-approved IWPs. Unanticipated field conditions shall be characterized without re-approaching NMED IWP changes. These additional characterizations shall be coordinated with EM-LA. Samples collected from investigation activities shall follow chain of custody procedures through shipment to analytical laboratories.

C.11.1.4 Analytical laboratory

The Contractor shall develop contracts with certified analytical laboratories to meet 2016 Consent Order standards (Section IX) and New Mexico Water Quality Control Commission (NMWQCC) MDLs sufficient to meet NMWQCC standards. The Contractor shall ensure sample results from the analytical laboratories are loaded directly into EIMS by the analytical laboratory and that they are evaluated for consistency and expectancy. The Contractor shall follow-up with laboratory for inconsistencies.

IntellusNM provides public access to environmental data; the Contractor shall support inquiries by the public.

C.11.1.5 Clearance of cultural sites

The Contractor shall examine and evaluate cultural sites where cleanups will occur, work with EM-LA and NNSA cultural resources; and provide information for NNSA-prepared State Historic Preservation Officer (SHPO) reports. The Contractor must provide the background information such as site survey data, records search data, and evaluation cultural artifacts and their distribution to allow EM-LA to work with NNSA to either clear cultural sites for the work activities or change investigatory activities to avoid the cultural sites.

C.11.1.6 Field Cleanups

The Contractor shall use the established soil screening levels (SSLs) to determine necessary field remediation. During investigatory activities, the Contractor shall conduct field cleanups where contaminants are above SSLs such that post-remediation contaminant concentrations are less than SSLs. The Contractor shall follow-up remediation activities to ensure the media contaminants are below SSLs.

C.11.1.7 Waste Disposal

The Contractor shall dispose of remediation wastes and shall restore areas to acceptable conditions as defined in discussions with and communications from EM-LA. The Contractor shall characterize the wastes and generate all waste management documentation, including manifests. The Contractor shall establish its own contracts or utilize Federal waste transportation and disposal contracts to properly dispose of the remediation wastes if more cost effective.

C.11.1.8 Investigation Report

The Contractor shall prepare IRs with human health risk assessments against cleanup standards (residential, Industrial including construction worker, or recreational) as specified by EM-LA as appropriate for the expected land use. The Contractor shall allow EM-LA the opportunity to participate in IR peer review process. This deliverable is co-signed by the Contractor and EM-LA, and as

such must be provided for EM-LA acceptance and signature in accordance with the review schedules identified in Section J, Attachment J-11, GFS/I.

C.11.1.9 Certificates of Completion and Removal from Hazardous Waste Facility Permit

Following NMED approval of IRs, the Contractor shall prepare and submit requests for Certificates of Completion (CoC) for all SWMUs and AOCs that have been remediated or meet acceptable risk exposure levels to EM-LA for approval and subsequent submittal to NMED.

Following NMED approval of CoCs, the Contractor shall prepare permit modifications to the NNSA-owned RCRA HWF Permit to remove sites from Appendix K. The Contractor shall coordinate with the NNSA M&O Contractor, EM-LA, and NMED to effect removal of the SWMU or AOC from the Permit.

C.11.2 Scope by Aggregate Area

C.11.2.1 Guaje/Barrancas/Rendija Canyons Aggregate Area

Investigation should be complete with remaining actions only being triennial surface clearance ordnance surveys in Rendija Canyon for SWMUs 00-011(a), 00-011(d), and 00-011(e) and reporting. The Contractor shall conduct the additional triennial surface clearance ordnance surveys by December of each triennial year from the last submittal by the previous contractor (2016). The Contractor shall prepare access agreements with USFS, the County of Los Alamos, and private individuals, for EM-LA approval.

The Contractor shall conduct biennial asphalt monitoring and removal activities at AOC C-00-041 in 'early fall'. The Contractor shall prepare a report of the results by the end of December of each biennial year, the last documented in *Biennial Asphalt Monitoring and Removal Report for Area of Concern C-00-041, Guaje/Barrancas/Rendija Canyons Aggregate Area*, December 2015, LA-UR-15-29147, ADESH-15-171. Previous contractors have removed the following generally diminishing quantities of asphalt and tar from the site:

Year of Work	Weight Removed	Volume Removed
1995	N/A	1,100 55-gallon drum equivalents (300 yd ³)
2009	~3,220 lbs	seven 55-gallon drums
2011	~1,840 lbs	four 55-gallon drums
2013	660 lbs	one-half 55-gallon drum
2015	1,160 lbs	three 55-gallon drums

The Contractor shall dispose of this material as appropriate. In addition, the Contractor shall prepare access agreements with US Forest Service and the County of Los Alamos for EM-LA approval. The Contractor shall propose and

negotiate criteria to discontinue asphalt monitoring and obtain a Certificate of Completion WITHOUT controls at some point after the 2019 monitoring activity.

CoCs were received from NMED for SWMU 00-011(c) and AOC C-00-020 in *“Certificates of Completion One Solid Waste Management Unit and One Area of Concern in the Guaje/Barrancas/Rendija Canyons Aggregate Area EPA ID #NM0890010515 HWB-LANL-12-008,”* May 16, 2012.

Since CoCs have been approved by NMED, the Contractor shall prepare modifications to the NNSA-owned RCRA HWF Permit to remove sites from Appendix K. The Contractor shall coordinate with the NNSA M&O Contractor, EM-LA, and NMED to effect removal of the SWMU or AOC from the Permit.

C.11.2.2 Upper Los Alamos Canyon Aggregate Area

Twenty-Five CoCs were received from NMED in *“Certificates of Completion Upper Los Alamos Canyon Aggregate Area,”* Los Alamos National Laboratory, EPA ID #NM0890010515, HWB-LANL-10-056, September 10, 2010. One CoC was received from NMED in *“Certificate of Completion One Area of Concern in the Upper Los Alamos Canyon Aggregate Area,”* EPA ID #NM0890010515, HWB-LANL-12-069, December 20, 2012. One CoC was received for AOC-01-007(k) from NMED in *“Certificate of Completion Area of Concern 01-007(k) in the Upper Los Alamos Canyon Aggregate Area,”* EPA ID #NM0890010515, HWB-LANL-15-002, March 16, 2015.

The Contractor shall execute the *Phase II Investigation Work Plan for Upper Los Alamos Canyon Aggregate Area, October 2010*, LA-UR-10-6327, EP2010-0398 for the remaining SWMUs and AOCs (sometimes referred to as townsite or historical properties). The Contractor shall prepare access agreements with the County of Los Alamos and private individuals, for EM-LA approval.

Following the remediation, the Contractor shall develop and submit the Phase II IR and submit remaining CoCs. The Contractor shall submit a modification to the NNSA-owned RCRA HWF Permit to remove the sites from the Permit.

There are 229 original sites within the Los Alamos Canyon Area. Of the original number of sites, 223 have been addressed through a previous phase I investigation and remediation campaign. As of March 2016, there are 6 sites that require further sampling and final remediation under the Consent Order. All 6 remaining sites are located directly adjacent to Los Alamos Townsite on either non-DOE or DOE-owned property.

The Contractor is to complete the work remaining for the 6 sites and prepare the final investigation report for EM-LA review and approval then to the NMED for review and approval. When NMED has approved the investigation report, the Contractor will request Certificates of Completion (CoC) from NMED. Upon receipt of the CoCs for each site, the Contractor shall prepare modifications to the NNSA-owned RCRA HWF Permit to remove sites from Appendix K. The

Contractor shall coordinate with the NNSA M&O Contractor, EM-LA, and NMED to effect removal of the SWMU or AOC from the Permit.

A current site-specific summary of the SWMUs and AOCs that still require sampling and remediation along Los Alamos Canyon within and adjacent to the Los Alamos Townsite is provided in Table 1.

Table 1. Remaining SWMUs and AOCs Requiring Additional Sampling and Remediation Within and Adjacent to Los Alamos Townsite

Site ID	Description	Contaminant	Comments
01-001(g)	Septic tank for former Building X. Building X was used to test radioactive targets. Both the septic tank and building have been removed. The associated outfall discharged into the canyon. The location of the former inlet pipeline is under a building of the Los Arboles townhouses, and the outfall area is undeveloped land owned by DOE.	plutonium 239/240	Contractor will need to include this information in the Phase II IR, submit request for COC without control, modify RCRA permit.
01-003(b)	Former surface disposal site for construction debris reported below the north rim of the canyon.	arsenic	Contractor will need to include this information in the Phase II IR, submit request for COC without control, modify RCRA permit.
01-006(b)	Drain line from Building D (used to process plutonium) discharged into the canyon. Building D and all associated drain lines were previously removed along with areas of elevated radioactivity on the mesa top.	plutonium 239/240	Contractor will need to include this information in the Phase II IR, submit request for COC without control, modify RCRA permit.
01-007(a)	Building D and all associated drain lines were previously removed along with areas of elevated radioactivity on the mesa top. Subsequent investigations have identified contamination on the canyon slope on DOE property.	plutonium 239/240	Contractor will need to include this information in the Phase II IR, submit request for COC without control, modify RCRA permit.
01-007(b)	An area of suspected subsurface contamination near the former drain lines and outfall from Building D-2 (laundry facility for radioactively contaminated clothing and recyclable equipment for the entire technical area). The drain lines discharged into the canyon. Building D-2 and all associated drain lines were previously removed but subsequent investigations identified areas of surface contamination on the canyon side on DOE property below this site.	plutonium 239/240	Contractor will need to include this information in the Phase II IR, submit request for COC without control, modify RCRA permit.
01-001(d) 01-006(h)	These 2 sites are co-located and are associated with a drain line and storm-water drainage system from former Buildings K, R, and Y. Building K was a chemical stock room that contained a mercury still. Building R housed model, glass, carpentry and plumbing shops. Building Y housed a physics laboratory that handled various radionuclides. The outfalls from the drain lines discharged into the canyon. Buildings K, R, and Y were removed as well as the majority of the drain lines with the possible exception of portions of drain lines that are or were beneath structures.	mercury and plutonium 239/240	Remaining remediation is primarily surface and subsurface soil below the discharge point of the drain lines on DOE property. As currently planned, all soil with contamination levels that exceed residential land use risk scenarios will be removed. Actual volumes of soil removed and waste disposed offsite are subject to additional sampling and analysis and further discussions with NMED.

Site ID	Description	Contaminant	Comments
01-001(f)	Drain lines and septic tank that served Buildings HT and FP. Building HT was used to heat-treat and machine natural and enriched uranium. Building FP was a foundry of nonradioactive and nonferrous metals. The associated septic tank discharged directly into the canyon. Buildings HT and FP and the septic tank were previously removed but the entire mesa-top area of the drain line is developed and the location of the drain lines are under pavement and buildings of the Ridge Park Village.	polychlorinated biphenyls (PCBs)	Remaining remediation is primarily surface and subsurface soil below the discharge point of the drain line and location of the former septic tank on DOE property. As currently planned, all soil and tuff with contamination levels that exceed residential land use risk scenarios will be removed. Actual volumes of soil removed and waste disposed offsite are subject to additional sampling and analysis and further discussions with NMED.
01-001(o)	Sanitary waste line that served Buildings J and ML. Building J was a small research laboratory and Building ML was a medical laboratory. The waste line discharged into the canyon. Buildings J, ML, and the associated waste line was previously removed.	polychlorinated biphenyls (PCBs)	Remaining remediation is primarily surface and subsurface soil below the discharge point of the drain line on DOE property. As currently planned, all soil and tuff with contamination levels that exceed residential land use risk scenarios will be removed. Actual volumes of soil removed and waste disposed offsite are subject to additional sampling and analysis and further discussions with NMED.
01-003(a)	Surface disposal site (Bailey Bridge landfill) used for demolition debris from buildings associated with the Manhattan Project/early Cold War-period between 1964 and 1978. Debris with acceptable levels of radioactivity was deposited into the canyon below the site and later covered with clean fill. Subsequent sampling of the site for radioactivity established extent and indicated levels of contamination well below required cleanup levels. Sampling results, however, indicated the presence of PCB and other organic compounds, primarily PAHs, which require further investigation and remediation.	polychlorinated biphenyls (PCBs) and polycyclic aromatic hydrocarbons (PAHs)	Remaining complex cleanup is primarily surface and subsurface soil and other materials on DOE property. As currently planned, all soil and tuff with contamination levels that exceed residential land use risk scenarios will be removed. Actual volumes of material removed and waste disposed offsite are subject to additional sampling and analysis and further discussions with NMED. This site will likely require additional sampling and analysis before the scope of the cleanup can be fully defined. It is likely, based on existing and future data, cleanup to residential levels on DOE property will not be considered technically feasible or practical. If this is the case, further discussion will be required with NMED to negotiate a more realistic recreational cleanup threshold.
01-003(d)	Surface disposal area used for empty solvent and paint cans. The majority of paint cans and contaminated soil was previously removed; however, subsequent investigation indicated the presence of antimony (chemical element) in surface and subsurface soils that require further remediation.	antimony	Remaining remediation is primarily surface and subsurface soil on DOE property. Approximately 170 cubic yards of soil will be removed and disposed offsite as hazardous waste. The extent of the cleanup is well defined but considered complex because of the remote location of the site and steep surrounding topography.

 Remediation completed in 2016
 Remediation remaining

Following NMED approval of CoCs, the Contractor shall prepare modifications to the NNSA-owned RCRA HWF Permit to remove sites from Appendix K. The Contractor shall coordinate with the NNSA M&O Contractor, EM-LA, and NMED to effect removal of the SWMU or AOC from the Permit.

The Contractor shall provide support to the County of Los Alamos and private landowners where SWMUs and AOCs are located within the town sites, including radiological survey or sampling support when property owner activities disturb soils around these SWMUs/AOCs.

C.11.2.3 Bayo Canyon Aggregate Area

Request for Certificates of Completion for Three Areas of Concern and Twenty-Six Solid Waste Management Units in the Bayo Canyon Aggregate Area, ADESH-15-086, was submitted to NMED-HWB on June 15, 2015 based on the Investigation Report for Bayo Canyon Aggregate Area, Revision 1, LA-UR-08-3202, EP2008-0226.

The Contractor shall facilitate NMED-HWB's approval of the CoCs. The Contractor shall provide radiological regulatory support to EM-LA for the closure of SWMU 10-007. The Contractor shall prepare the closure documentation for EM-LA to negotiate with the County of Los Alamos. The Contractor shall work with the County of Los Alamos and may have to prepare access agreements with the County of Los Alamos for EM-LA approval.

C.11.2.4 Delta Prime Site Aggregate Area

An Investigation Report for DP Site Aggregate Area Delayed Sites (Consolidated unit 21-004(B)-99 and Solid Waste Management Unit 21-001B) and DP East Building Footprints at Technical Area 21, December 2011, ERID-208824 was submitted to NMED. NMED issued a Notice of Disapproval (NOD) for the report in June 2012 because of sampling gaps. The Contractor shall prepare and submit a supplemental Investigation report (SIR) to adequately address NMED concerns and comments in the NOD.

The Contractor shall excavate and dispose of the buried industrial waste lines in the DP West area that run from the DP West building slabs to building TA-21-257 (Radiological Liquid Waste Facility) and that are included in TA-21 Consolidated Unit 022(b)-99.

The Contractor shall conduct the demolition of building TA-21-257 including the facility infrastructure, legacy tanks, process piping, pumps, dikes, vaults, etc., and their constituents. The Contractor shall also conduct a historical data review, prepare sampling & analysis plan, prepare a demolition plan, etc. as necessary to demolish the facilities and equipment and dispose of all wastes appropriately. The wastes are expected to include asbestos containing materials, universal waste, and PCB-containing materials. All structures, foundations, footings, and piping etc., to a distance of nominally ten (10) feet from the exterior walls shall be removed; however, this shall be coordinated with the exterior buried piping removal from the facility connected to other area slabs.

The Contractor shall demolish and dispose of DP West slabs and below-grade concrete for 11 buildings that were razed prior to 2011. The description of this work is included in the *Investigation Work Plan for the DP Site Aggregate Area Delayed Sites*, September 2009, LA-UR-09-6108. The Contractor shall conduct through-slab sampling to determine contaminant concentrations below the slabs to add to the characterization already conducted around the slabs exteriors (IR referenced above).

The Contractor shall coordinate demolition activities with the soil cleanup in accordance with the DP Site Aggregate Area investigation and cleanup. The Contractor shall coordinate with the NNSA M&O Contractor and shall notify NMED-HWB of the demolition plans to ensure controls are in place to address any associated SWMU in accordance with the NNSA-owned RCRA HWF Permit.

The Contractor shall conduct remaining TA-21 Site Cleanup activities and disposal of wastes including concrete slabs material generated from MDA-B remediation currently being stored at DP East area, ancillary equipment including a decommissioned concrete crusher, dismantled support systems equipment from MDA-B enclosures, two MDA-B mobile enclosures, three excavators, and utility lines and poles across the TA-21 area.

The Contractor shall take confirmatory sampling data after excavation of contaminated soils and following other remediation activities to ensure that any remaining contamination along the industrial waste lines area, below the DP concrete slabs area, and at other remediation sites are below the threshold for the cleanup standard being met. The entire DP West area shall be cleaned up to industrial cleanup standards to the requisite depth (ten (10) feet bgs). The site shall be surveyed and hot spots removed to meet the industrial cleanup standards. The slabs and demolition sites shall be restored to approximate original grade sufficient to meet land transfer requirements and expectations negotiated through EM-LA with NA-LA and the County of Los Alamos. The DP East area shall be surveyed and hot spots removed such that this area is below the threshold for a residential cleanup standard.

The Contractor shall conduct readiness reviews prior to commencing field activities. During these activities at TA-21, the Contractor shall establish EM operational controls to the site and implement the necessary site access controls and Conduct of Operations necessary to accomplish the work. Interface with the NNSA M&O Contractor FOD shall only be required for Doppler radar and hazardous conditions notifications relevant to work at TA-21.

Following NMED approval of CoCs, the Contractor shall prepare modifications to the NNSA-owned RCRA HWF Permit to remove sites from Appendix K. The Contractor shall coordinate with the NNSA M&O Contractor, EM-LA, and NMED to effect removal of the SWMU or AOC from the Permit.

C.11.2.5 Middle Los Alamos Canyon Aggregate Area

Middle Los Alamos Canyon Aggregate Area includes 33 SWMUs and AOCs. The previous contractor will have completed the remaining investigation and the currently necessary remediation work and begin preparation of the Supplemental

Investigation Report (SIR) for submittal to the NMED. The Contractor shall pick up the development and finalize the SIR for the Middle Los Alamos Canyon Aggregate Area for submittal to the NMED. This will include addressing peer review comments, finalizing the SIR and submitting to EM-LA for review and approval for submittal to the NMED. The contractor shall submit the remaining CoCs. Following NMED approval of CoCs, the Contractor shall prepare modifications to the NNSA-owned RCRA HWF Permit to remove sites from Appendix K. The Contractor shall coordinate with the NNSA M&O Contractor, EM-LA, and NMED to effect removal of the SWMU or AOC from the Permit.

C.11.2.6 Upper Sandia Canyon Aggregate Area

The *Supplemental Investigation Report for Upper Sandia Canyon Aggregate Area*, Revision 1, LA-UR-15-26598, EP2015-0146, ESHID-600912-05, was prepared by the LCBC contractor. The Contractor shall prepare an IWP addressing NMED NOD comments, and conduct Phase II field activities as required. The contractor shall prepare and submit an IR and CoCs or required remediation. The Contractor shall allow EM-LA the opportunity to participate in the product peer review process. Following NMED approval of CoCs, the Contractor shall prepare modifications to the NNSA-owned RCRA HWF Permit to remove sites from Appendix K. The Contractor shall coordinate with the NNSA M&O Contractor, EM-LA, and NMED to effect removal of the SWMU or AOC from the Permit. CoCs were received from NMED for 8 SWMUs and 16 AOCs in "*Certificates of Completion Upper Sandia Canyon Aggregate Area Los Alamos National Laboratory EPA ID #NM0890010515 HWB-LANL-10-099*," (February 18, 2011).

The Contractor shall monitor the health of the wetland in Upper Sandia Canyon and work with the NNSA M&O Contractor to ensure sufficient water is continuously discharged into the head of Upper Sandia Canyon to maintain conditions necessary to ensure the stability of the hexavalent chromium entrapped within the wetland.

C.11.2.7 Lower Sandia Canyon Aggregate Area

A SIR will be prepared by the LCBC contractor in August 2017 to address the following SWMUs in TA-20 and TA-53:

20-001(a)	20-002(d)	53-005
20-001(b)	20-003(b)	53-008
20-001(c)	20-003(c)	53-009
20-002(a)	20-004	53-010
20-002(b)	20-005	53-012(e)
20-002(c)	53-001(a)	

Based on current knowledge, not all sites will be able to be closed without additional field work. Therefore, the Contractor shall prepare a Phase II Work

Plan for Lower Sandia Canyon Aggregate Area. For those sites still above SSLs the Contractor shall conduct any necessary field characterization for these sites IAW the IWP, conduct field cleanup activities for these sites, and submit an IR and CoCs as required. The Contractor shall allow EM-LA the opportunity to participate in the product peer review process. Following NMED approval of CoCs, the Contractor shall prepare modifications to the NNSA-owned RCRA HWF Permit to remove sites from Appendix K. The Contractor shall coordinate with the NNSA M&O Contractor, EM-LA, and NMED to effect removal of the SWMU or AOC from the Permit.

C.11.2.8 Upper Mortandad Canyon Aggregate Area

An SIR will be prepared by the LCBC contractor in August 2017. The Contractor shall prepare an IWP for those sites still above SSLs, conduct field cleanup activities for these sites, and submit an IR and CoCs or required remediation under the 2016 Consent Order and conduct activities as required. The Contractor shall allow EM-LA the opportunity to participate in the product peer review process. Following NMED approval of CoCs, the Contractor shall prepare modifications to the NNSA-owned RCRA HWF Permit to remove sites from Appendix K. The Contractor shall coordinate with the NNSA M&O Contractor, EM-LA, and NMED to effect removal of the SWMU or AOC from the Permit.

C.11.2.9 Middle Mortandad and Ten Site Canyons Aggregate Area

NMED granted CoCs for:

- 33 SWMUs and 12 AOCs on June 30, 2011
 - 15 SWMUs not subject to controls include 05-006(h), 35-002, 35-004(b and g), 35-009(b and c), 35-010(a, b, c, and d), 35-014(a), 52-002(a), 60-005(a), and 63-001(a and b);
 - 8 AOCs not subject to controls include 35-004(m) [which was mislabeled a SWMU], 35-007, 35-011(d), 35-014(f and g2), 52-003(a), 60-004(c and e);
 - 18 SWMUs subject to controls include 35-003(a, b, c, d, e, f, g, j, k, l, m, n, o, and q), 35-009(e), 35-014(b), 35-015(a, b); and
 - 4 AOCs subject to controls include 35-003(misc), 35-014(d), 35-016(j), and 35-018(a).
- 3 SWMUs (04-001, 04-002, and 04-003(b)) on May 18, 2015;
- 1 SWMU (35-016(i)) and 1 AOC (35-014(e2)) on September 27, 2013;
- 6 SWMUs (05-001(a and b), 05-002, 05-005(a), and 05-006(b and e)) and 1 AOC (05-001(c)) on September 16, 2015;

- 17 SWMUs (35-003(h and p), 35-004(a and h), 35-008, 35-009(a and d), 35-014(e and g), and 35-016(a, c, d, k, m, o, p, and q)) and 8 AOCs (35-003(r), 35-010(e), 35-014(g3), and 35-016(b, e, f, l, and n)) on October 14, 2015.

The Contractor shall coordinate with the NNSA M&O Contractor, EM-LA, and NMED to effect removal of the SWMU or AOC from the Permit.

C.11.2.10 Lower Mortandad and Cedro Canyons Aggregate Area

Investigation is completed. CoCs were received for SWMUs 05-003, 05-004, 05-005(b), and 05-006(c) from NMED in *“Certificates of Completion Four Solid Waste Management Units at technical Area 5 Lower Mortandad/Cedro Canyons Aggregate Area,”* EPA ID #NM0890010515, HWB-LANL-15-030, October 28, 2015. The previous contractor will conduct and submit a risk assessment for construction workers for remaining SWMUs and AOCs that was required in the October 28, 2015, response from NMED. The Contractor shall coordinate with the NNSA M&O Contractor, EM-LA, and NMED to effect removal of the SWMU or AOC from the Permit.

C.11.2.11 Upper Cañada del Buey Canyon Aggregate Area

Forty-nine SWMUs and AOCs were investigated and reported in the *Upper Cañada del Buey Aggregate Area Investigation Report*, May 2011. Based on this report, CoCs were received from NMED for 6 SWMUs and 1 AOC in *“Approval of Request for Certificates of Completion for Six Solid Waste Management Units and One Area of Concern in the Upper Cañada del Buey Aggregate Area Los Alamos National Laboratory,”* EPA ID #NM0890010515, HWB-LANL-11-049, July 13, 2012.

The previous contractor submitted a *Upper Canada del Buey Aggregate Area Supplemental Investigation Report*, LA-UR-16-26150, EP2016-0042, August 2016, that include a risk assessment of the previously investigated sites. Following NMED approval of this report, the Contractor shall submit requests for CoC for the 39 SWMUs and AOCs that were recommended for CoCs either without or without controls. One SWMU remains deferred until the facility is no longer operational.

The Contractor shall prepare a phase II IWP and conduct additional sampling and analysis for the following:

- To define nature and extent of contamination for one or more contaminants of potential concern at SWMUs 46-004(b2), 46-004(q), 46-004(u), 46-006(f), and 46-008(b).
- To sample for analytes inadvertently excluded from the previous investigation for VOCs and pesticides at SWMU 46-004(h), total petroleum hydrocarbons diesel range organics (TPH-DRO) at SWMU 46-006(d), and TPH-DRO at SWMU 46-008(g).
- To resample SWMU 46-004(t) drainline at locations 46-611277 and 46-611278 to assure information was obtained from the proper depths. And

- To remediate SWMU 46-004(c) because of trichloroethene exposure under construction worker and residential scenarios and the residential non-cancer risk from mercury and SWMU 46-004(q) because of mercury exposure under construction worker and residential scenarios and ecological risks.

The Contractor shall prepare and submit an IR and CoCs or required remediation under the 2016 Consent Order and conduct activities as required. The Contractor shall allow EM-LA the opportunity to participate in the product peer review process. Following NMED approval of CoCs, the Contractor shall prepare modifications to the NNSA-owned RCRA HWF Permit to remove sites from Appendix K. The Contractor shall coordinate with the NNSA M&O Contractor, EM-LA, and NMED to effect removal of the SWMU or AOC from the Permit.

C.11.2.12 Middle Cañada del Buey Canyon Aggregate Area

The *Investigation Report for Middle Canada del Buey Aggregate Area*, LA-UR-09-0228, EP2009-0012, documented the investigation of four AOCs in TA-51 and TA-54. CoCs were received from NMED for AOCs 18-005(b), 18-005(c), 51-001, and 54-007(d) in “*Certificates of Completion Middle Canada del Buey Aggregate Area AOCs*,” EPA ID #NM0890010515 HWB-LANL-11-015, April 14, 2011. The Contractor shall prepare modifications to the NNSA-owned RCRA HWF Permit to remove sites from Appendix K. The Contractor shall coordinate with the NNSA M&O Contractor, EM-LA, and NMED to effect removal of the SWMU or AOC from the Permit.

C.11.2.13 Lower Mortandad/Lower Canada del Buey Canyons Aggregate Area

NMED concurred that investigations are not required because there are no SWMUs or AOCs in this area in “*Approval Investigation Work Plan for Lower Mortandad/Canada del Buey Aggregate Area*,” LANL, EPA ID #NM0890010515, March 4, 2009. The previous contractor will have submitted the requests for CoCs to NMED. Upon receipt of the CoCs for each site, the Contractor shall prepare modifications to the NNSA-owned RCRA HWF Permit to remove sites from Appendix K. The Contractor shall coordinate with the NNSA M&O Contractor, EM-LA, and NMED to effect removal of the SWMU or AOC from the Permit.

C.11.2.14 Starmer/ Upper Pajarito Canyon Aggregate Area

The Contractor shall perform field investigations at the specified in the *Investigation Work Plan for Starmer/Upper Pajarito Canyon Aggregate Area*, Revision 1 (EP2011-0066) for 77 sites requiring investigation at TA-08, TA-09, TA-22, and TA-40 and conduct field cleanup activities for those sites exceeding SSLs. The contractor shall prepare and submit an IR and request for CoCs. The Contractor shall allow EM-LA the opportunity to participate in the product peer review process. Following NMED approval of CoCs, the Contractor shall prepare modifications to the NNSA-owned RCRA HWF Permit to remove sites from Appendix K. The Contractor shall coordinate with the NNSA M&O Contractor, EM-LA, and NMED to effect removal of the SWMU or AOC from the Permit.

C.11.2.15 Twomile Canyon Aggregate Area

The *Investigation Work Plan for Twomile Canyon Aggregate Area*, Revision 1, LA-UR-10-02899, EP2010-0200 was approved by NMED-HWB in June 2010 (ERID-109652). The Contractor shall complete the investigation and conduct site cleanups for sites exceeding SSLs, prepare and submit an IR following all site completions, and submit CoCs for 70 sites at TA-03, TA-06, TA-07, TA-22, TA-40, TA-50, TA-59, and TA-69.

C.11.2.16 Threemile Canyon Aggregate Area

The *Supplemental Investigation Report for Threemile Canyon Aggregate Area*, LA-UR-16-20567, EP2015-0192, was completed by the LCBC contractor, and addresses the following SWMUs and AOCs:

SWMU 12-001(a)	SWMU 15-008(g)	AOC C-12-001
SWMU 12-001(b)	SWMU 15-009(b)	AOC C-12-002
SWMU 12-002	SWMU 15-009(c)	AOC C-12-003
SWMU 12-004(a)	SWMU 15-009(h)	AOC C-12-004
SWMU 12-004(b)	SWMU 15-010(b)	AOC C-12-005
SWMU 15-005(c)	SWMU 15-014(h)	AOC C-12-006
SWMU 15-007(c)	SWMU 36-002	AOC C-36-003
SWMU 15-007(d)	SWMU 36-003(a)	
SWMU 15-008(b)	SWMU 36-008	

Twenty-one sites were recommended for corrective action complete and can proceed to CoCs. The Contractor shall respond to NMED comments on the SIR if still necessary. The Contractor shall prepare an IWP to address four sites where nature and extent are still not defined: SWMU 15-007(c), SWMU 15-008(b), AOC 15-008(g), and AOC 15-009(b). The Contractor shall remove contaminated soil at SWMUs 15-007(c) and 15-008(b) that still exceed SSLs and conduct any remaining field cleanups on those sites. The Contractor shall prepare and submit an IR following all site completions, and submit CoCs for all completed sites.

C.11.2.17 Lower Pajarito Canyon Aggregate Area

The HIR and IWP were approved by NMED-HWB with modifications in December 2010 (EP2010-5227). The Contractor shall execute the *Investigation Work Plan for Lower Pajarito Canyon Aggregate Area*, Revision 1 (EP2010-0522) for 31 sites requiring investigation at TA-18 and former TA-27, conduct any remaining field cleanups on those sites exceeding SSLs, prepare and submit an IR following all site completions, and submit CoCs.

C.11.2.18 Cañon de Valle Aggregate Area

A SIR for TA-14 will be completed by the LCBC contractor to address the following SWMUs and AOCs:

SWMU 14-001(a)	SWMU 14-003	AOC C-14-002
SWMU 14-001(b)	SWMU 14-004(a)	AOC C-14-003
SWMU 14-001(c)	SWMU 14-005	AOC C-14-004
SWMU 14-001(d)	SWMU 14-006	AOC C-14-005
SWMU 14-001(e)	SWMU 14-007	AOC C-14-007
SWMU 14-001(g)	SWMU 14-009	AOC C-14-008
SWMU 14-002(c)	SWMU 14-010	AOC C-14-009
SWMU 14-002(f)	AOC C-14-001	

The Contractor shall develop an IWP for TA-14 sites still above the risk thresholds and respond to NMED comments, conduct the Phase II investigation field cleanup activities, prepare and submit a final Phase II IR, and submit remaining CoCs.

Although an IWP for TA-15 was approved under the LCBC contractor, the Contractor shall conduct Investigation and field cleanup activities for sites above soil screening levels, conduct risk assessment, prepare and submit an IR, and submit for remaining CoCs.

Although the *Investigation Work Plan for Cañon de Valle Aggregate Area* (EP2006-0224) for TA-16 was approved with modifications in February 2007 (ERID-095478), a field implementation plan (FIP) was prepared in June 2011 and contains deviations to the IWP that make the FIP more consistent with the current approach to collecting analytical samples. The Contractor shall conduct field investigations and cleanups for sites exceeding SSLs, conduct a risk assessment, prepare and submit an IR, and submit for remaining CoCs for 21 sites requiring investigation at TA-15.

C.11.2.19 Upper Water Canyon Aggregate Area

A *Historical Investigation Report for Upper Water Canyon Aggregate Area*, LA-UR-10-5226, EP2010-0307 was previously prepared. The Contractor shall execute the *Investigation Work Plan for Upper Water Canyon Aggregate Area*, Revision 1, LA-UR-11-0135, EP2010-0516, which was approved with a direction to modify on February 18, 2011 (ERID-111827, EP2011-5079) for 129 sites requiring investigation at TA-11 and TA-16, excavation activities at numerous sites, and preparation of an IR.

C.11.2.20 Lower Water Canyon Aggregate Area

Lower Water Canyon Aggregate Area has not been investigated to date, nor has an IWP been prepared. The Contractor shall develop, submit for approval, and execute an IWP for Lower Water Canyon Aggregate Area. The Contractor shall execute the investigation activities, conduct field cleanup activities for those sites exceeding SSLs, prepare and submit an IR, and submit CoCs for six sites requiring investigation at TA-15 and one site in TA-49.

SWMUs 15-004(h)	SWMU 15-014(l)

SWMU 15-001	SWMU 15-009(g)
SWMU 15-014(d)	AOC C-15-011
One site in TA-49	

C.11.2.21 Potrillo/Fence Canyon Aggregate Area

A *Supplemental Investigation Report for Potrillo and Fence Canyons Aggregate Area*, LA-UR-15-27131, EP2015-0079, was submitted to NMED-HWB on September 30, 2015 that includes a risk assessment and makes a recommendation for site completion based on sites being below human health risk. The Contractor shall facilitate NMED-HWB approval of the SIR and the Contractor shall submit requests for CoCs for the seven sites recommended for corrective actions complete (see the left column of the table below). The Contractor shall conduct additional characterization of seven sites for nature and extent and shall remediate (see the middle column of the table below) and conduct post-remediation confirmatory sampling for three sites (see the far-right column of the table below).

CoCs	Nature and Extend Characterization	Remediation and Confirmatory Sampling
SWMU 15-005(b)	SWMU 15-004(b)	SWMU 15-002, former south burn pit
SWMU 15-007(a)	SWMU 15-004(c)	SWMU 15-004(f), E-F Firing Site
SWMU 15-010(a)	SWMU 15-004(f)	SWMU 15-008(a), surface disposal area at E-F Firing Site
SWMU 36-006	SWMU 15-009(e)	
AOC C-15-004	SWMU 36-001	
AOC C-15-005	SWMU 36-003(b)	
AOC C-15-006	SWMU 36-005	

C.11.2.22 North Ancho Canyon Aggregate Area

Although an initial investigation was conducted and documented in 2009 and 2010, a *Phase II Investigation Work Plan for North Ancho Canyon Aggregate Area*, Revision 1, LA-UR-11-01817, EP2011-0115, was submitted to NMED-HWB and approved with modifications that do not substantially affect the proposed sampling (ERID-203447, EP2011-5255, HWB-LANL-10-104), the Phase II field investigation has not been executed. The Contractor shall conduct the Phase II field investigation activities, conduct field cleanup activities for those sites exceeding SSLs, prepare an IR that includes a risk assessment, and submit CoCs for 5 sites in TA-39: SWMU 39-001(a), 39-002(b), 39-006(a), 39-007(a), and 39-010.

C.11.2.23 South Ancho Canyon Aggregate Area

Although the *Historical Investigation Report for South Ancho Canyon Aggregate Area*, LA-UR-15-25431, WP2015-0103, ESHRD-600530, and the *Investigation Work Plan for South Ancho Canyon Aggregate Area*, LA-UR-15-25429, EP2015-

0104, ESHID-600531, were submitted to NMED-HWB in FY2015, the field investigation has not been executed. The Contractor shall execute the investigation. The Contractor shall conduct the field investigation activities, conduct field cleanup activities for those sites exceeding SSLs, prepare and submit an IR that includes a risk assessment, and submit CoCs for the following 11 sites requiring investigation at TA-33:

SWMU 33-003(a), Soil Contamination	SWMU 33-003(b), Soil Contamination
SWMU 33-004(c), Septic System	SWMU 33-004(k), Drainline and Outfall
SWMU 33-006(b), Firing Site	SWMU 33-007(a), Firing Site
SWMU 33-008(b), Landfill	SWMU 33-010(a), Surface Disposal Area
SWMU 33-010(b), Surface Disposal Site	SWMU 33-010(d), Surface Disposal Site
AOC C-33-002, Former Transformer	

C.11.2.24 Chaquehui Canyon Aggregate Area

An Historical Investigation Report for Chaquehui Canyon Aggregate Area An Historical Investigation Report for Chaquehui Canyon Aggregate Area, EP2009-0554-2868, 11/30/2009 was previously prepared as was an IR for several areas Investigation Report for Ancho, Chaquehui, and Indio Canyons, Revision 1, ERID-204397 ; 2011-07-08.

The Contractor shall execute the remaining field investigations as defined in the *Investigation Work Plan for Chaquehui Canyon Aggregate Area*, LA-UR-09-7401, EP2009-0554, as modified by the NMED *Approval With Modifications for the Investigation Work Plan for Chaquehui Canyon Aggregate Area*, Revision 1, ERID-201242, March 3, 2011. The Contractor shall conduct the initial fieldwork activity, excavation activities at numerous sites, and prepare and submit an IR, submit remaining CoCs, and submit a modification to remove the sites from the NNSA-owned RCRA HWF Permit. The IWP requires investigation at 43 sites within the following Consolidated Units, SWMUs, and AOCs:

Consolidated Unit 33-002(a)-99, MDA-K (includes (a), (b), and (c))	Consolidated Unit 33-004(a)-00, Main Site
Consolidated Unit 33-005(a)-00, Potential Soil Contamination	AOC 33-008(c), Surface Disposal Area
SWMU 33-011(e), Former Storage Area	SWMU 33-012(a), Former Storage Area
SWMU 33-016, Sump, Drainline, Outfall	AOC C-33-001, Former Transformer
AOC C-33-003, Potential Soil Contamination	SWMU 33-004(d), Septic System
Consolidated Unit 33-004(g)-00, Area 6 Firing Site	SWMU 33-009, Surface Disposal Area
Consolidated Unit 33-001(a)-99, MDA-E	SWMU 33-004(b), Septic System
Consolidated Unit 33-004(j)-00, Outfall	SWMU 33-010(g), Surface Disposal Area
SWMU 33-004(m), Septic System	SWMU 33-001(b), former Storage Area

The Contractor shall establish EM operational controls to the site and implement the necessary site access controls and Conduct of Operations necessary to accomplish the work. Interface with the NNSA M&O Contractor FOD shall only be required for Doppler radar and hazardous conditions notifications relevant to work. At a minimum, the Contractor shall install an acceptable personnel exclusion fence up-canyon to provide a physical barrier between NA-LA operational areas and the EM operational control areas.

C.11.2.25 S-Site Aggregate Area

Although the *Supplemental Investigation Report for S-Site Aggregate Area*, LA-UR-15-28016, EP2015-0065, was completed by the LCBC contractor and submitted to NMED-HWB on November 19, 2015 for approval, responses have not been received and comment must be expected. This SIR addresses 61 SWMUs and AOCs in TA-11 and TA-16. The Contractor shall prepare comment responses to NMED-HWB comment after receipt and shall prepare any revision to the SIR. The Contractor shall submit either remaining CoCs based on what NMED-HWB does approve or shall conduct remediation under the 2016 Consent Order to meet site cleanup standards until CoCs can be obtained. The SIR indicated the following additional work is required:

- (a) Six sites in the V-Site Courtyard that could not be directly characterized because of historical property preservation constraints and where periphery data show no potential unacceptable human health risks under the recreational scenario and no unacceptable ecological risk require characterization when the facilities are released. These sites are: SWMU 16-006(h), Pit; SWMU 16-013, Decommissioned Storage Area; SWMU 16-017(q)-99, Storage Building 16-517; SWMU 16-017(r)-99, Former Building 16-519; SWMU 16-017(s)-99, Former Building 16-520; SWMU 16-017(t)-99, High Bay Building 16-516; and SWMU 16-017(v)-99, Former HE Processing Building 16-515.
- (b) Three sites in the V-Site Subaggregate that could not be sampled completely or at all because of historical property preservation constraints require characterization when the facilities are released. These sites are: SWMU 16-006(g), Former Septic System; SWMU 16-031(c), Former Drainline; and SWMU 16-017(v)-99, Former HE Processing Building 16-516.
- (c) Additional sampling is required for eight sites for which extent is not defined but which pose no potential unacceptable human health risk under one or more scenarios and no unacceptable ecological risk. These sites are: SWMUs 11-011(a), 16-026(e), 16-034(n), 16-003(f), 16-029(h), 16-025(x), 16-029(w), and 16-029(x).

C.11.2.26 Technical Area-49 Inside Nuclear Environmental Site (NES)

The previous contractor (LCBC) submitted the *Supplemental Investigation Report for Sites at Technical Area 49 Inside the Nuclear Environmental Site Boundary*, LA-UR-16-25263, EP2016-0062, August 2016, that addressed the following ten sites:

- SWMU 49-001(g), Area of Potential Contamination,
- SWMU 49-003, inactive Leach Field and Associated Drain Lines,
- AOC 49-008(c), Area of potential Soil Contamination,
- AOC 49-008(d), Bottle House and Cable Pull Test Facility,
- SWMU 49-001(e), Experimental Shafts,
and
- SWMU 49-001(a), Experimental Shafts,
- SWMU 49-001(b), Experimental Shafts,
- SWMU 49-001(c), Experimental Shafts,
- SWMU 49-001(d), Experimental Shafts, and
- SWMU 49-001(f), Experimental Shafts

It is expected that NMED-HWB will provide comments on the SIR. The Contractor shall prepare comment responses to NMED-HWB comment after receipt and shall prepare any revision to the SIR. The Contractor shall submit CoCs based on what NMED-HWB does approve as complete (the first five are considered complete). The remaining evaluation recommended for the remaining (last) five sites shall be conducted under Section C.12.2.7 for MDA-AB.

C.11.2.27 Technical Area-49 Outside Nuclear Environmental Site

The previous contractor (LCBC) submitted the *Supplemental Investigation Report for Sites at Technical Area 49 Outside the Nuclear Environmental Site Boundary*, LA-UR-16-25264, EP2016-0061, August 2016, that addressed the following sites:

- AOC 49-002,
- SWMU 49-004, and
- SWMU 49-005(a).

It is expected that NMED-HWB will provide comments on the SIR. The Contractor shall prepare comment responses to NMED-HWB comments after receipt and shall prepare any revision to the SIR. The Contractor shall submit CoCs based on what NMED-HWB does approve as complete (SWMU 49-005(a) may already be complete). The remaining investigation or evaluation shall be included in Section C.12.2.7 for MDA-AB.

C.12 MATERIAL DISPOSAL AREAS

C.12.1 Work Process Including Consent Order

This section described a typical investigation and remediation for each of the Material Disposal Areas (MDA) required under the 2016 Consent Order. Specific work scope for each MDA is provided in that section in C.12.2.

C.12.1.1 Inspection and Maintenance of Existing Operational Covers

The Contractor shall periodically conduct inspection and maintenance of existing operational covers on the MDAs. Inspections and maintenance for all MDAs shall be in accordance with the *Documented Safety Analysis (DSA) for Surveillance and Maintenance of the Nuclear Environmental Sites [NES] at LANL*, NES-ABD-0101, Revision 1, June 2007 including but not limited to access controls, combustible loading (vegetation) controls, preventing/correcting erosion, and preventing/correcting intrusion of water into the waste disposal pits and shafts.

C.12.1.2 Historical Information Review

All available previous investigatory activities, such as RCRA investigations that were completed ~ 1996, were documented in HIRs by aggregate area by the previous contractor.

C.12.1.3 Investigation Work Plans

The Contractor shall develop an IWP to characterize the area to determine nature and extent of contamination. IWPs shall be peer reviewed and EM-LA provided an opportunity to participate. This deliverable is co-signed by the Contractor and EM-LA, and as such must be provided for EM-LA acceptance and signature in accordance with the review schedules identified in Section J, Attachment J-11, GFS/I.

C.12.1.4 Field Investigations

The Contractor shall conduct field investigation activities at the MDAs in accordance with NMED approved IWPs. Unanticipated field conditions and field investigation activities may be expanded within the IWP without re-approaching NMED for IWP changes under Section XIX of the 2016 Consent Order. These additional characterizations shall be coordinated with EM-LA. Samples collected from investigation activities shall follow chain of custody procedures through shipment to analytical laboratories.

C.12.1.5 Analytical Laboratory

The Contractor shall develop contracts with certified analytical laboratories to meet 2016 Consent Order standards (Section IX) and NMWQCC MDLs. Laboratory MDLs shall be sufficient to meet NMWQCC standards. Sample results from the analytical laboratories shall be loaded directly into EIMS by the analytical laboratory. The Contractor shall evaluate the data for consistency and expectancy and the Contractor shall follow-up with laboratory for inconsistencies. IntellusNM provides public access to environmental data; the Contractor shall support inquiries by the public.

C.12.1.6 Clearance of Cultural Sites

The Contractor shall examine and evaluate cultural sites where cleanups will occur, work with EM-LA and NNSA cultural resources, and provide information

for NNSA prepared New Mexico SHPO reports. The Contractor shall provide the background information to allow EM-LA to work with NNSA to either clear cultural sites for the work activities or change investigatory activities to avoid the cultural sites.

C.12.1.7 Waste Disposal

The Contractor shall dispose of remediation wastes and restore disturbed areas to acceptable conditions such that the area is consistent with the surrounding topography, vegetation, and characteristics similar to the adjacent undisturbed areas. The Contractor shall characterize the wastes and generate all waste management documentation including manifests. The Contractor shall establish its own contracts or utilize Federal waste transportation and disposal contracts to properly dispose of the remediation wastes if more cost effective.

C.12.1.8 Investigation Report

The Contractor shall prepare IRs with human health risk assessments compared with cleanup standards (residential, industrial including construction worker, or recreational) specified by EM-LA as appropriate for the expected land use. The Contractor shall allow EM-LA the opportunity to participate in the IR peer review process. This deliverable is co-signed by the Contractor and EM-LA, and as such must be provided for EM-LA acceptance and signature in accordance with the review schedules identified in Section J, Attachment J-11, GFS/I.

C.12.1.9 Evaluation of Potential Remedies and Alternatives

The Contractor shall evaluate potential treatment options and potential remedy projects in a CME including conceptual level detail for potential remedies. The CME recommends a remedy and proposes a DOE commitment to NMED. The CME shall be reviewed and accepted by EM-LA. The schedule shall include an EM HQ Internal Remedy Review, estimated to require two weeks, that will be conducted immediately after the product peer review.

C.12.1.10 Support NMED Statement of Basis

The Contractor shall facilitate and support a public review of the NMED SOB and a decision by NMED to implement a remedy project. In those cases where radiological constituents overshadow hazardous constituents, the Contractor shall develop those products and documents necessary to support DOE's authority for radiological regulatory authority in accordance with MP-05.15, *Regulation and Release of Environmental Sites Containing, or Potentially Containing, Radioactive Material* or EM-LA equivalent procedure (in development).

C.12.1.11 Construction of Remedy Projects

The Contractor shall execute Environmental remedy projects. The Contractor shall evaluate the need for and conduct onsite air monitoring during the implementation of the proposed remedy construction activities.

C.12.1.12 Remedy Completion Report

Following execution of the remedy the contractor shall prepare a remedy completion report. The Contractor shall provide EM-LA the opportunity to participate in the RCR peer review process. This deliverable is co-signed by the Contractor and EM-LA, and as such must be provided for EM-LA acceptance and signature in accordance with the review schedules identified in Section J, Attachment J-11, GFS/I.

C.12.1.13 Certificates of Completion and Removal from Hazardous Waste Facility Permit

Following NMED approval of the remedy completion report, the Contractor shall prepare and submit requests for CoCs for all SWMUs and AOCs that have been remediated or meet acceptable risk exposure levels.

Following NMED approval of CoCs, the Contractor shall prepare modifications to the NNSA-owned RCRA HWF Permit to remove sites from Appendix K. The Contractor shall coordinate with the NNSA M&O Contractor, EM-LA, and NMED to effect removal of the SWMU or AOC from the Permit.

C.12.2 Scope by Material Disposal Area

There are seven MDAs and long-term monitoring at the Airport Landfill cover within the scope of work.

C.12.2.1 Material Disposal Area-A

MDA-A is an inactive subsurface disposal site on DP Mesa located at LANL in TA-21 bounded on the south by Los Alamos Canyon and north by DP Canyon and identified as SWMU 21-014. The facility is comprised of the two General's Tanks, two trenches and a central pit that operated from 1945-1947 and again from 1961 until it closed in 1976. It received contaminated materials from the earliest laboratory operations and may contain both hazardous and radioactive waste.

The Contractor shall establish EM operational controls to the site and implement the necessary site access controls and Conduct of Operations necessary to accomplish the work. Interface with the NNSA M&O Contractor FOD shall only be required for Doppler radar and hazardous conditions notifications relevant to work at TA-21.

MDA-A General's Tanks Removal Action

From 1945 to 1947, plutonium residues were discharged into two 50,000-gallon underground storage tanks and identified as SWMUs 21-011(i) and (j). The two tanks are covered by 18 in. of soil, an 8-in. reinforced concrete slab, and 3-5ft of overburden soil. Each of the tanks is 12 ft. in diameter and 63 ft. in length. The tanks are located on the west end of the site and contain plutonium-contaminated sediment from the plutonium recovery operations. Liquid wastes containing Pu 239/240 and Am 241 were to be stored until improved chemical recovery

methods could be developed. Supernatant water was eventually removed from the tanks from 1975 to 1981 through access holes cut in the concrete and the tops of the tanks.

All pipes and access holes were sealed in 1985; installation of cofferdams and new access holes was completed in 2011. An estimated 86 ft³ heel of sediment remains in the bottom of each tank. The total radioactive inventory for the two tanks is estimated to be 139 Ci, with 111 Ci in the western tank and 28 Ci in the eastern tank. This is sufficient MAR to categorize the Plutonium Tanks as a Hazard Category 2 nuclear facility.

The Contractor shall develop a project plan, provide project development and authorization documents to EM-LA for approval, develop any necessary work documents, execute the removal of the tanks and their heel material, and dispose of all materials. The Contractor shall conduct an evaluation of the feasibility of various disposal options for the final waste form for waste classification as either M/LLW or CH-TRU. The most recent sampling results and Light Detection and Ranging (LIDAR) surveys in *Characterization of Sludge and Water Samples Obtained from the General's Tanks During April, 2010 Sampling*, Rev. 0, LA-UR-11-06876, provide an initial basis for this determination. If the waste stream is determined to require disposal as TRU, the Contractor shall coordinate with the NNSA M&O Contractor to determine options for preparation and shipment through LANL to TA-54 Area-G. The Contractor shall prepare all appropriate environmental evaluation supporting documentation and safety basis documentation to accomplish the remediation and submit to EM-LA for approval (this will likely require subsequent submittal to EM-HQ for approval).

MDA-A Pit and Trenches Characterization

Combustible and noncombustible solid wastes and debris were disposed of in three pits/trenches. Two are located on the eastern portion of the site, and one is located on the central part. Solid wastes disposed of in the eastern pits in 1945-1946 contained a variety of radionuclides and possibly hazardous chemicals. The two eastern pits are estimated to be approximately 28,000 ft³. Very little documentation has been found that detail the types of chemicals and quantities of radionuclides in these pits, but they may contain polonium, plutonium, uranium, americium, radium, lanthanum, and actinium.

The central pit is approximately 500,000 ft³ with 2 to 6 ft. of soil overburden above plutonium-, uranium-, and americium-contaminated decontamination and decommissioning related building waste debris from TA-21. Photographs taken during partial filling indicated plenums and air-handling equipment, hoods, ducts and other construction debris. LANL compiled a Final Hazard Categorization (FHC) for the MDA-A eastern and central pits in December 2009 that applied a segmentation approach for work processes in accordance with DOE-STD-1027-92 and DOE-STD-1120-2005.

The Contractor shall facilitate getting a response from NMED on the LANL request to change the previous remedy strategy for excavation to a new strategy to further characterize the MDA and conduct a CME, "*Request for Withdrawal of Phase II Investigation/Remediation Work Plan for Material Disposal Area A, Solid*

Waste Management Unit 21-014, at Technical Area 21, Revision 1," EP2012-0027, Issued April 12, 2012. The Contractor shall then develop and submit an IWP to EM-LA for approval and subsequently to NMED. The Contractor shall conduct additional trench waste sampling (such as potholing) in accordance with the expected sampling plan and execute further characterization of MDA-A central debris pit and trenches.

MDA-A Corrective Measures Evaluation

The FHC of the eastern and central pits can be downgraded to less than Hazard Category 3 if discrete work areas are established during excavation and remediation, retrieved landfill materials must be managed such that MAR is maintained below the Hazard Category 3 threshold, and separation of discrete excavation areas are by minimum distances.

Based on the results of the waste characterization sampling, the Contractor shall prepare a CME report that evaluates potential remedial alternatives and recommends a preferred remedy that will be protective of human health and the environment and attain the appropriate cleanup goals. This CME shall also address the 22 SWMUs and AOCs that were made accessible following TA-21-257 demolition. The Contractor shall prepare and submit the CME for MDA-A to EM-LA for approval and subsequently to NMED.

The Contractor shall facilitate NMED-HWB review of the CME and development and issuance of a SOB including public meetings and public comment resolution and issuance of a Notice of Final Remedy.

MDA-A Dose Assessment

The Contractor shall evaluate radiological dose from the radionuclide inventory contained in the disposal shafts that industrial workers and the public would receive when the recommended remedy is implemented. The Contractor shall conduct the assessment to meet DOE requirements of DOE O 435.1. The Contractor shall evaluate existing radiological data, identifying receptors, and inserting the information into the RESRAD (residual radioactive material guidelines) software such that the Contractor can compile the results into a Dose Assessment Report for approval by DOE for consideration in selecting a final remedy. The Contractor shall develop and submit the radiological dose assessment documents and other radiological design criteria documents to EM-LA (as the radiological regulator under DOE's AEA authority for radionuclides. Specific radiological documentation necessary is included in procedure MP-05.17.

MDA-A Remedy Project

After the final remedy is selected by NMED and direction is provided by EM-LA, the Contractor shall develop the potential remedy project CMIP for submittal to EM-LA for approval and subsequently to NMED. The MDA-A presumptive remedy is currently an engineered, evapo-transpiration (ET) cover, as a project and include provisions for post-closure care and monitoring to be implemented during this contract period. The Contractor shall include in this CMIP a detailed

engineering design and schedule for initiation and execution of the expected project for the remedy. After approval of the CMIP, the Contractor shall execute the remedy project for MDA-A. The Contractor shall coordinate this project development with the remedy project development for MDA-T and explore the possibility of using one remedy for both MDAs due to their proximity. The Contractor shall prepare all appropriate environmental evaluation supporting documentation and safety basis documentation to accomplish the remediation and submit to EM-LA for approval (this will likely require subsequent submittal to EM-HQ for approval).

C.12.2.2 Material Disposal Area-C

MDA-C is an inactive 11.8-acre landfill consisting of six disposal pits, a chemical disposal pit, and 107 shafts. Hazardous waste and mixed waste, as well as radioactive wastes were disposed of in the landfill between 1948 and 1974. MDA-C is not a Nuclear Environmental Site.

MDA-C Soil Vapor Monitoring

The Contractor shall commence semi-annual monitoring of the vapor plume underneath the facility in accordance with the soil vapor monitoring plan [Ref MDA-5] immediately following contract transition and continuing through construction activities for the remedy project. Vapor samples are collected from existing vapor monitoring wells in and around MDA-C - from 110 sampling ports. The Contractor shall arrange for laboratory analysis of the samples for tritium and volatile organic compounds. The Contractor shall prepare and submit to EM-LA for approval and subsequently submitted to NMED annually an effectiveness monitoring report that documents sampling results and plume response.

MDA-C Corrective Measures Evaluation

Investigation and characterization activities are complete at MDA-C and the *Corrective Measures Evaluation Report for Material Disposal Area C, Solid Waste Management Unit 50-009, at Technical Area 50*, LA-UR-12-24944, EP2012-0194, was submitted to NMED in September 2012. The CME evaluated several remedial alternatives and recommended installation of an ET cover system with soil vapor extraction (SVE) and institutional controls.

The Contractor shall facilitate NMED-HWB issuance of a SOB including public meetings and public comment resolution and issuance a Notice of Final Remedy.

MDA-C Dose Assessment

The Contractor shall evaluate radiological dose from the radionuclide inventory contained in the disposal shafts that industrial workers and the public would receive when the recommended remedy is implemented. The Contractor shall conduct the assessment to meet DOE requirements of DOE O 435.1. The Contractor shall evaluate existing radiological data, identifying receptors, and inserting the information into the RESRAD software such that the Contractor can compile the results into a Dose Assessment Report for approval by DOE for consideration in selecting a final remedy. The Contractor shall develop and

submit the radiological dose assessment documents and other radiological design criteria documents to EM-LA (as the radiological regulator under DOE's AEA authority for radionuclides. Specific radiological documentation necessary is included in procedure MP-05.17.

MDA-C Remedy Project

After the final remedy is selected by NMED and direction is provided by EM-LA, the Contractor shall develop the project CMIP for submittal to EM-LA for approval and subsequently to NMED. The MDA-C presumptive remedy is currently an engineered, evapo-transpirative cover with post-closure care and monitoring systems as a project to be implemented during this contract period. The Contractor shall include in this CMIP a detailed engineering design and schedule for initiation and execution of the expected project for the remedy. After approval of the CMIP, the Contractor shall execute the remedy project for MDA-C as a project including fully implement the additional post-closure care and monitoring plan. The project must be closely coordinated with EM-LA and NNSA because of its location close to NNSA operational facilities. During this project, the Contractor shall obtain approval from EM-LA and NNSA before blocking or impeding traffic on Pajarito Road. As part of the remedy project, the Contractor shall operate and maintain the SVE at MDA-C and periodically report the mass removal to EM-LA and NMED. The Contractor shall prepare all appropriate environmental evaluation supporting documentation and safety basis documentation to accomplish the remediation and submit to EM-LA for approval (this will likely require subsequent submittal to EM-HQ for approval).

C.12.2.3 Material Disposal Area-G

MDA-G is LANL's primary low-level radioactive disposal facility (1957 until 1997) and includes ten SWMUs comprised of 229 subsurface disposal units including disposal shafts, trenches, and pits for the disposal of low-level radioactive waste, radioactive infectious waste, asbestos-contaminated waste, PCBs, and temporary placement of TRU waste. Currently, Area G is used by the NNSA M&O Contractor for the disposal of low-level radioactive waste in pits, and by the EM Bridge Contractor for the storage of mixed and TRU waste.

MDA-G Interim Measures Soil Vapor Extraction System

The Contractor shall consider whether an SVE IM is warranted before the completion of CH-TRU operations and, if warranted, develop an interim measures work plan and submit to EM-LA for approval and subsequent submittal for approval by NMED, collect baseline vapor samples from 41 sampling ports in 20 monitoring wells near the existing extraction boreholes, and execute the SVE IM collecting data and modeling performance as necessary.

The Contractor shall prepare and submit semi-annual summary reports to EM-LA for approval and subsequent submittal to NMED, if the SVE IM is determined to be appropriate.

MDA-G Corrective Measures Evaluation

Investigation and characterization activities are complete at MDA-G and the *Corrective Measures Evaluation Report for Material Disposal Area G, Solid Waste Management Unit 54-013(b)-99, at Technical Area 54, Revision 3*, LA-UR-11-4910, was submitted to NMED in September 2011. The CME evaluated several remedial alternatives and recommended installation of an ET cover system with SVE and institutional controls.

However, EM-LA has withdrawn this CME based on the time needed for CH-TRU under this contract. Therefore, the Contractor shall prepare a CME for MDA-G that evaluates potential remedial alternatives and recommends a preferred remedy that will be protective of human health and the environment and attain the appropriate cleanup goals. The Contractor shall prepare and submit the CME for MDA-G to EM-LA for approval and subsequently to NMED.

The Contractor shall facilitate and support NMED-HWB issuance of a SOB including public meetings and public comment resolution and NMED issuance of a Notice of Final Remedy.

MDA-G Dose Assessment

The Contractor shall evaluate radiological dose from the radionuclide inventory contained in the disposal shafts that industrial workers and the public would receive when the recommended remedy is implemented. The assessment shall meet DOE requirements of DOE O 435.1. The Contractor shall evaluate existing radiological data, identifying receptors, and inserting the information into the RESRAD software. The results shall be compiled into a Dose Assessment Report for approval by EM-LA for consideration in selecting a final remedy. The Contractor shall develop and submit the radiological dose assessment documents and other radiological design criteria documents to EM-LA (as the radiological regulator under DOE's AEA authority for radionuclides. Specific radiological documentation necessary is included in EM-LA procedure MP-05.15 (in development)).

MDA-G Remedy Project Planning

After the final remedy is selected, the Contractor shall prepare a CMIP for submittal to NMED to include a detailed engineering design and schedule for initiation and execution of the expected project for the MDA-G selected remedy. The MDA-G presumptive remedy is currently expected to be an engineered, evapo-transpirative cover with SVE and institutional controls, and with post-closure care and monitoring systems.

Due to the expectation that the CH-TRU program will continue through this contract, demolition of only a portion of the above-grade surface facilities in Area G at TA-54 are anticipated to be within the potential periods of this contract – See Section C.14.

The MDA-G corrective measures will not be implemented during this contract period. The Contractor shall prepare all appropriate environmental evaluation

supporting documentation and safety basis documentation to accomplish the remediation and submit to EM-LA for approval (this will likely require subsequent submittal to EM-HQ for approval).

C.12.2.4 Material Disposal Area-H

MDA-H is a 0.3-acre inactive hazardous and radioactive waste disposal area consisting of nine disposal shafts that received classified or sensitive wastes and debris contaminated with radioactive, hazardous, and explosive constituents located at TA-54. The shafts are 6 ft. in diameter and 60 ft. deep. Hazardous wastes, and mixed wastes, as well as radioactive wastes have been stored at TA-54 from the 1950s to the present.

MDA-H Corrective Measures Evaluation

Investigation and characterization activities are complete at MDA-H and the *Corrective Measures Evaluation Report for Material Disposal Area H, Solid Waste Management Unit 54-004, at Technical Area 54, Revision 1, LA-UR-11-5079*, was submitted to NMED in September 2011. NMED has not yet responded to the CME at this time. The CME evaluated several remedial alternatives and recommended installation of an ET cover system with SVE and institutional controls.

However, EM-LA has withdrawn this CME based on the time needed for CH-TRU under this contract. Therefore, the Contractor shall prepare a CME for MDA-H that evaluates potential remedial alternatives and recommends a preferred remedy that will be protective of human health and the environment and attain the appropriate cleanup goals. The Contractor shall prepare and submit the CME for MDA-H to EM-LA for approval and subsequently to NMED.

The Contractor shall facilitate and support NMED-HWB issuance of a SOB including public meetings and public comment resolution and NMED issuance of a Notice of Final Remedy.

MDA-H Dose Assessment

The Contractor shall evaluate radiological dose from the radionuclide inventory contained in the disposal shafts that industrial workers and the public would receive when the recommended remedy is implemented. The Contractor shall conduct the assessment to meet DOE requirements of DOE O 435.1. The Contractor shall evaluate existing radiological data, identifying receptors, and inserting the information into the RESRAD software such that the Contractor can compile the results into a Dose Assessment Report for approval by DOE for consideration in selecting a final remedy.

MDA-H Remedy Project

After the final remedy is selected by NMED, the Contractor shall prepare a CMIP for submittal to EM-LA for approval and subsequently to NMED, to include a detailed engineering design for the remedy and any post-closure care and monitoring systems and schedule for initiation and execution of the expected

project for the MDA-H selected remedy. The MDA-H presumptive remedy is currently expected to be an engineered, evapo-transpirative cover with SVE and institutional controls, and with post-closure care and monitoring systems. After approval of the CMIP, the Contractor shall execute the remedy project for MDA-H including fully implementing the additional post-closure care and monitoring plan. The project must be closely coordinated with EM-LA and NNSA because of its location along the egress road to Area G and the RANT off-site shipments of TRU wastes. The Contractor shall prepare all appropriate environmental evaluation supporting documentation and safety basis documentation to accomplish the remediation and submit to EM-LA for approval (this will likely require subsequent submittal to EM-HQ for approval).

C.12.2.5 Material Disposal Area-L

MDA-L is located within TA-54. MDA-L was used between 1959 and 1986 for disposal of mostly liquid hazardous and radioactive wastes into pits, trenches, and shafts including solvent and other liquid wastes. Some liquid wastes were poured into the disposal shafts while others were disposed of in containers. There is a relatively large VOC vapor plume under MDA-L.

MDA-L Vapor Monitoring

Vapor monitoring is necessary to determine whether or not the slow leak continues or if there is a catastrophic container failure event. The Contractor shall conduct semi-annual monitoring of the vapor plume underneath MDA-L; collecting vapor samples from existing vapor monitoring wells in and around MDA-L from 86 sampling ports in 29 wells. The Contractor shall arrange for laboratory analysis of the samples for tritium and VOCs and prepare and submit to EM-LA for approval and subsequently to NMED an annual effectiveness monitoring report to document sampling results and plume response.

MDA-L Interim Measures Soil Vapor Extraction System

The Contractor shall continue execution of the SVE IM in accordance with the *Interim Measures Work Plan for Soil Vapor Extraction of Volatile Organic Compounds from Material Disposal Area L, Technical Area 54*, Revision 1, LA-UR-14-26472, September 2014, to remove the overall VOC mass, to decrease maximum VOC concentrations within the plume, to decrease the current extent of the vapor plume so it remains well contained within the upper geologic units, and to help gather design information for a potential final SVE remedy. The Contractor shall perform VOC monitoring on a quarterly basis for 3 years. The Contractor shall continue to report emissions to the NNSA M&O Contractor for Title V Air Permit reporting. (See Section C.3.4.8)

MDA-L Corrective Measures Evaluation

Investigation and characterization activities are complete at MDA-L and a *CME Report for Material Disposal Area L, Solid Waste Management Unit 54-006, at Technical Area 54, Revision 2*, LA-UR-11-4798 was submitted to NMED in September 2011 that recommended installation of an ET cover system with SVE and institutional controls.

However, EM-LA has withdrawn this CME based on the time needed for CH-TRU under this contract. Therefore, the Contractor shall prepare a CME for MDA-L that evaluates potential remedial alternatives and recommends a preferred remedy that will be protective of human health and the environment and attain the appropriate cleanup goals. The Contractor shall prepare and submit the CME for MDA-L to EM-LA for approval and subsequently to NMED.

The Contractor shall facilitate NMED-HWB review of the CME, issuance of a SOB including public meetings and public comment resolution and NMED issuance of a Notice of Final Remedy.

MDA-L Remedy Project Planning

The MDA-L corrective measures will not be implemented during this contract period. However, after NMED selects a final remedy, the Contractor prepares a CMIP for submittal to EM-LA for approval and subsequently NMED. The MDA-L presumptive remedy is currently expected to be an engineered, evapo-transpirative cover with SVE and institutional controls, and with post-closure care and monitoring systems. The CMI Plan is to include a detailed engineering design for the remedy and any post-closure care and monitoring systems and schedule for initiation and execution of a project for the MDA-L selected remedy. The Contractor shall prepare all appropriate environmental evaluation supporting documentation and safety basis documentation to accomplish the remediation and submit to EM-LA for approval (this will likely require subsequent submittal to EM-HQ for approval).

C.12.2.6 Material Disposal Area-T

MDA-T is a 2.2-acre radiological waste disposal site located at TA-21 where the remains of four absorption beds and a series of disposal shafts are all that exist and identified as SWMUs 21-016(a), (b), and (c). MDA-T is currently classified as a Hazard Category 2 nuclear facility due to the radiological inventory in the disposal shafts. The Contractor must manage MDA-T activities in accordance with a DSA for surveillance and maintenance at nuclear environmental sites.

The Contractor shall establish EM operational controls to the site and implement the necessary site access controls and Conduct of Operations necessary to accomplish the work. The Contractor shall interface with the NNSA M&O Contractor FOD for Doppler radar and hazardous conditions notifications relevant to work at and around TA-21.

MDA-T Moisture Monitoring

The Contractor shall continue to conduct a moisture monitoring program pilot study in the vadose-zone at TA-21 that uses heat dissipation probes (HDPs) coupled with an infiltration test that applies water at the ground surface to demonstrate if the HDPs work well under transient conditions that would have been started by the previous contractor. The Contractor shall conduct this pilot in accordance with the *Work Plan for Vadose Zone Moisture Monitoring at Material Disposal Area T at Technical Area 21*, LA-UR-11-3831, EP2011-0019, ERID-

204696, and NMED's comments in *Approval With Modifications Work Plan for Vadose Zone Moisture Monitoring at Material Disposal Area T at Technical Area 21*, HWB-LANL-11-056, EP2011-5412. This pilot study also includes installing a deep borehole in an undisturbed area of TA-21 and periodically collecting water/moisture samples. Moisture monitoring shall evaluate the mobilization and transport of soluble contaminants in the subsurface from the wastes buried at the site and help guide and evaluate remedial alternatives.

MDA-T Corrective Measures Evaluation

The Contractor shall prepare a CME report that evaluates potential remedial alternatives and recommends a preferred remedy that will be protective of human health and the environment and attain the appropriate cleanup goals. The Contractor shall prepare and submit the CME for MDA-T to EM-LA for approval and subsequently to NMED.

The Contractor shall facilitate NMED-HWB review of the CME and development and issuance of a SOB including public meetings and public comment resolution.

MDA-T Dose Assessment

The Contractor shall evaluate radiological dose from the radionuclide inventory contained in the disposal shafts that industrial workers and the public would receive when the recommended remedy is implemented. The Contractor shall conduct the assessment to meet DOE requirements of DOE O 435.1. The Contractor shall evaluate existing radiological data, identifying receptors, and inserting the information into the RESRAD software such that the Contractor can compile the results into a Dose Assessment Report for approval by DOE for consideration in selecting a final remedy. The Contractor shall develop and submit the radiological dose assessment documents and other radiological design criteria documents to EM-LA (as the radiological regulator under DOE's AEA authority for radionuclides. Specific radiological documentation necessary is included in EM-LA procedure MP-05.15 (in development)).

MDA-T Remedy Project

After the final remedy is selected by NMED and direction is provided by EM-LA, the Contractor shall prepare a project CMIP for submittal to EM-LA for approval and subsequently to NMED. The MDA-T presumptive remedy is currently an engineered, evapo-transpirative cover with post-closure care and monitoring systems as a project to be implemented during this contract period. The Contractor shall include in this CMIP a detailed engineering design and schedule for initiation and execution of the expected project for the remedy. After approval of the CMIP, the Contractor shall execute the remedy project for MDA-T as a project. The Contractor shall coordinate this project development with the remedy project development for MDA-A and explore the possibility of using one remedy for both MDAs due to their proximity. The Contractor shall prepare all appropriate environmental evaluation supporting documentation and safety basis documentation to accomplish the remediation and submit to EM-LA for approval (this will likely require subsequent submittal to EM-HQ for approval).

C.12.2.7 Material Disposal Area-AB

MDA-AB includes 12 SWMUs and portion has been categorized as a Hazard Category 2 nuclear facility, which includes SWMUs 49-001(b), 49-001(c), 49-001(d), and 49-001(g). MDA-AB is located immediately in and around several archaeological sites including an Ancestral Pueblo room block (circa AD 1275 – 1350). Any work performed at this site requires close coordination and reporting between LANL and the New Mexico SHPO.

The Contractor shall establish EM operational controls to the site and implement the necessary site access controls and Conduct of Operations necessary to accomplish the work. Interface with the NNSA M&O Contractor FOD shall only be required for Doppler radar and hazardous conditions notifications relevant to work at TA-49. The Contractor shall coordinate activities to allow the Interagency Fire Response Center within TA-49 to continue operating.

MDA-AB Archeological Site Evaluation

The Contractor shall conduct field investigations and archeological site clearances by subject matter experts to delineate archaeological sites, preserve artifacts as necessary, coordinate all work with the SHPO, and provide documentation of any work performed in/around the culturally significant areas.

MDA-AB Investigation and Corrective Measures Evaluation

Based on the *Supplemental Investigation Report for Sites at Technical Area 49 Outside the Nuclear Environmental Site Boundary*, LA-UR-16-25264, EP2016-0061, August 2016, the Contractor shall conduct the remaining investigations at TA-49 Outside the Nuclear Environmental Sites in accordance with the *Phase II Investigation Work Plan for Technical Area 49 Sites Outside the NES Boundary (AOC 49-002 and SWMUs 49-005(a) and 49-004)*, LA-UR-11-0553, EP2011-0028, for only the following two activities as SWMU 49-005(a) is considered complete:

- Drill at least two boreholes next to the calibration and elevator shafts at AOC 49-002 to investigate the extent of contamination at and beneath the bottom of the 64-ft deep shafts.
- Perform additional sampling and analysis at SWMU 49-004 for dioxins and furans, which were not required in the original investigation.

The Contractor shall also conduct the remaining investigations at TA-49 MDA-AB Inside the nuclear environmental site in accordance with the *Phase II Investigation Work Plan for Technical Area 49 Sites Inside the NES Boundary*, LA-UR-11-01818, EP2011-0108, which addresses the remaining nine SWMUs. The Contractor shall implement the Phase II IWPs to determine vertical extent of contamination in Areas: 1, 2, 3, 4, 10, 11 and 12. The Contractor shall prepare and submit a Phase II IR to EM-LA for approval and subsequent submittal to NMED that should include the installation of vapor monitoring wells for Area 12 to further evaluate Tritium contamination.

Following NMED approval of the Phase II IR, the Contractor shall develop a CME to propose a remedy, if necessary, for the closure and sealing of the 82 shafts at TA-49. The offeror shall propose a remedy with minimum disturbance of radiological materials present at the bottom of each of the 82 shafts.

MDA-AB Dose Assessment

The Contractor shall evaluate the radiological dose from the radionuclide inventory contained in the disposal shafts that industrial workers and the public would receive when the recommended remedy is implemented. The Contractor shall conduct the assessment to meet DOE requirements of DOE O 435.1. The Contractor shall evaluate existing radiological data, identifying receptors, and inserting the information into the RESRAD software such that the Contractor can compile the results into a Dose Assessment Report to be submitted to EM-LA for approval for consideration when selecting or supporting a final remedy. The Contractor shall develop and submit the radiological dose assessment documents and other radiological design criteria documents to EM-LA (as the radiological regulator under DOE's AEA authority for radionuclides. Specific radiological documentation necessary is included in EM-LA procedure MP-05.15 (in development)).

MDA-AB Remedy Project

After the final remedy is selected by NMED and direction is provided by EM-LA, the Contractor shall prepare a CMIP for submittal to EM-LA for approval and subsequently to NMED. The MDA-AB presumptive remedy is currently expected to be an engineered, evapo-transpirative cover with post-closure care and monitoring systems to be implemented during this contract period. The Contractor shall include in the CMIP a detailed engineering design and schedule for initiation and execution of the expected project for the MDA-AB selected remedy. The Contractor shall prepare all appropriate environmental evaluation supporting documentation and safety basis documentation to accomplish the remediation and submit to EM-LA for approval (this will likely require subsequent submittal to EM-HQ for approval).

C.12.2.8 Long-Term Monitoring County of Los Alamos Airport Landfill

EM-LA replaced a failed asphalt cover with an engineered Evapo-Transpirative (ET) cover at former DOE Class III RCRA landfill at Former TA-73, currently identified as the Los Alamos County Airport Landfill, in 2016. The Contractor shall conduct the necessary quarterly monitoring for this ET cover as described in the *Long-Term Monitoring Plan (LMP)*, (Dwyer 2016). Monitoring includes the following activities:

- Surface inspection and maintenance,
- Methane monitoring at monitoring locations, and
- Moisture measurement and water balance evaluations.

Monitoring may be reduced after two years from quarterly to semi-annually if the results indicate that the landfill cover is stabilizing, infrequent maintenance is required, and methane is below 25% of the Lower Explosive Limit (LEL); semi-

annually defined as once after winter and again after the rainy season. If after two years, methane is still less than 25% of the LEL, then methane monitoring could be changed to annually. Through the fifth and final year, if the methane, moisture measurements and water balancing continued to remain below 25% of the LEL, then methane monitoring could be discontinued thereafter. The landfill cover surface monitoring would continue annually through this contract period of performance. The Contractor shall provide annual performance reports to NMED before February 14 of every year.

C.13 PHASE OUT AND CLOSEOUT ACTIVITIES

C.13.1 Transition to Follow-on Contract

The Contractor recognizes that the work and services covered by this Contract are vital to the DOE mission and shall be maintained without interruption, both at the commencement (as described in Section C.1.2 incoming Contract Transition) and the expiration of this Contract (as described in this section). Therefore:

- (a) At the expiration of the Contract term or any earlier termination thereof, the Contractor shall cooperate with a successor contractor or the Government by allowing its employees to interview for possible employment. For those employees who accept employment with the successor contractor, such employees shall be released in a coordinated manner with the successor contractor. The Contractor shall cooperate with the successor contractor and Government with regard to the termination or transfer arrangements for such employees to ensure maximum protection of employee service credits and fringe benefits.
- (b) This clause shall apply to subcontracts as approved by the Contracting Officer.

C.13.2 Phase Out Activities

The EM-LA Field Office acquisition strategy for the time period after this Contract will be determined after the start of this Contract, requiring the Contractor to transition the PWS to one or more contractors. Following notification by the EM-LA Contracting Officer of the specific transition plan to any new contractors, the Contractor shall develop, submit, and execute a phase-out transition plan, as follows:

- (a) The Contractor shall submit a *Phase-Out Transition Plan* to include its approach to adequately phase-out all LLCC activities and transition existing status and continuing activities to the incoming contractor. The Phase-Out Transition Plan shall be submitted the EM-LA Contracting Officer at least 60 days prior to the completion of the contract term, or as notified by the DOE EM Contracting Officer.
- (b) The Contractor shall perform those activities that are necessary to transition the work under this contract to a successor contractor in a manner that:
 - Ensures that all work for which the Contractor is responsible under the contract is continued without disruption;

- Provides for an orderly transfer of resources, responsibilities, and accountability from the Contractor; and
 - Provides the incoming contractor the ability to perform the work in an efficient, effective, and safe manner.
- (c) The *Phase-Out Transition Plan* shall include a proposed date by which the Contractor will transition responsibility to the incoming contractor. The Contractor will maintain full responsibility for all contract stated work until assumption thereof by the incoming contractor. The Contractor shall execute the proposed plan or any part thereof in accordance with the EM-LA Contracting Officer's direction and approval.
- (d) The *Phase-Out Transition Plan* shall also include a schedule of major activities, and address at a minimum:
- A training and orientation program for the successor contractor to inform the incoming contractor of the PWS included in the Contract and other specific requirements associated with work efforts at LANL;
 - Communication process including interface agreements between DOE, the Contractor, assigned subcontractors, incumbent employees, other site contractors, Regulators and the public;
 - Identification of key transition issues and milestones;
 - Identification of a transition team (inclusive of consultants and teaming members, if any);
 - Approach to minimizing impacts on continuity of operations;
 - Dispute resolution;
 - Transition of programs, plans, property and projects;
 - Transition and/or modification of necessary permits, which shall include list of permits and purpose.
 - Transition of existing management and operating systems, plans, procedures, programs (e.g., Worker Safety and Health plan, QA plan, ISMS program, Occupational Radiation Protection Program, Waste Management Program, Records Management Program, etc.);
 - Transition of all Contract responsibilities, functions, and activities;
 - Transition of all interface control documents; and
 - Transition of any other documents or records that would be required for a successor contractor to adequately and efficiently perform.
- (e) The *Phase Out Transition Plan* shall also include a transfer walkthrough of all real and personal property currently accountable to the Contractor. During the phase out, the Contractor shall provide an inventory record of such property in the DOE FIMS and Contractor's personal property databases to the follow-on contractor. Specifically, the following property acceptance requirements shall be implemented:

- (1) The Contractor must perform a joint wall-to-wall physical inventory with the incoming Contractor of all accountable high-risk and sensitive property during the follow-on contract transition period and obtain the incoming Contractor's full accountability for the high-risk and sensitive property by the end of transition period.
- (2) The Contractor must obtain the incoming Contractor's acceptance, at the end of the follow contract transition period, of the transfer of accountability for the remaining government-owned real and personal property not covered under paragraph (e)(1), based on existing inventory records, on an "as-is, where-is" basis, or perform a wall-to-wall inventory within the transition period of the Contract. The incoming Contractor shall be responsible for reporting any discrepancies from the existing inventory records to the CO. If the physical inventory is not accomplished within the allotted timeframe, the Contractor's records will become the inventory baseline.
- (3) The Contractor shall work with DOE Property Manager, Fleet Manager and Realty Officer and provide the property and vehicle reports in accordance with Section J, Attachment J-1.

Upon DOE approval of the *Phase-Out Transition Plan*, the Contractor shall complete the activities described in the plan by the end date of the contract.

C.13.3 Contract Closeout Activities

The Contractor shall develop and submit to the EM-LA Contracting Officer the following contract closeout documents:

- (a) A *Contract Closeout Plan* to document the necessary steps the Contractor shall take to adequately closeout the contract. The Closeout Plan shall include a schedule of major activities, and address at a minimum:
 - Identification of all contract deliverables submitted and accepted. The Contractor shall include date submitted, DOE acceptance date (if applicable) and status of any remaining open deliverables;
 - Status of all requirements (complete and incomplete) under this contract;
 - Identification of all subcontracts along with status of each subcontract's settlement and final payment. The Contractor shall identify for each subcontract under this contract whether final invoices have been paid, date of final payment, current status of settlement, and any other outstanding issues related to final settlement and payment of subcontracts;
 - Disposition of Government property and equipment, including special nuclear material;
 - Status of activities performed in accordance with the Contractor's *Records Management portion of the Close-Out or Transition Plan*
 - Status of the final invoice and any incurred cost audit; and

- Status of the issues raised in the final Contractor Self-Assessment Report that follow-on EM contractors should be aware of; and
- An estimate of the funding needed to support this contract closeout.

The Contractor shall submit the *Contract Closeout Plan* in accordance with this PWS and Section J, Attachment J-2, at least 60 days prior to the completion of the contract term or as directed by the DOE EM Contracting Officer. DOE may withhold final payment until all of the necessary activities are completed by the Contractor.

- (b) A final *Contractor Self-Assessment Report* (Deliverable C.1.6.2 (2)) that includes evidence of performance of the contract terms and completion of work. The Contractor shall submit this final *Contractor Self-Assessment Report* to the EM-LA Contracting Officer within 30 days of the completion of the contract term.

Upon completion of the contract, EM-LA and the Contractor will execute a final modification to officially close out the contract. The Contractor shall provide a final release statement that will be included in the closeout modification where the Contractor discharges the Government, its officers, agents and employees from all liabilities, obligations and claims under the contract.

C.14 ADDITIONAL ASSIGNMENTS (INDEFINITE DELIVERY INDEFINITE QUANTITY CONTRACT LINE ITEM NUMBERS 00004, 00007 AND 00010)

Some additional 'in-scope' requirements are expected to be developed or identified during the contract's period of performance. These types of assignments may involve, but are not necessarily limited to, the following categories of work:

- Wells, boreholes, and piezometers that are expected throughout the contract period whose requirements are not currently established or known shall be drilled in accordance with the Section C.6 process and requirements.
- Emergent environmental remediation activities that are within the contract scope but not currently identified or quantifiable, such as a discovery of a new disposal site identified as a result of initial aggregate area investigations that shall be conducted in accordance with Section C.11 process and requirements. Newly identified SWMU's are those not listed under the current Consent Order, but reside within the aggregate areas otherwise being investigated.
- Currently known environmental remediation activities that are not developed sufficiently to rely on current estimates or allow accurate estimating by the contractor.
- For current CH-TRU disposal areas, there may be additional aggregate area investigations which uncover unexpected contaminant spread from the original disposal sites boundaries which would be conducted in accordance with Section C.11 processes and requirements.

C.14.1 Additional Monitoring Wells (4" Inner Diameter at Depth)

The Contractor shall drill additional monitoring wells to monitor water quality and to help define the vertical and lateral extent of contamination to obtain acceptable quality groundwater samples as specified by the Contracting Officer, in accordance with the 2016 Consent Order Appendix F, NMED-approved DWPs, and Section C.6, Drilling. These additional monitoring wells may be ordered under the IDIQ CLINs (00004, 00007, and 00010) by the issuance of task orders.

C.14.2 Additional Core Holes and Piezometers

The Contractor shall collect core samples from core holes and shall drill and install piezometers as specified by the Contracting Officer in accordance with the requirements of the 2016 Consent Order Appendix F, NMED-approved DWPs, and Section C.6, Drilling. There are no specific locations for other core holes or piezometers at this time. These additional core holes and piezometers may be ordered under the IDIQ CLINs (00004, 00007, and 00010) by the issuance of task orders.

C.14.3 Additional Injection or Extraction Wells

The Contractor shall drill additional injection or extraction wells at locations determined by analysis of the groundwater remediation projects (e.g., Cr and RDX) as specified by the Contracting Officer. The performance criteria for these additional injection and extraction wells are not currently known. These additional injection or extraction wells shall be drilled in compliance with the 2016 Consent Order Appendix F, NMED-approved DWPs, and Section C.6, Drilling and may be ordered under the IDIQ CLINs (00004, 00007, and 00010) by the issuance of task orders.

C.14.4 Demolition of Excess Facilities at TA-54 Area G

The Contractor shall deactivate, decontaminate is necessary, and demolish excess facilities at TA-54 Area G following their identification as excess during the facility evaluations conducted in accordance with Section C.4.7. The Contractor shall coordinate with the NNSA M&O Contractor and shall notify NMED-HWB of the demolition plans to ensure controls are in place to address any associated SWMU in accordance with the NNSA-owned RCRA HWF Permit. Demolition activities shall include:

- potential sampling for any RCRA Units permitted under the HWF Permit,
- RCRA Unit closure under NMED-approved closure plans, and
- Notification of NMED of the start of demolition activities such that associated SWMUs are not adversely affected by the demolition activities.

Facility demolition is not conducted under the 2016 Consent Order. The Contractor shall maintain an operational cover over the subsurface disposal pits and trenches at all times during demolition activities. These additional demolition activities may be ordered under the IDIQ CLINs (00004, 00007, and 00010) by the issuance of task orders.

C.14.5 NNSA-Owned CH-TRU Not Yet Identified and Not in Area G

The Contractor shall perform remediation of several types of newly generated NNSA-owned CH-TRU waste that are not approved for disposal of TRU waste at WIPP and that have not been currently identified by NNSA and are not within Area G at this time. The Contractor shall receive, store, and remediate this currently unknown waste stream through the SSSR process. This scope includes but is not limited to SSSR activities such as preparing, sorting, segregating, surveying and non-destructive analysis, and characterization of the containers and their content to meet requirements for disposals at the WIPP or otherwise as M/LLW.

Since this waste stream is not currently identified, the Contractor shall not include this waste stream in their proposal. The total quantity of waste to be processed will be based on NNSA's emerging needs and the Contractor's excess capabilities during the contract period. These additional CH-TRU waste disposition activities may be ordered under the IDIQ CLINs (00004, 00007, and 00010) by the issuance of task orders. The Contractor shall collect the costs associated with the handling of the NNSA newly generated CH-TRU and be paid through contractual agreements with the LANL M&O Contractor, and provide to EM-LA for information only.

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D.1 DOE-D-2001 PACKAGING AND MARKING (OCT 2014)

- (a) Preservation, packaging and packing for shipment or mailing of all work delivered hereunder shall be in accordance with good commercial practice and adequate to insure acceptance by common carrier and safe transportation at the most economical rate(s), including electronic means.
- (b) Each package, report or other deliverable shall be accompanied by a letter or other document which –
 - (1) Identifies the contract by number pursuant to which the item is being delivered;
 - (2) Identifies the deliverable item number or report requirement which requires the delivered item; and
 - (3) Indicates whether the Contractor considers the delivered item to be a partial or full satisfaction of the requirement.
- (c) For any package, report, or other deliverable being delivered to a party other than the Contracting Officer, a copy of the document required by paragraph (b) shall be simultaneously delivered to the office administering this contract, as identified in Section G of the contract, or if none, to the Contracting Officer.

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E.1 FAR 52.246-3, INSPECTION OF SUPPLIES – COST-REIMBURSEMENT (MAY 2001)

(a) *Definitions.* As used in this Clause—

“Contractor’s managerial personnel” means any of the Contractor’s directors, officers, managers, superintendents, or equivalent representatives who have supervision or direction of—

- (1) All or substantially all of the Contractor’s business;
- (2) All or substantially all of the Contractor’s operation at a plant or separate location where the contract is being performed; or
- (3) A separate and complete major industrial operation connected with performing this contract.

“Supplies” includes but is not limited to raw materials, components, intermediate assemblies, end products, lots of supplies, and, when the contract does not include the Warranty of Data clause, data.

- (b) The Contractor shall provide and maintain an inspection system acceptable to the Government covering the supplies, fabricating methods, and special tooling under this contract. Complete records of all inspection work performed by the Contractor shall be maintained and made available to the Government during contract performance and for as long afterwards as the contract requires.
- (c) The Government has the right to inspect and test the contract supplies, to the extent practicable at all places and times, including the period of manufacture, and in any event before acceptance. The Government may also inspect the plant or plants of the Contractor or any subcontractor engaged in the contract performance. The Government shall perform inspections and tests in a manner that will not unduly delay the work.
- (d) If the Government performs inspection or test on the premises of the Contractor or a subcontractor, the Contractor shall furnish and shall require subcontractors to furnish all reasonable facilities and assistance for the safe and convenient performance of these duties.
- (e) Unless otherwise specified in the Contract, the Government shall accept supplies as promptly as practicable after delivery, and supplies shall be deemed accepted 60 days after delivery, unless accepted earlier.
- (f) At any time during contract performance, but no later than 6 months (or such other time as may be specified in the contract) after acceptance of the supplies to be delivered under the contract, the Government may require the Contractor to replace or correct any supplies that are nonconforming at time of delivery. Supplies are nonconforming when they are defective in material or workmanship or are otherwise not in conformity with contract requirements. Except as otherwise provided in paragraph (h) of this clause, the cost of replacement or correction shall be included in allowable cost, determined as provided in the Allowable Cost and Payment clause,

but no additional fee shall be paid. The Contractor shall not tender for acceptance supplies required to be replaced or corrected without disclosing the former requirement for replacement or correction, and, when required, shall disclose the corrective action taken.

- (g) (1) If the Contractor fails to proceed with reasonable promptness to perform required replacement or correction, the Government may—
- (i) By contract or otherwise, perform the replacement or correction and charge to the Contractor any increased cost or make an equitable reduction in any fixed fee paid or payable under the contract;
 - (ii) Require delivery of undelivered supplies at an equitable reduction in any fixed fee paid or payable under the contract; or
 - (iii) Terminate the contract for default.
- (2) Failure to agree on the amount of increased cost to be charged to the Contractor or to the reduction in the fixed fee shall be a dispute.
- (h) Notwithstanding paragraphs (f) and (g) of this clause, the Government may at any time require the Contractor to correct or replace, without cost to the Government, nonconforming supplies, if the non-conformances are due to—
- (1) Fraud, lack of good faith, or willful misconduct on the part of the Contractor's managerial personnel; or
 - (2) The conduct of one or more of the Contractor's employees selected or retained by the Contractor after any of the Contractor's managerial personnel has reasonable grounds to believe that the employee is habitually careless or unqualified.
- (i) This clause applies in the same manner to corrected or replacement supplies as to supplies originally delivered.
- (j) The Contractor shall have no obligation or liability under this contract to replace supplies that were nonconforming at the time of delivery, except as provided in this clause or as may be otherwise provided in the contract.
- (k) Except as otherwise specified in the contract, the Contractor's obligation to correct or replace Government-furnished property shall be governed by the clause pertaining to Government property.

E.2 FAR 52.246-5, INSPECTION OF SERVICES – COST REIMBURSEMENT (APR 1984)

- (a) *Definition.* "Services," as used in this clause, includes services performed, workmanship, and material furnished or used in performing services.
- (b) The Contractor shall provide and maintain an inspection system acceptable to the Government covering the services under this Contract. Complete records of all

inspection work performed by the Contractor shall be maintained and made available to the Government during contract performance and for as long afterwards as the Contract requires.

- (c) The Government has the right to inspect and test all services called for by the Contract, to the extent practicable at all places and times during the term of the Contract. The Government shall perform inspections and tests in a manner that will not unduly delay the work.
- (d) If any of the services performed do not conform with contract requirements, the Government may require the Contractor to perform the services again in conformity with contract requirements, for no additional fee. When the defects in services cannot be corrected by re-performance, the Government may:
 - (1) Require the Contractor to take necessary action to ensure that future performance conforms to contract requirements; and
 - (2) Reduce any fee payable under the Contract to reflect the reduced value of the services performed.
- (e) If the Contractor fails to promptly perform the services again or take the action necessary to ensure future performance in conformity with contract requirements, the Government may:
 - (1) By contract or otherwise, perform the services and reduce any fee payable by an amount that is equitable under the circumstances; or
 - (2) Terminate the Contract for default.

E.3 DOE-E-2001, INSPECTION AND ACCEPTANCE (OCT 2014)

Inspection and acceptance of all items under this contract shall be accomplished by the Contracting Officer in accordance with the clauses entitled FAR 52.246-3, Inspection of Supplies – Cost Reimbursement and FAR 52.246-5, Inspection of Services – Cost Reimbursement. If the Contracting Officer assigns this responsibility to the Contracting Officer's Representative or another representative of the Government, the Contracting Officer shall notify the Contractor in writing.

***THE FOLLOWING CLAUSES APPLY ONLY TO FIXED-PRICE TASK ORDERS
ISSUED UNDER THE IDIQ CLINs:***

- E.4 FAR 52.246-2, INSPECTION OF SUPPLIES – FIXED-PRICE (AUG 1996)**
- E.5 FAR 52.246-4, INSPECTION OF SERVICES – FIXED-PRICE (AUG 1996)**
- E.6 FAR 52.246-16, RESPONSIBILITY FOR SUPPLIES (APR 1984)**

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F.1 FAR 52.242-15, STOP-WORK ORDER (AUG 1989) -- ALTERNATE I (APR 1984)

- (a) The Contracting Officer may, at any time, by written order to the Contractor, require the Contractor to stop all, or any part, of the work called for by this contract for a period of 90 days after the order is delivered to the Contractor, and for any further period to which the parties may agree. The order shall be specifically identified as a stop-work order issued under this clause. Upon receipt of the order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. Within a period of 90 days after a stop-work is delivered to the Contractor, or within any extension of that period to which the parties shall have agreed, the Contracting Officer shall either -
 - (1) Cancel the stop-work order; or
 - (2) Terminate the work covered by the order as provided in the Termination clause of this contract.
- (b) If a stop-work order issued under this clause is canceled or the period of the order or any extension thereof expires, the Contractor shall resume work. The Contracting Officer shall make an equitable adjustment in the delivery schedule, the estimated cost, the fee, or a combination thereof, and in any other terms of the contract that may be affected, and the contract shall be modified, in writing, accordingly, if -
 - (1) The stop-work order results in an increase in the time required for, or in the Contractor's cost properly allocable to, the performance of any part of this contract; and
 - (2) The Contractor asserts its right to the adjustment within 30 days after the end of the period of work stoppage; provided, that, if the Contracting Officer decides the facts justify the action, the Contracting Officer may receive and act upon the claim submitted at any time before final payment under this contract.
- (c) If a stop-work order is not canceled and the work covered by the order is terminated for the convenience of the Government, the Contracting Officer shall allow reasonable costs resulting from the stop-work order in arriving at the termination settlement.
- (d) If a stop-work order is not canceled and the work covered by the order is terminated for default, the Contracting Officer shall allow, by equitable adjustment or otherwise, reasonable costs resulting from the stop-work order.

F.2 DOE-F-2002, PLACE OF PERFORMANCE - SERVICES (OCT 2014)

The services specified by this contract shall be performed at the following primary location(s):

- Los Alamos National Laboratory, Los Alamos, NM
- Legacy cleanup sites off LANL property and former LANL property in the County of Los Alamos, NM (example Rendija Canyon)

F.3 DOE-F-2003, PERIOD OF PERFORMANCE – ALT I AND ALT II (OCT 2014)

(a) The Contractor shall commence performance of this contract in accordance with the contract terms and conditions on the date the Notice to Proceed is issued for the 90-day Transition Period and then continue for five years through the end of the Base Period. Periods of performance for Contract Line Item Numbers (CLINs) will be accomplished in accordance with the schedule below:

Periods of Performance (POP)		
Period	Start	End
Transition Period CLIN (90 days)	January 24, 2018	April 23, 2018
Base Period CLINs (5 Years)	April 24, 2018	April 23, 2023
Option Period 1 CLINs (3 Years)	April 24, 2023	April 23, 2026
Option Period 2 CLINs (2 Years)	April 24, 2026	April 23, 2028

(b) The period of performance of this contract may be extended pursuant to unilateral options or other clauses that provide for the extension of the contract. In the event that the Government elects to exercise its right pursuant to such options(s) or other clauses, the period of performance shall be revised to reflect such extensions. The period of performance above does not include the option to extend services per FAR 52.217-8.

***THE FOLLOWING CLAUSES APPLY ONLY TO FIXED-PRICE TASK ORDERS
ISSUED UNDER THE IDIQ CLINs:***

F.4 FAR 52.242-15, STOP-WORK ORDER (AUG 1989)

F.5 FAR 52.242-17, GOVERNMENT DELAY OF WORK (APR 1984)

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G.1 DOE-G-2001 CONTRACTING OFFICER AUTHORITY (OCT 2014)

The Contracting Officer is responsible for administration of the contract. The Contracting Officer may appoint a Contracting Officer's Representative (COR), in accordance with the clause entitled Contracting Officer's Representative, to perform specifically delegated functions. The Contracting Officer is the only individual who has the authority on behalf of the Government, among other things, to take the following actions under the contract:

- (a) Assign additional work within the general scope of the contract.
- (b) Issue a change in accordance with the clause entitled Changes.
- (c) Change the cost or price of the contract.
- (d) Change any of the terms, conditions, specifications, or services required by the contract.
- (e) Accept non-conforming work.
- (f) Waive any requirement of the contract.

G.2 DOE-G-2002 CONTRACTING OFFICER'S REPRESENTATIVE (OCT 2014)

Pursuant to the clause at DEAR 952.242-70, Technical Direction, the Contracting Officer shall designate in writing a Contracting Officer's Representative (COR) for this contract, and provide a copy of such designation to the contractor, including the delegated responsibilities and functions. The COR does not have authority to perform those functions reserved exclusively for the Contracting Officer.

G.3 DOE-G-2003 CONTRACTOR'S PROGRAM MANAGER (OCT 2014)

- (a) The Contractor shall designate a Program Manager who will be the Contractor's authorized supervisor for technical and administrative performance of all work hereunder. The Program Manager shall be the primary point of contact between the Contractor and the Contracting Officer's Representative (COR) under this contract.
- (b) The Program Manager shall receive and execute, on behalf of the Contractor, such technical directions as the COR may issue within the terms and conditions of the contract.

G.4 DOE-G-2004 CONTRACT ADMINISTRATION (OCT 2014)

To promote timely and effective contract administration, correspondence delivered to the Government under this contract shall reference the contract number, title, and subject matter, and shall be subject to the following procedures:

- (a) Technical correspondence. Technical correspondence shall be addressed to the Contracting Officer's Representative (COR) for this contract, and a copy of any such correspondence shall be sent to the DOE Contracting Officer (CO). As used herein,

technical correspondence does not include correspondence where patent or rights in data issues are involved, nor technical correspondence which proposes or involves waivers, deviations, or modifications to the requirements, terms or conditions of this contract.

(b) Other Correspondence.

- (1) Correspondence regarding patent or rights in data issues should be sent to the Intellectual Property Counsel. A copy of such correspondence shall be provided to the CO.
- (2) If no Government Contract Administration Office is designated on Standard Form 33 (Block 24), all correspondence, other than technical correspondence and correspondence regarding patent or rights in data, including correspondence regarding waivers, deviations, or modifications to requirements, terms or conditions of the contract, shall be addressed to the CO. Copies of all such correspondence shall be provided to the COR.
- (3) Where a Government Contract Administration Office, other than DOE, is designated on either Standard Form 33 (Block 24), of this contract, all correspondence, other than technical correspondence, shall be addressed to the Government Contract Administration Office so designated, with copies of the correspondence to the (Contracting Officer..

(c) Information regarding correspondence addresses and contact information is as follows:

- (1) Contract Specialist:
 - (A) U.S. Department of Energy
Office of Environmental Management - Los Alamos (EM-LA)
Attn: Kara Hetrick
 - (B) Telephone number:
 - (C) Address:
1900 Diamond Drive
Los Alamos, NM 87544
 - (D) Email address: kara.hetrick@em.doe.gov
- (2) Contracting Officer
 - (A) U.S. Department of Energy
Office of Environmental Management - Los Alamos (EM-LA)
Attn: Chris Lockhart
 - (B) Telephone number: 505-206-2532
 - (C) Address:
1900 Diamond Drive
Los Alamos, NM 87544
 - (D) Email address: Christopher.lockhart@em.doe.gov
- (3) Contracting Officer's Representative
 - (A) U.S. Department of Energy

- Office of Environmental Management - Los Alamos (EM-LA)
Attn: Robert Pfaff
(B) Telephone number: 505-606-0075
(C) Address:
1900 Diamond Drive
Los Alamos, NM 87544
(D) Email address: Robert.pfaff@em.doe.gov
- (4) Intellectual Property Counsel
(A) Integrated Service Center (ISC) Chicago Office acting through the Intellectual Property Law Division of the Office of Chief Counsel
(B) Telephone number: (630) 252-2308
(C) Address: Department of Energy
9800 S. Cass Ave.
Argonne, IL 60439
(D) Email address: Daniel.park@science.doe.gov
- (5) Government Contract Administration Office
(A) Name: U.S. Department of Energy
Office of Environmental Management - Los Alamos (EM-LA)
Attn: Christopher Lockhart
(B) Telephone number: 505-206-2532
(C) Mailing address:
EM Los Alamos Field Office
LANL MS-M984
PO Box 1663
Los Alamos, NM 87545-1663
(D) Email address: christopher.lockhart@em.doe.gov

G.5 DOE-G-2005 BILLING INSTRUCTIONS – ALTERNATE I (OCT 2014)

- (a) Contractors shall use Standard Form 1034, Public Voucher for Purchases and Services Other than Personal, when requesting payment for work performed under the contract.
- (b) Contractors shall submit vouchers electronically through the Oak Ridge Financial Service Center's (ORFSC) Vendor Inquiry Payment Electronic Reporting System (VIPERS). VIPERS allows vendors to submit vouchers, attach supporting documentation and check the payment status of any voucher submitted to the DOE. Instructions concerning contractor enrollment and use of VIPERS can be found at <https://vipers.doe.gov>.
- (c) A paper copy of a voucher that has been submitted electronically will not be accepted.
- (d) The voucher must include a statement of cost and supporting documentation for services rendered. This statement should include, as a minimum, a breakout by cost or price element and task order (if applicable) of all services actually provided by the Contractor, both for the current billing period and cumulatively for the entire contract.

- (1) Statement of Cost. The Contractor shall prepare and submit a Statement of Cost with each voucher in accordance with the following:
 - (A) Statement of Cost must be completed in accordance with the Contractor's cost accounting system.
 - (B) Costs claimed must be only those recorded costs authorized for billing by the payment provisions of the contract.
 - (C) Indirect costs claimed must reflect the rates approved for billing purposes by the Contracting Officer.
 - (D) The Direct Productive Labor Hours (DPLH) incurred during the current billing period must be shown and the DPLH summary completed, if applicable.
 - (E) The total fee billed, retainage amount, and available fee must be shown.
 - (F) If task orders or task assignments are issued under this contract, the Contractor must prepare a Statement of Cost for each task order work assignment and a summary for the total invoiced cost.
- (2) The Contractor shall prepare and submit the supporting documentation with each voucher in accordance with the following:
 - (A) Direct costs (e.g., labor, equipment, travel, supplies, etc.) claimed for reimbursement on the Statement of Cost must be adequately supported. The level of detail provided must clearly indicate where the funds were expended. For example, support for labor costs must include the labor category (e.g., program manager, senior engineer, technician, etc.), the hourly rate, the labor cost per category, and any claimed overtime; equipment costs must be supported by a list of the equipment purchased, along with the item's cost; supporting data for travel must include the destination of the trip, number and labor category of travelers, transportation costs, per diem costs, and purpose of the trip; and supplies should be categorized by the nature of the items (e.g., office, lab, computer, etc.) and the dollar amount per category.
 - (B) Any cost sharing or in-kind contributions incurred by the Contractor and/or third party during the billing period must be included.
 - (C) Indirect rates used for billings must be clearly indicated, as well as their basis of application. When the cognizant Administrative Contracting Officer (ACO) or auditor approves a change in the billing rates, include a copy of the approval.
 - (D) All claimed subcontractor costs must be supported by submitting the same detail as outlined herein.

G.6 DOE-G-2007 CONTRACTOR PERFORMANCE ASSESSMENT REPORTING (OCT 2014)

- (a) The Contracting Officer will document the Contractor's performance under this contract (including any task orders placed against it, if applicable) by using the Contractor Performance Assessment Reporting System (CPARS). CPARS information is handled as "Source Selection Information." Performance assessments entered into CPARS by the Contracting Officer are transmitted to the Past Performance Information Retrieval System (PPIRS) which is maintained by the Department of Defense (DoD). Information in PPIRS is available to authorized Government personnel seeking past performance information when evaluating proposals for award.
- (b) Contractor performance will be evaluated at least annually at the contract or task order level, as determined by the Contracting Officer. Evaluation categories may include any or all of the following at the Government's discretion: (1) quality, (2) schedule, (3) business relations, (4) business management/key personnel, and (5) cost/price. PPIRS information is available at <http://www.ppirs.gov>, and CPARS information is available at <http://www.cpars.gov>. It is recommended that the Contractor take the overview training that can be found on the CPARS website. The Contractor shall acknowledge receipt of the Government's request for comments on CPARS assessments at the time it is received and shall adhere to the process and associated timeline found in the *User Manual for Contractor Performance Assessment Reporting System (CPARS)*.
- (c) Joint Ventures. Performance assessments shall be prepared on contracts with joint ventures. When the joint venture has a unique Commercial and Government Entity (CAGE) code and Data Universal Numbering System (DUNS) number, a single assessment will be prepared for the joint venture using its CAGE code and DUNS number. If the joint venture does not have a unique CAGE code and DUNS number, separate assessments, containing identical narrative, will be prepared for each participating contractor and will state that the evaluation is based on performance under a joint venture and will identify the contractors that were part of the joint venture.
- (d) In addition to the performance assessments addressed above, the Government will perform other performance assessments necessary for administration of the contract in accordance with other applicable clauses in this contract.

G.7 DOE-G-2008 NON-SUPERVISION OF CONTRACTOR EMPLOYEES (OCT 2014)

The Government shall not exercise any supervision or control over Contractor employees performing services under this contract. The Contractor's employees shall be held accountable solely to the Contractor's management, who in turn is responsible for contract performance to the Government.

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H.1 DOE-H-2013 CONSECUTIVE NUMBERING (OCT 2014)

Due to automated procedures employed in formulating this document, clauses and provisions contained within may not always be consecutively numbered.

CONTRACTOR HUMAN RESOURCE MANAGEMENT CLAUSES

H.2 DOE-H-2002 NO THIRD PARTY BENEFICIARIES (OCT 2014)

This Contract is for the exclusive benefit and convenience of the parties hereto. Nothing contained herein shall be construed as granting, vesting, creating or conferring any right of action or any other right or benefit upon past, present or future employees of the Contractor, or upon any other third party. This provision is not intended to limit or impair the rights which any person may have under applicable Federal statutes.

H.3 DEFINITIONS

For purposes of Clauses H.4, Workforce Transition and Employee Hiring Preferences, through H.7, Workforce Transition and Benefits Transition: Plans and Timeframes, the following definitions are applicable (unless otherwise specified):

- (A) "Contract Award Date" means the date the contract is signed by the Contracting Officer, noted in Block 28 of the SF 33.
- (B) "Contract Transition Period" means the 90 day transition as defined in Section F of this Contract.
- (C) "LANS" means Los Alamos National Security, LLC (LANS), performing work under Contract DE-AC52-06NA25396, at the Los Alamos National Laboratory.
- (D) "Incumbent Employees" means employees who are employees of Los Alamos National Security, LLC.
- (E) "Non-Incumbent Employees" are employees other than Incumbent Employees.
- (F) "Notice to Proceed (NTP)" means the authorization issued by the Contracting Officer to start performance on this Contract or as otherwise defined in this Contract.

H.4 WORKFORCE TRANSITION AND EMPLOYEE HIRING PREFERENCES INCLUDING THROUGH PERIOD OF PERFORMANCE

The Contractor shall comply with the hiring preferences set forth below:

- (A) The Contractor shall comply with the right of first refusal for employment for service employees and all of the requirements set forth in FAR 52.222-17 for the applicable work and positions. If a qualified service employee declines a bona fide express offer of employment, the Contractor need not provide the preference in hiring in

paragraphs (B)(1)(a) and (b) below to such employee, but should provide the other preferences in Paragraph (B) below, as applicable.

(B) The Contractor shall provide, during the transition period and throughout the period of performance, preferences in hiring for vacancies for non-managerial positions (i.e., all those below the first line of supervision) in non-construction activities of the PWS under this Contract, in accordance with the hiring preferences in paragraphs (1) – (3) below (subject to paragraph (A) above, in descending order of priority, any applicable collective-bargaining agreement(s), applicable law, and applicable site seniority lists as provided to the Contractor by the Contracting Officer), as set forth below.

(1) The Contractor shall provide Incumbent Employees the preferences in paragraphs (a) and (b) in descending order of priority:

(a) A right of first refusal for vacancies in non-managerial positions that are substantially equivalent to the positions the above employees held at the Contract Award date.

(b) A preference in hiring for vacancies in non-managerial positions for the above employees who meet the qualifications for the position and who have been identified by their employer as being at risk of being involuntarily separated because of the transfer of this work scope to the Contractor.

(2) The Contractor shall give a preference in hiring to individuals set forth below in paragraphs (a) – (b), in descending order of priority, who are eligible for the hiring preference contained in the clause in Section I of this Contract entitled “DEAR 952.226-74, Displaced Employee Hiring Preference,” consistent with the provisions of any applicable Work Force Restructuring Plan, as amended from time to time, regarding the preferential hiring of employees:

(a) Employees who are former employees of LANS at the Los Alamos National Laboratory, and

(b) Former employees of any other DOE contractor or subcontractor at a DOE defense nuclear facility.

(3) The Contractor shall give a preference in hiring to individuals (a) who have separated from employment at the Los Alamos National Laboratory; (b) who are not precluded from seeking employment at either the Los Alamos National Laboratory by the terms of employee waivers or releases of claims they executed, absent repayment of severance consistent with the terms of those agreements; and (c) who are qualified for a particular position or who may not meet the qualifications for a particular position, but who agree to become qualified and can become qualified by the commencement of active employment under this Contract.

H.5 DOE-H-2001 EMPLOYEE COMPENSATION: PAY AND BENEFITS (OCT 2014)

(A) Contractor Employee Compensation Plan

The Contractor shall submit, for Contracting Officer approval, by close of contract transition, a Contractor Employee Compensation Plan demonstrating how the Contractor will comply with the requirements of this Contract. The Contractor Employee Compensation Plan shall describe the Contractor's policies regarding compensation, pensions and other benefits, and how these policies will support at reasonable cost the effective recruitment and retention of a highly skilled, motivated, and experienced workforce.

A description of the Contractor Employee Compensation Program should include the following components;

- (1) Philosophy and strategy for all pay delivery programs.
- (2) System for establishing a job worth hierarchy.
- (3) Method for relating internal job worth hierarchy to external market.
- (4) System that links individual and/or group performance to compensation decisions.
- (5) Method for planning and monitoring the expenditure of funds.
- (6) Method for ensuring compliance with applicable laws and regulations.
- (7) System for communicating the programs to employees.
- (8) System for internal controls and self-assessment.
- (9) System to ensure that reimbursement of compensation, including stipends, for employees who are on joint appointments with a parent or other organization shall be on a pro-rated basis.

(B) Total Compensation System

The Contractor shall develop, implement and maintain formal policies, practices and procedures to be used in the administration of its compensation system consistent with FAR 31.205-6 and DEAR 970.3102-05-6; "Compensation for Personal Services". DOE-approved standards (e.g., set forth in an advance understanding or appendix), if any, shall be applied to the Total Compensation System. The Contractor's Total Compensation System shall be fully documented, consistently applied, and acceptable to the Contracting Officer. Costs incurred in implementing the Total Compensation System shall be consistent with the Contractor's documented Contractor Employee Compensation Plan as approved by the Contracting Officer.

(C) Reports and Information

The Contractor shall provide the Contracting Officer with the following reports and information with respect to pay and benefits provided under this Contract:

- (1) An Annual Contractor Salary-Wage Increase Expenditure Report to include, at a minimum, breakouts for merit, promotion, variable pay, special adjustments, and structure movements for each pay structure showing actual against approved

amounts and planned distribution of funds for the following year.

- (2) A list of the top five most highly compensated executives as defined in FAR 31.205-6(p)(4)(ii) and their total cash compensation at the time of NTP and at the time of any subsequent change to their total cash compensation. This should be the same information provided to the System for Award Management (SAM) per FAR 52.204-10.
- (3) An Annual Report of Compensation and Benefits. Report no later than March 1 of each year in iBenefits or its successor.

(D) Pay and Benefit Programs

The Contractor shall establish pay and benefit programs for Incumbent Employees, and Non-Incumbent Employees as set forth in paragraphs (1) and (2) below and consistent with any applicable collective bargaining agreement(s), and applicable law, provided, however, that employees scheduled to work fewer than 20 hours per week receive only those benefits required by law. Employees are eligible for benefits, subject to the terms, conditions, and limitations of each benefit program.

(1) Incumbent Employees are as defined in H.3 (D).

- (a) Pay. The Contractor shall provide equivalent base pay, as compared to base pay provided and reimbursed by the government, to Incumbent Employees for at least the first year of the term of the Contract.
- (b) Pension and Other Benefits. The Contractor shall provide a total package of benefits to Incumbent Employees comparable to those benefits provided and currently reimbursed by the Government under the LANS Contract. Comparability of the total package of benefits shall be determined by the CO in his/her sole discretion. Incumbent Employees shall remain in their existing defined benefit plans and/or defined contribution pension plans (or, if continuation of the existing plans is not practicable, comparable successor plans pursuant to pension plan eligibility requirements and applicable law.

(2) Non-Incumbent Employees are as defined in H.3(E). All Non-Incumbent Employees shall receive a total pay and benefits package that provides for market-based retirement and medical benefit plans that are competitive with the industry from which the Contractor recruits its employees and in accordance with Contract requirements.

(3) Cash Compensation

- (a) The Contractor shall submit the following to the Contracting Officer for a determination of cost allowability for reimbursement under the Contract:
 - (i) Any proposed major compensation program design changes prior to implementation.

- (ii) Variable pay programs/incentives. If not already authorized under H.5(a) above of the contract, a justification shall be provided with proposed costs and impacts to budget, if any.
- (iii) In the absence of Departmental policy to the contrary (e.g., Secretarial pay freeze) a Contractor that meets the criteria, as set forth below, is not required to submit a Compensation Increase Plan (CIP) request to the Contracting Officer for an advance determination of cost allowability for a Merit Increase fund or Promotion/Adjustment fund:
- The Merit Increase fund does not exceed the mean percent increase included in the annual Departmental guidance providing the WorldatWork Salary Budget Survey's salary increase projected for the CIP year. The Promotion/Adjustment fund does not exceed 1.0 percent in total.
 - The budget used for both Merit Increase funds and Promotion/Adjustment funds shall be based on the payroll for the end of the previous CIP year.
 - Salary structure adjustments do not exceed the mean WorldatWork structure adjustments projected for the CIP year and communicated through the annual Department CIP guidance.
 - Please note: No later than the first day of the CIP cycle, Contractors must provide notification to the Contracting Officer of planned increases and position to market data by mutually agreed-upon employment categories. No presumption of allowability will exist for employee job classes that exceed market position.
- (iv) If a Contractor does not meet the criteria included in (iii) above, a CIP must be submitted to the Contracting Officer for an advance determination of cost allowability. The CIP should include the following components and data:
- (1) Comparison of average pay to market average pay.
 - (2) Information regarding surveys used for comparison.
 - (3) Aging factors used for escalating survey data and supporting information.
 - (4) Projection of escalation in the market and supporting information.
 - (5) Information to support proposed structure adjustments, if any.
 - (6) Analysis to support special adjustments.
 - (7) Funding requests for each pay structure to include breakouts of merit, promotions, variable pay, special adjustments, and structure movement. (a) The proposed plan totals shall be expressed as a percentage of the payroll for the end of the previous CIP year. (b) All pay actions granted under the compensation increase plan are fully charged when they occur regardless of time of year in which the action transpires and whether the employee terminates before year end. (c) Specific payroll groups (e.g., exempt, nonexempt) for which CIP amounts are intended shall be defined by mutual agreement

- between the contractor and the Contracting Officer. (d) The Contracting Officer may adjust the CIP amount after approval based on major changes in factors that significantly affect the plan amount (for example, in the event of a major reduction in force or significant ramp-up).
- (8) A discussion of the impact of budget and business constraints on the CIP amount.
- (9) Comparison of pay to relevant factors other than market average pay.
- (v) After receiving DOE CIP approval or if criteria in (d)(3)(A)(iii) are met, contractors may make minor shifts of up to 10 percent of approved CIP funds by employment category (e.g., Scientist/Engineer, Admin, Exempt, Non-Exempt) without obtaining DOE approval.
- (vi) Individual compensation actions for the top contractor official (e.g., laboratory director/plant manager or equivalent) and key personnel not included in the CIP. For those key personnel included in the CIP, DOE will approve salaries upon the initial Contract award and when key personnel are replaced during the life of the Contract. DOE will have access to all individual salary reimbursements. This access is provided for transparency; DOE will not approve individual salary actions (except as previously indicated).
- (b) The Contracting Officer's approval of individual compensation actions will be required only for the top contractor official (e.g., laboratory director/plant manager or equivalent) and key personnel as indicated in (D) (3) (a) (vi) above. The base salary reimbursement level for the top contractor official establishes the maximum allowable base salary reimbursement under the Contract. Unusual circumstances may require a deviation for an individual on a case-by-case basis. Any such deviations must be approved by the Contracting Officer.
- (c) Severance Pay is not payable to an employee under this Contract if the employee:
- (i) Voluntarily separates, resigns or retires from employment,
 - (ii) Is offered employment with a successor/replacement contractor,
 - (iii) Is offered employment with a parent or affiliated company, or
 - (iv) Is discharged for cause.
- (d) Service Credit for purposes of determining severance pay does not include any period of prior service for which severance pay has been previously paid through a DOE cost-reimbursement contract or Task Order.

(E) Pension and Other Benefit Programs

- (1) No presumption of allowability will exist when the Contractor implements a new benefit plan or makes changes to existing benefit plans that increase costs or are contrary to Departmental policy or written instruction or until the Contracting Officer makes a determination of cost allowability for reimbursement for new or

changed benefit plans. Changes shall be in accordance with and pursuant to the terms and conditions of the contract. Advance notification, rather than approval, is required for changes that do not increase costs and are not contrary to Departmental policy or written instruction. To the extent that the Contractor has not submitted a new benefit plan or changes to existing benefit plans for approval on the basis that it does not increase costs and such new plan or change to existing plan does in fact increase costs, any increase in costs may be considered unreasonable and will likely be determined unallowable.

- (2) Cost reimbursement for Employee pension and other benefit programs sponsored by the Contractor will be based on the Contracting Officer's approval of Contractor actions pursuant to an approved "Employee Benefits Value Study" and an "Employee Benefits Cost Survey Comparison" as described below.
- (3) Unless otherwise stated, or as directed by the Contracting Officer, the Contractor shall submit the studies required in paragraphs (a) and (b) below, except for defined benefit plans that are closed to new entrants. The studies shall be used by the Contractor in calculating the cost of benefits under existing benefit plans. An Employee Benefits Value (BenVal) Study Method using no less than 15 comparator organizations and an Employee Benefits Cost Survey comparison Method for both bargaining and non-bargaining unit employees shall be used in this evaluation to establish an appropriate comparison method. In addition, the Contractor shall submit updated studies to the Contracting Officer for approval prior to the adoption of any change to a pension or other benefit plan which increases costs. To the extent that the value studies do not address post-retirement benefits other than pensions, the Contractor shall provide a separate cost and plan design data comparison for those benefits using external benchmarks derived from nationally recognized and Contracting Officer approved survey sources.
 - (a) A BenVal for non-bargaining unit employees, every two years for each benefit tier (e.g., group of employees receiving a benefit package based on date of hire), which is an actuarial study of the relative value (RV) of the benefits programs offered by the Contractor to Employees measured against the RV of benefit programs offered by the Contracting Officer approved comparator companies;
 - (b) An Employee Benefits Cost Study Comparison for both bargaining and non-bargaining unit employees, annually for each benefit tier that analyzes the Contractor's employee benefits cost for Employees on a per capita basis per full time equivalent employee and as a percent of payroll and compares it with the cost reported by the U.S. Department of Labor's Bureau of Labor Statistics or other Contracting Officer approved broad based national survey.
- (4) When the net benefit value exceeds the comparator group by more than five percent, the Contractor shall submit a corrective action plan to the Contracting Officer for approval, unless waived in writing by the Contracting Officer.

- (5) When the average total benefit per capita cost or total benefit cost as a percent of payroll exceeds the comparator group by more than five percent, the Contractor shall submit an analysis of the specific plan costs that are above the per capita cost range or total benefit cost as a percent of payroll and a corrective action plan to achieve conformance with a Contracting Officer directed per capita cost range or total benefit cost as a percent of payroll, unless waived in writing by the Contracting Officer.
- (6) Within two years of Contracting Officer approval of the Contractor's corrective action plan, the Contractor shall align employee benefit programs with the benefit value and per capita cost range or percent of payroll as approved by the Contracting Officer.
- (7) The Contractor may not terminate any benefit plan during the term of the Contract without the prior approval of the Contracting Officer in writing.
- (8) Cost reimbursement for post-retirement benefits other than pensions (PRBs) is contingent on DOE approved service eligibility requirements for PRB that shall be based on a minimum period of continuous employment service not less than 5 years under a DOE cost reimbursement contract(s) immediately prior to retirement. Unless required by Federal or State law, advance funding of PRBs is not allowable.
- (9) Each contractor sponsoring a defined benefit pension plan and/or postretirement benefit plan will participate in the annual plan management process which includes written responses to a questionnaire regarding plan management, providing forecasted estimates of future reimbursements in connection with the plan and participating in a conference call to discuss the contractor submission (see (G)(6) below for Pension Management Plan requirements).
- (10) Each contractor will respond to quarterly data calls issued through iBenefits, or its successor system.

(F) Establishment and Maintenance of Pension Plans for which DOE Reimburses Costs

- (1) Employees working for the Contractor shall only accrue credit for service under this Contract after the date of Contract award.
- (2) Any pension plan maintained by the Contractor for which DOE reimburses costs shall be maintained as a separate pension plan distinct from any other pension plan that provides credit for service not performed under a DOE cost-reimbursement contract.

(G) Basic Requirements

The Contractor shall adhere to the requirements set forth below in the establishment and administration of pension plans that are reimbursed by DOE pursuant to cost reimbursement contracts for management and operation of DOE facilities and pursuant to other cost reimbursement facilities contracts. Pension Plans include Defined Benefit and Defined Contribution plans.

- (1) The Contractor shall become a sponsor of the existing defined benefit and defined contribution plans (or, if continuation of the existing plans is not practicable, comparable plans) and other benefit plans sponsored by LANS, including other post-retirement benefit (PRB) plans, as applicable, with responsibility for management and administration of the plans. The Contractor shall be responsible for maintaining the qualified status of those plans consistent with the requirements of ERISA and the Internal Revenue Code (IRC). Based on the potential limited number of employees who may accept positions and have existing defined benefit plans, it may not be feasible to establish a comparable defined benefit plan which complies with the requirements of ERISA and the IRC. If that circumstance develops, the contractor shall propose comparable alternative benefit plans. The Contractor shall carry over the length of service credit and leave balances accrued as of the date of the Contractor's assumption of Contract performance.
- (2) Each Contractor's defined benefit and defined contribution pension plan shall be subjected to a limited-scope audit annually that satisfies the requirements of ERISA section 103, except that every third year the Contractor must conduct a full-scope audit of defined benefit plan(s) satisfying ERISA section 103. Alternatively, the Contractor may conduct a full-scope audit satisfying ERISA section 103 annually. In all cases, the Contractor must submit the audit results to the Contracting officer. In years in which a limited scope audit is conducted, the Contractor must provide the Contracting Officer with a copy of the qualified trustee or custodian's certification regarding the investment information that provides the basis for the plan sponsor to satisfy reporting requirements under ERISA section 104. While there is no requirement to submit a full scope audit for defined contribution plans, contractors are responsible for maintaining adequate controls for ensuring that defined contribution plan assets are correctly recorded and allocated to plan participants.
- (3) For existing Commingled Plans, the Contractor shall maintain and provide annual Separate Accounting of DOE liabilities and assets for a Separate Plan.
- (4) For existing Commingled Plans, the Contractor shall be liable for any shortfall in the plan assets caused by funding or events unrelated to DOE contracts.
- (5) The Contractor shall comply with the requirements of ERISA if applicable to the pension plan and any other applicable laws.
- (6) The Pension Management Plan (PMP) shall include a discussion of the Contractor's plans for management and administration of all pension plans consistent with the terms of this Contract. The PMP shall be submitted in the iBenefits system, or its successor system no later than January 31 of each applicable year. A full description of the necessary reporting will be provided in the annual management plan data request. Within sixty (60) days after the date of the submission, appropriate Contractor representatives shall participate in a conference call to discuss the Contractor's PMP submission and any other current plan issues.

(H) Reimbursement of Contractors for Contributions to Defined Benefit Pension Plans

Contractors that sponsor single employer or multiple employer defined benefit pension plans will be reimbursed for the annual required minimum contributions under the Employee Retirement Income Security Act (ERISA), as amended by the Pension Protection Act (PPA) of 2006 and any other subsequent amendments. Reimbursement above the annual minimum required contribution will require prior approval of the Contracting Officer. Minimum required contribution amounts will take into consideration all pre-funding balances and funding standard carryover balances. Early in the fiscal year but no later than the end of June, the Contractor requesting above the minimum for the subsequent fiscal year, may submit/update a business case for funding above the minimum if preliminary approval is needed prior to the Pension Management Plan process. The business case shall include a projection of the annual minimum required contribution and the proposed contribution above the minimum. The submission of the business case will provide the opportunity for the Department to provide preliminary approval, within 30 days after contractor submission, pending receipt of final estimates, generally after January 1st of the calendar year. Final approval of funding will be communicated by the Head of Contracting Activity (HCA) when discount rates are finalized and it is known whether there are any budget issues with the proposed contribution amount.

(I) Reporting Requirements for Designated Contracts

The following reports shall be submitted to DOE as soon as possible after the last day of the plan year by the contractor responsible for each designated pension plan funded by DOE but no later than the dates specified below:

- (1) Actuarial Valuation Reports. The annual actuarial valuation report for each DOE-reimbursed pension plan and when a pension plan is commingled, the Contractor shall submit separate reports for DOE's portion and the plan total by the due date for filing IRS Form 5500.
- (2) Forms 5500. Copies of IRS Forms 5500 with Schedules for each DOE-funded pension plan, no later than that submitted to the IRS.
- (3) Forms 5300. Copies of all forms in the 5300 series submitted to the IRS that document the establishment, amendment, termination, spin-off, or merger of a plan submitted to the IRS.

(J) Changes to Pension Plans

At least sixty (60) days prior to the adoption of any changes to a pension plan, the Contractor shall submit the information required below, to the Contracting Officer. The Contracting Officer must approve plan changes that increase costs as part of a determination as to whether the costs are deemed allowable pursuant to FAR 31.205-6, as supplemented by DEAR 970.3102-05-6.

- (1) For proposed changes to pension plans and pension plan funding, the Contractor shall provide the following to the Contracting Officer:

- (A) a copy of the current plan document (as conformed to show all prior plan amendments), with the proposed new amendment indicated in redline/strikeout;
 - (B) an analysis of the impact of any proposed changes on actuarial accrued liabilities and costs;
 - (C) except in circumstances where the Contracting Officer indicates that it is unnecessary, a legal explanation of the proposed changes from the counsel used by the plan for purposes of compliance with all legal requirements applicable to private sector defined benefit pension plans;
 - (D) the Summary Plan Description; and,
 - (E) any such additional information as requested by the Contracting Officer.
- (2) Contractors shall submit new benefit plans and changes to plan design or funding methodology with justification to the Contracting Officer for approval, as applicable (see (E)(1) above). The justification must:
- (A) demonstrate the effect of the plan changes on the contract net benefit value or per capita benefit costs,
 - (B) provide the dollar estimate of savings or costs, and
 - (C) provide the basis of determining the estimated savings or cost.

(K) Terminating Operations

When operations at a designated DOE facility are terminated and no further work is to occur under the prime contract, the following apply:

- (1) No further benefits for service shall accrue.
- (2) The Contractor shall provide a determination statement in its settlement proposal, defining and identifying all liabilities and assets attributable to the DOE contract.
- (3) The Contractor shall base its pension liabilities attributable to DOE contract work on the market value of annuities or lump sum payments or dispose of such liabilities through a competitive purchase of annuities or lump sum payouts.
- (4) Assets shall be determined using the "accrual-basis market value" on the date of termination of operations.
- (5) DOE and the Contractor(s) shall establish an effective date for spinoff or plan termination. On the same day as the Contractor notifies the IRS of the spinoff or plan termination, all plan assets assigned to a spun-off or terminating plan shall be placed in a low-risk liability matching portfolio until the successor trustee, or an insurance company, is able to assume stewardship of those assets.

(L) Terminating Plans

- (1) DOE Contractors shall not terminate any pension plan (Commingled or site specific) without requesting Departmental approval at least 60 days prior to the scheduled date of plan termination.
- (2) To the extent possible, the Contractor shall satisfy plan liabilities to plan participants by the purchase of annuities through competitive bidding on the open annuity market or lump sum payouts. The Contractor shall apply the assumptions and procedures of the Pension Benefit Guaranty Corporation.
- (3) Funds to be paid or transferred to any party as a result of settlements relating to pension plan termination or reassignment shall accrue interest from the effective date of termination or reassignment until the date of payment or transfer.
- (4) If ERISA or IRC rules prevent a full transfer of excess DOE reimbursed assets from the terminated plan, the Contractor shall pay any deficiency directly to DOE according to a schedule of payments to be negotiated by the parties.
- (5) On or before the same day as the Contractor notifies the IRS of the spinoff or plan termination, all plan assets assigned to a spun-off or terminating plan shall be placed in a low-risk liability matching portfolio until the successor trustee, or an insurance company, is able to assume stewardship of those assets.
- (6) DOE liability to a Commingled pension plan shall not exceed that portion which corresponds to DOE contract service. The DOE shall have no other liability to the plan, to the plan sponsor, or to the plan participants.
- (7) After all liabilities of the plan are satisfied, the Contractor shall return to DOE an amount equaling the asset reversion from the plan termination and any earnings which accrue on that amount because of a delay in the payment to DOE. Such amount and such earnings shall be subject to DOE audit. To affect the purposes of this paragraph, DOE and the Contractor may stipulate to a schedule of payments.

(M) Special Programs

Contractors must advise DOE and receive prior approval for each early-out program, window benefit, disability program, plan-loan feature, employee contribution refund, asset reversion, or incidental benefit.

(N) Definitions

- (1) Commingled Plans. Cover employees from the Contractor's private operations and its DOE contract work.
- (2) Current Liability. The sum of all plan liabilities to employees and their beneficiaries. Current liability includes only benefits accrued to the date of valuation. This liability is commonly expressed as a present value.

- (3) Defined Benefit Pension Plan. Provides a specific benefit at retirement that is determined pursuant to the formula in the pension plan document.
- (4) Defined Contribution Pension Plan. Provides benefits to each participant based on the amount held in the participant's account. Funds in the account may be comprised of employer contributions, employee contributions, investment returns on behalf of that plan participant and/or other amounts credited to the participant's account.
- (5) Designated Contract. For purposes of this clause, a contract (other than a prime cost reimbursement contract for management and operation of a DOE facility) for which the Head of the Departmental Contracting Activity determines that advance pension understandings are necessary or where there is a continuing Departmental obligation to the pension plan.
- (6) Pension Fund. The portfolio of investments and cash provided by employer and employee contributions and investment returns. A pension fund exists to defray pension plan benefit outlays and (at the option of the plan sponsor) the administrative expenses of the plan.
- (7) Separate Accounting. Account records established and maintained within a commingled plan for assets and liabilities attributable to DOE contract service. NOTE: The assets so represented are not for the exclusive benefit of any one group of plan participants.
- (8) Separate Plan. Must satisfy IRC Sec. 414(l) definition of a single plan, designate assets for the exclusive benefit of employees under DOE contract, exist under a separate plan document (having its own Department of Labor plan number) that is distinct from corporate plan documents and identify the Contractor as the plan sponsor.
- (9) Spun-off Plan. A new plan which satisfies IRC Reg. 1.414 (l)-1 requirements for a single plan and which is created by separating assets and liabilities from a larger original plan. The funding level of each individual participant's benefits shall be no less than before the event, when calculated on a "plan termination basis."

H.6 SPECIAL PROVISIONS APPLICABLE TO WORKFORCE TRANSITION AND EMPLOYEE COMPENSATION: PAY AND BENEFITS

- (A) Service Credit. The Contractor shall provide pension and other benefit plans, to Incumbent Employees and all other employees hired by the Contractor and service credit for leave as set forth below:
 - (1) Service Credit For Leave. For Incumbent Employees hired by the Contractor as set forth in Clause H.4, the Contractor shall carry over the length of service credit from LANS for purposes of determining rates of accruing leave for these employees as required by and consistent with any applicable collective bargaining agreement(s) and applicable law.

(2) Service Credit for Fringe Benefits Other Than Leave. Service credit for all individuals hired by the Contractor shall be applied consistent with any applicable collective bargaining agreement(s), applicable law, and the terms of the applicable benefit plan(s). Service credit for purposes of severance pay is subject to Clause H5.

(B) Annual Actuarial Evaluations. Notwithstanding the above, the Contractor has responsibility for administering and maintaining the qualified status of all pension and other benefit plans that it sponsors under this Contract consistent with the plan documents. The Contractor shall submit to the Contracting Officer annual actuarial evaluations for all applicable benefit plans as well as certify that the benefit plans are in full compliance with IRC and ERISA requirements. Such certification shall demonstrate that the benefit plans are qualified under the IRC. This evaluation shall include but not be limited to written reports relating to how the benefit plans pass IRC discrimination, participation and coverage testing requirements. Each detailed annual written actuarial evaluation shall identify any conditions that may adversely affect the qualification status of the plans within eighteen months or less of the date of the evaluation, including but not limited to discrimination, participation and coverage testing requirements for the contractor and any of its subcontractors that are participating employers in the plans.

(1) Meeting Test Requirements. With the approval of the Contracting Officer, the Contractor shall establish threshold factors that indicate when the Contractor's Defined Benefit Pension Plan may not meet testing requirements within the next two plan years. Every six months the Contractor shall identify when the Defined Benefit Pension Plan may not meet testing requirements for the current plan year and the following plan year.

(2) Failure to Meet Test Requirements. In the case that the approved threshold factors described above and other factors as approved or requested by the Contracting Officer indicate that the Defined Benefit Pension Plan may not meet testing requirements, the Contractor shall provide the Contracting Officer with a corrective action plan for addressing the potential or actual failure to meet testing requirements and quarterly updates on the status for testing purposes. After the corrective action plan has been submitted and approved by the Contracting Officer, the Contractor shall provide quarterly updates on the status for testing purposes.

(3) Changes to the Defined Benefit Pension Plan. In addition to any other provision of this Contract, including but not limited to Clause H.5, any changes or amendments to the Defined Benefit Pension Plan are subject to Contracting Officer prior approval and shall be in accordance with applicable law, including compliance with any applicable collective bargaining agreement(s).

H.7 WORKFORCE TRANSITION AND BENEFITS TRANSITION: PLANS AND TIMEFRAMES

(A) Workforce Transition Plan. The Contractor shall submit a Workforce Transition Plan (WF Transition Plan) for Contracting Officer approval, describing in detail the Contractor's plans and procedures as to how the Contractor will comply with the hiring preferences set forth in Clause H. 4, Workforce Transition and Employee Hiring Preferences Including through Period of Performance, and Section I. DEAR 952.226-74, Displaced Employee Hiring Preference. The WF Transition Plan shall also detail the Contractor's plan for incorporating, if applicable, multiple unions with separate bargaining agreements. Notwithstanding timeframes identified elsewhere in the Contract, the Contractor shall perform the following activities in the specified timeframes:

(1) Within ten days after Notice to Proceed (NTP), the Contractor shall:

- (a) Provide the Contracting Officer with a list of Contractor personnel who will be responsible for transitioning the employees of the Incumbent Contractor and for development of the transition agreements, including specifically the personnel responsible for ensuring that the Contractor complies with the National Labor Relations Act and Clause H. 9, Labor Relations, and contact information for the above personnel;
- (b) Submit to the Contracting Officer a description of any and all transition agreements that it intends to enter into with LANS to ensure compliance with Clause H.4, Workforce Transition and Employee Hiring Preferences during the Contract Transition Period;
- (c) Establish and submit to the Contracting Officer a draft communication plan detailing the communication the Contractor and its subcontractors will engage in with LANS and their employees or former employees, and any labor organizations representing those employees, regarding implementation of the requirements set forth in Clauses H.4, Workforce Transition and Employee Hiring Preferences, and H.5, Employee Compensation: Pay and Benefits;
- (d) Obtain information from LANS, identifying all employees who have charged time to the DOE Office of Environmental Management work scope as of October 1, 2015; and,
- (e) Obtain information from LANS, identifying the employees who have initially been identified as being at risk of being involuntarily separated because of the transfer of this work scope to the Contractor. Provide and define a process as part of transition agreements required in paragraph (1) (a) above for obtaining updated and continuous information through the Transition Period regarding the identification of employees by LANS that have been identified as being at risk of being involuntarily separated.

(2) Within 15 days after NTP, the Contractor shall:

- (a) Submit to the Contracting Officer copies of the draft WF Transition Plan for the Contractor and its first and second tier subcontractors, including processes and procedures regarding how the Contractor will implement and ensure compliance with the hiring preferences set forth in Clause H.4, Workforce Transition and Employee Hiring Preferences and with the requirements of Clause H.9, Labor Relations, as applicable.
- (b) Establish and provide a copy to the Contracting Officer of its final written communication plan with:
 - (i) LANS regarding the implementation of the hiring preferences in Clause H.4, Workforce Transition and Employee Hiring Preferences; and
 - (ii) DOE, site tenants, and, if applicable, labor organizations representing Incumbent Employees.
- (3) Within 30 days after NTP, the Contractor shall provide to the Contracting Officer a copy of the final WF Transition described in paragraph (A) above.
- (4) Within 60 days after NTP, the Contractor shall provide to the Contracting Officer copies of the final transition agreements described in paragraph (A)(1)(b) above.
- (5) The Contractor shall submit reports to the Contracting Officer regarding the Contractor's and its subcontractors' implementation of the hiring preferences required by Clause H.4, Workforce Transition and Employee Hiring Preferences, including paragraph (A) regarding the right of first refusal in accordance with the timeframes set forth below. These reports shall include the following information: employee, hire date or anticipated hire dates; and, where applicable, the Incumbent Contractor or subcontractor that employed the employee and the Contractor or subcontractor that hired the employee.
 - (a) During the 90 day Contract Transition Period, such reports shall be provided to the Contracting Officer on a weekly basis; or
 - (b) On a less frequent basis, if requested by the Contracting Officer.
- (6) The Contractor shall implement the transition activities as set forth in the approved transition plan and such other transition activities as may be authorized or directed by the Contracting Officer.

(B) Benefits Transition Plan.

- (1) The Contractor shall submit a draft Benefits Transition Plan for the approval of the Contracting Officer, as set forth herein.
 - (a) A detailed description of the Contractor's plans and procedures showing how the Contractor will comply with Clauses H.5 and H.6, and this Paragraph (B).
 - (b) A detailed description of the Contractor's policies regarding pensions and other benefits for which the Department reimburses costs under this Contract, and how these policies will support at reasonable cost the effective

recruitment and retention of a highly skilled, motivated, and experienced workforce.

- (c) A written description of how pension and other benefit plans provided to employees pursuant to Clauses H.5 and H.6, will be transitioned, or if needed, developed and implemented on or before the last day of the 90 day Transition Period.
 - (d) If needed, an asset transfer(s) agreement to transfer assets from the LANS existing defined benefit plan to a new defined benefit plan to cover past eligibility service in order for the Contractor to adhere to the benefits sponsorship requirements set forth in this Contract. On or before the last day of the 90 day Transition Period the Contractor shall provide (1) a description of the necessary transactions, including but not limited to how the Contractor proposes to comply with the Contract and applicable law governing such transactions; and (2) a schedule for Contracting Officer approval for when the benefit plan will be developed and assets transferred.
- (2) The Contractor shall perform the following activities involving benefit transition within the timeframes specified below.
- (a) Within ten days after NTP, the Contractor shall:
 - (1) Provide the Contracting Officer with a list of Contractor personnel who will be responsible for the transition of existing benefit plans, and, if needed, development of new benefit plans, including specifically the personnel responsible for ensuring that the Contractor develops and implements a defined benefit pension plan and a defined contribution pension plan and contact information for the above personnel; and
 - (2) Request LANS to provide information and documents necessary for the Contractor to adhere to the requirements set forth in this Contract pertaining to sponsoring existing benefits plans and the establishment of any new benefits plans, including, if needed, the transfer of assets from the LANS existing defined pension plan and other benefit plans on or before the end of the 90-day Contract Transition Period.
 - (3) Provide estimated costs and detailed breakouts of the costs to accomplish workforce and benefits transition activities within the timeframes specified, including the costs for enrolled actuaries and counsel.
 - (b) Within 15 days after NTP, the Contractor shall provide to the Contracting Officer a list of the information and documents that the Contractor has requested from LANS pertaining to the existing benefit plans. The Contractor shall notify the Contracting Officer on a timely basis of any issues or problems that it encounters in obtaining information or documents requested from LANS. Regardless of such notification, the Contractor remains responsible under this Contract for ensuring compliance with the terms of this Contract, including the timeframes set forth in this clause and the requirements in Clauses H.5 and H.6.

(c) Within 20 days of NTP, the Contractor shall:

- (1) Submit the final draft Benefits Transition Plan; and
- (2) Submit a detailed description of its plans and processes, including timeframes and specific projected dates for accomplishment of each activity necessary to ensure compliance with the requirements set forth in Clause H.5 and H.6, including requirements pertaining to the transition of existing benefit plans and, if needed, the establishment of employee benefit plans; and
- (3) Meet via televideo, teleconference, and/or in person with relevant personnel who administer the benefit plans for LANS, if and when necessary. The meeting shall include the Contractor's benefit plan administrators and personnel, head of human resources, ERISA counsel, actuaries, and any and all other personnel deemed necessary by the Contractor. During such meeting, the Contractor shall discuss all matters necessary to ensure the Contractor adheres to its obligations under Clause H.5 and H.6, including execution of transition agreements with the Incumbent Contractor and other applicable entities. The minutes of the meeting as well as a written description of any substantive issues identified at the meeting shall be submitted to the Contracting Officer within two days after the meeting.

(d) Within 30 days after NTP, the Contractor shall provide a final written Benefits Transition Plan to the Contracting Officer, to include a written description of how the existing benefit plans provided to employees pursuant to Clause H.5 will be amended and restated on or before the last day of the Contract Transition Period.

(e) Within 45 days after NTP, the Contractor shall provide the Contracting Officer:

- (1) draft copies of the transition agreements the Contractor will enter into with the Incumbent Contractor(s), to ensure the Contractor's compliance with the pay and benefits requirements set forth in Clause H.5; and
- (2) drafts of all amendments to or restatements of the pension and other benefit plans presently sponsored by the Incumbent Contractor. If applicable, the Contractor shall also submit all draft restated benefit plans and draft Summary Plan Descriptions (SPDs) for pension and other benefit plans sponsored by the Incumbent Contractors. Any and all such amendments shall comply with applicable law governing such transactions and changes in sponsorship of the plans; or
- (3) if needed, as agreed to in the final written Benefits Transition Plan in (d) above, draft or proposed final versions of any new defined benefit and defined contribution pension plans and other benefit plans. The

Contractor shall also submit draft Summary Plan Descriptions (SPDs) for the pension and any other benefit plans.

- (f) No later than 60 days after NTP and prior to the adoption or execution of those documents, the Contractor shall submit to the Contracting Officer for approval the proposed final versions of the documents provided in paragraph (e) above.
- (g) The Contractor shall respond to any comments provided by the Contracting Officer under any of the above paragraphs within two days of receipt of the comments.
- (h) After the Contract Transition Period and throughout the remaining period of performance of the Contract, the Contractor shall provide the following information promptly to the Contracting Officer upon the request of the Contracting Officer:
 - (1) Documents relating to benefit plans offered to Contractor Employees, including but not limited to SPDs, all Plan documents, applicable amendments, employee handbooks that summarize benefits provided to employees, and other documents that describe benefits provided to employees of the Contractor who perform work on this Contract, and
 - (2) Any and all other documents pertaining to implementation of and compliance with implementation of the compensation and benefit programs identified in Clause H.5
 - (3) Additionally, the contractor shall provide timely data responses to Departmental annual and ad hoc pension and PRB data requests. Such data responses shall be provided within the timeframe established by the contracting officer for each response and, if no timeframe is specified, the contractor shall provide the data response within one calendar day.

H.8 DOE-H-2004 POST CONTRACT RESPONSIBILITIES FOR PENSION AND OTHER BENEFIT PLANS (OCT 2014)

- (A) If this Contract expires and/or terminates and DOE has awarded a contract under which a new contractor becomes a sponsor and assumes responsibility for management and administration of the pension or other benefit plans covering active or retired employees with respect to service at the Los Alamos National Laboratory (collectively, the "Plans"), the Contractor shall cooperate and transfer to the new contractor its responsibility for sponsorship, management and administration of the plans consistent with direction from the Contracting Officer. If a Commingled plan is involved, the Contractor shall:
 - (1) Spin off the DOE portion of any Commingled Plan used to cover employees working at the DOE facilities into a separate plan. The new plan will normally provide benefits similar to those provided by the commingled plan and shall carry

with it the DOE assets on an accrual basis market value, including DOE assets that have accrued in excess of DOE liabilities.

- (2) Bargain in good faith with DOE or the successor contractor to determine the assumptions and methods for establishing the liabilities involved in a spinoff. DOE and the contractor(s) shall establish an effective date of spinoff. On or before the same day as the contractor notifies the IRS of the spinoff or plan termination, all plan assets assigned to a spun-off or terminating plan shall be placed in a low-risk liability matching portfolio until the successor trustee, or an insurance company, is able to assume stewardship of those assets.

(B) If this Contract expires or terminates and DOE has not awarded a contract to a new contractor under which the new contractor becomes a sponsor and assumes responsibility for management and administration of the Plans, or if the Contracting Officer determines that the scope of work under the Contract has been completed (any one such event may be deemed by the Contracting Officer to be "Contract Completion" for purposes of this clause), whichever is earlier, and notwithstanding any other obligations and requirements concerning expiration or termination under any other clause of this Contract, the following actions shall occur regarding the Contractor's obligations regarding the Plans at the time of Contract Completion:

- (1) Subject to subparagraph (2) below, and notwithstanding any legal obligations independent of the Contract the Contractor may have regarding responsibilities for sponsorship, management, and administration of the Plans, the Contractor shall remain the sponsor of the Plans, in accordance with applicable legal requirements.
- (2) The parties shall exercise their best efforts to reach agreement on the Contractor's responsibilities for sponsorship, management and administration of the plans for which DOE reimburses costs, prior to or at the time of Contract Completion. However, if the parties have not reached agreement on the Contractor's responsibilities for sponsorship, management and administration of the Plans prior to or at the time of Contract Completion, unless and until such agreement is reached, the Contractor shall comply with written direction from the Contracting Officer regarding the Contractor's responsibilities for continued provision of pension and welfare benefits under the Plans, including but not limited to continued sponsorship of the Plans, in accordance with applicable legal requirements. To the extent that the Contractor incurs costs in implementing direction from the Contracting Officer, the Contractor's costs will be reimbursed pursuant to applicable Contract provisions.

H.9 DOE-H-2028 LABOR RELATIONS (OCT 2014)

- (A) The Contractor shall respect the right of employees to organize, form, join, or assist labor organizations; bargain collectively through their chosen labor representatives; engage in other concerted activities for the purpose of collective bargaining or other mutual aid or protection, and to refrain from any or all of these activities.

- (B) The Contractor shall submit its economic bargaining parameters for which DOE reimburses costs to, and obtain the approval of, the Contracting Officer regarding allowability of the costs, and compliance with the terms and conditions of the Contract, including those for pension and medical benefit costs, prior to the Contractor entering into the collective bargaining process. During the collective bargaining negotiations, the Contractor shall notify, and obtain the approval of, the Contracting Officer before submitting or agreeing to any collective bargaining proposal that increases or may increase allowable costs above those previously approved in the economic bargaining parameters, or that could involve changes in any pension or other benefit plans, and such other items of special interest to DOE as are identified by the Contracting Officer. The preliminary approval of the Contracting Officer under this paragraph does not waive any other terms and conditions of the Contract.
- (C) The Contractor will seek to maintain harmonious bargaining relationships that reflect a judicious expenditure of public funds, equitable resolution of disputes and effective and efficient bargaining relationships consistent with the requirements of FAR Subpart 22.1, DEAR Subpart 970.2201, and all applicable Federal and state labor relations laws.
- (D) The Contractor shall use its best efforts to ensure that collective bargaining agreements negotiated under this Contract contain provisions designed to assure no disruption in services during the performance of the Contract. All such agreements entered into the Contract period of performance should, to the extent that the parties voluntarily agree, provide that grievances and disputes involving the interpretation or application of the agreement will be settled without resorting to strike, lockout or other disruption in services. For this purpose, each collective bargaining agreement should provide an effective grievance procedure with arbitration as its final step, unless the parties mutually agree upon some other method of assuring no disruption in services. The Contractor shall include the substance of this subparagraph (D) in any subcontracts.
- (E) In addition to FAR 52.222-1, Notice to the Government of Labor Disputes, and other requirements in the contract, the Contractor shall immediately notify the Contracting Officer or designee of all labor relations issues and matters of interest, including, but not limited to, organizing initiatives, unfair labor practice charges or complaints, work stoppages, picketing, labor arbitrations, National Labor Relations Board charges, legal or judicial proceedings, and settlement agreements and will furnish such additional information as may be required from time to time by the Contracting Officer.
- (F) The Contractor shall immediately notify the Contracting Officer or designee of any planned or actual strike or work stoppage involving its employees or employees of a subcontractor.
- (G) The Contractor shall provide the Contracting Officer or designee a copy of all arbitration decisions issued by an arbitrator within one week of receipt of the decision.

- (H) The Contractor shall provide the Contracting Officer with a "Report of Settlement" after ratification of a collective bargaining agreement by accessing and inputting the information into the Labor Relations module (GCLR) of DOE's iBenefits reporting system, or its successor system, during the next open quarter. Such information shall include negotiated wages, pension, medical and other benefits costs, and a copy of the collective bargaining agreement and any subsequent modifications
- (I) The Contractor shall provide to the Contracting Officer a semi-annual report on grievances for which further judicial or administrative proceedings are anticipated, and all final step grievances. The Contractor shall immediately provide information on all arbitration requests. The reports are due June 30 and December 31, of each year, and should include the following information:
 - 1. List of all final step grievances filed during the previous six-month period and grievances for which further judicial or administrative proceedings are anticipated, together with the dates filed;
 - 2. A brief description of issues regarding each grievance;
 - 3. If settled, the date of settlement, and terms of the settlement. If a denial is made at the final step and the period for requesting arbitration passes, report the matter as closed;
 - 4. If not settled during the six-month reporting period, carry the item over to the subsequent six-month reporting periods until settlement, request for arbitration, closure, or other proceeding occurs.

H.10 WORKFORCE RESTRUCTURING

- (a) The Contractor shall regularly analyze workforce requirements and develop appropriate workforce transition strategies consistent with DOE policy, as set forth in DOE O 350.3 and Secretarial Guidance, as may be revised from time to time, to ensure continued availability of the critical workforce knowledge, skills, and abilities necessary for performance under this Contract.
- (b) When the Contractor determines that a change in the workforce is necessary, the Contractor shall accomplish the workforce restructuring in a manner consistent with the DOE General Workforce Restructuring Plan, if applicable, in effect for the facility or site.
- (c) The Contractor must prepare and submit to the Contracting Officer a specific workforce restructuring plan (Specific Plan), as described below in paragraph (d), if either of the following conditions are met within a rolling 12-month period:
 - (1) The Contractor intends to reduce its workforce by 50 or more employees through involuntary separation; or
 - (2) The Contractor intends to reduce its workforce by 100 or more employees, whether through voluntary or involuntary separation actions, or a combination of such actions.
- (d) The Contractor's Specific Plan shall set forth how the Contractor will conduct its

workforce restructuring action at the site in a manner that meets DOE policy objectives as set forth in DOE Order 350.3, and be submitted to the Contracting Officer for approval at least 60 days in advance of the first communication planned to be given to the employees and public. The models for Contractor Self-Select Voluntary Separation Plan and Involuntary Separation Plan, as well as the General Release and Waiver Forms, are available online at: <http://www.energy.gov/gc/services/technology-transfer-and-procurement/office-assistant-general-counsel-labor-and-pension>. If the Contractor determines it will be necessary to conduct a voluntary separation program likely followed by an involuntary separation, the Contractor may combine the Self-Select Voluntary Separation Plan and the Involuntary Separation Plan into one Specific Plan for submission to the Contracting Officer.

- (e) Pay-in-lieu of notice beyond two work-weeks requires written advance Contracting Officer approval. The Contractor shall submit the request to the Contracting Officer as part of the Workforce Restructuring package submitted for approval in (d) above, and include the number of days of pay-in-lieu of notice requested, above two work-weeks, a detailed business justification, and the associated costs.
- (f) The Contractor is encouraged to consider the use of employee waivers and releases. DOE has developed a model waiver and release of claims for both Voluntary and Involuntary Separation Plans. The forms are available on line at the website set forth in (d) above. Any deviation from the models must be approved by the Contracting Officer.
- (g) The Contractor must perform an adverse impact analysis (also known as a diversity analysis) when the involuntary separation action(s) will affect 50 or more contractor employees within a rolling 12-month period. The analysis shall be submitted to the DOE or National Nuclear Security Administration (NNSA) site counsel, as applicable, prior to notification of employees selected for involuntary separation, and may be used by DOE in determining cost allowability.
- (h) For workforce reductions that do not meet the conditions set forth in paragraph (c) above, the Contractor shall provide such notification as the Contracting Officer directs. The notification shall include affected job classifications, numbers of employees affected, and actions taken to assist the employees to find other employment or otherwise lessen the effect of the involuntary separation.
- (i) The Contractor shall ensure it does not hire or rehire individuals who volunteered for termination during a Self-Select Voluntary Separation Plan, at any DOE or NNSA site, during the one-year period following the separation. If an employee is hired or rehired prior to the one-year period, the employee may be required to pay back, to the contractor who provided the severance payment, all or a pro-rata amount of the severance received under the Voluntary Separation Plan.
- (j) Contractor(s) must provide actual and projected workforce reductions on an annual basis, no later than March 15th of each year, as set forth in the iBenefits system (<https://ibenefits.energy.gov>), or its successor.

H.11 LABOR STANDARDS

- (a) The Contracting Officer will determine the appropriate labor standards that apply to specific work activities in accordance with the Wage Rate Requirements (Construction) statute (formerly known as the Davis-Bacon Act (DBA)), the Service Contract Labor Standards (SCLS) statute (formerly known as the Service Contract Act of 1965 (SCA)), or other applicable Federal labor standards law. Prior to the start of any proposed work activities, the Contractor shall request a labor standards determination from the Contracting Officer for specific work activities by submitting proposed work packages that describe the specific activities to be performed for particular work and other information as necessary for DOE to make a determination regarding the appropriate labor standard(s) for the work or aspects of the work. Once a determination is made and provided to the Contractor, the Contractor shall comply with the determination and shall ensure that appropriate labor standards clauses and requirements are flowed down to and incorporated into any applicable subcontracts.
- (b) The Contractor shall comply, and shall be responsible for compliance by any subcontractor, with the Wage Rate Requirements (Construction), the Service Contract Labor Standards, or other applicable labor standards law. The Contractor shall conduct such payroll and job-site reviews for construction work, including interviews with employees, with such frequency as may be necessary to assure compliance by its subcontractors and as requested or directed by the DOE. When performing work subject to the Wage Rate Requirements (Construction), Contractor shall maintain payroll records for a period of three years from completion of the Contract, for laborers and mechanics performing the work. In accordance with FAR 52.222-41(g) and FAR 52.222-6(b)(4), the Contractor and its subcontractors shall post in a prominent job-site location, the wage determination and, as applicable, Department of Labor Publication: WH-1231, *Notice to Employees Working on Federal or Federally Assisted Construction Projects* and/or WH-1313, *Notice to Employees Working on Government Contracts*.
- (c) For subcontracts determined to be subject to the Service Contract Labor Standards, the Contractor will prepare Standard Form 98 (e98), *Notice of Intention to Make a Service Contract and Response Notice*. This form is available on the Department of Labor website at: <http://www.dol.gov/whd/govcontracts/sca/sf98/index.asp>. The form shall be submitted to the Contracting Officer.
- (d) In addition to any other requirements in the Contract, Contractor shall as soon as possible notify the Contracting Officer of all labor standards issues, including all complaints regarding incorrect payment of prevailing wages and/or fringe benefits, received from contractor or subcontractor employees; significant labor standards violations, as defined in 29 CFR 5.7; disputes concerning labor standards pursuant to 29 CFR parts 4,6, and 8 and as defined in FAR 52.222-41(t); disputed labor standards determinations; Department of Labor investigations; or legal or judicial proceedings related to the labor standards under this Contract or a subcontract. The Contractor shall furnish such additional information as may be required from time to time by the Contracting Officer.

- (e) The Contractor shall prepare and submit, to the Contracting Officer, the DBA Semi-Annual Enforcement Report, Form OMB 1910-5165, by April 21 and October 21 of each year. Form submittal will be administered through the iBenefits system (<https://ibenefits.energy.gov>) or its successor system.

H.12 DOE-H-2003 WORKER'S COMPENSATION INSURANCE (OCT 2014)

- (a) Contractors, other than those whose workers' compensation coverage is provided through a state funded arrangement or a corporate benefits program, shall submit to the Contracting Officer for approval all new compensation policies and all initial proposals for self-insurance (contractors shall provide copies to the Contracting Officer of all renewal policies for workers compensation).
- (b) Workers compensation loss income benefit payments, when supplemented by other programs (such as salary continuation, short-term disability) are to be administered so that total benefit payments from all sources shall not exceed 100 percent of the employee's net pay.
- (c) Contractors approve all workers compensation settlement claims up to the threshold established by the Contracting Officer for DOE approval and submit all settlement claims above the threshold to DOE for approval.
- (d) The Contractor shall obtain approval from the CO before making any significant change to its workers compensation coverage and shall furnish reports as may be required from time to time by the CO.

H.13 DOE-H-2057 DEPARTMENT OF LABOR WAGE DETERMINATIONS (OCT 2014) (REVISED)

The Contractor's performance under this contract shall comply with the requirements of U.S. Department of Labor Wage Determination(s) located in Section J.

BUSINESS SYSTEMS CLAUSES

H.14 DOE-H-2022 CONTRACTOR BUSINESS SYSTEMS (OCT 2014)

- (a) Definitions. As used in this clause -
Acceptable contractor business systems means contractor business systems that comply with the terms and conditions of the applicable business system clauses listed in the definition of "contractor business systems" in this clause.

Contractor business systems means -

- (1) Accounting system, if this contract includes the Section H clause Accounting System Administration;
- (2) Earned value management system, if this contract includes the Section H clause Earned Value Management System;

- (3) Estimating system, if this contract includes the Section H clause Cost Estimating System Requirements;
- (4) Property management system, if this contract includes the Section H clause Contractor Property Management System Administration; and
- (5) Purchasing system, if this contract includes the Section H clause Contractor Purchasing System Administration.

Significant deficiency, in the case of a contractor business system, means a shortcoming in the system that materially affects the ability of officials of the Department of Energy to rely upon information produced by the system that is needed for management purposes.

- (b) General. The Contractor shall establish and maintain acceptable business systems in accordance with the terms and conditions of this contract. If the Contractor plans to adopt any existing business system from the previous Contractor, the Contractor is responsible for the system and shall comply with the system requirements and criteria required in that specific business system clause.

- (c) Significant deficiencies.

- (1) The Contractor shall respond, in writing, within 30 days to an initial determination that there are one or more significant deficiencies in one or more of the Contractor's business systems.
- (2) The Contracting Officer will evaluate the Contractor's response and notify the Contractor, in writing, of the final determination as to whether the Contractor's business system contains significant deficiencies. If the Contracting Officer determines that the Contractor's business system contains significant deficiencies, the final determination will include a notice to withhold payments.

- (d) Withholding payments.

- (1) If the Contracting Officer issues the final determination with a notice to withhold payments for significant deficiencies in a contractor business system required under this contract, the Contracting Officer will direct the Contractor, in writing, to withhold five percent from its invoices until the Contracting Officer has determined that the Contractor has corrected all significant deficiencies as directed by the Contracting Officer's final determination. The Contractor shall, within 45 days of receipt of the notice, either— -
 - (i) Correct the deficiencies; or
 - (ii) Submit an acceptable corrective action plan showing milestones and actions to eliminate the deficiencies. The plan shall contain— -
 - (A) Root cause(s) identification of the problem(s);
 - (B) The proposed corrective action(s) to address the root cause(s);
 - (C) A schedule for implementation; and
 - (D) The name of the person responsible for the implementation.
- (2) If the Contractor submits an acceptable corrective action plan within 45 days of receipt of a notice of the Contracting Officer's intent to withhold payments, and the Contracting Officer, in consultation with the auditor or functional specialist, determines that the Contractor is effectively implementing such plan, the Contracting Officer will direct the Contractor, in writing, to reduce the percentage withheld on invoices to two percent until the Contracting Officer determines the

Contractor has corrected all significant deficiencies as directed by the Contracting Officer's final determination. However, if at any time, the Contracting Officer determines that the Contractor has failed to follow the accepted corrective action plan, the Contracting Officer will increase withholding and direct the Contractor, in writing, to increase the percentage withheld on invoices to the percentage initially withheld, until the Contracting Officer determines that the Contractor has corrected all significant deficiencies as directed by the Contracting Officer's final determination.

- (3) Payment withhold percentage limits.
 - (i) The total percentage of payments withheld on amounts due on this contract shall not exceed— -
 - (A) Five percent for one or more significant deficiencies in any single contractor business system; and
 - (B) Ten percent for significant deficiencies in multiple contractor business systems.
 - (ii) If this contract contains pre-existing withholds, and the application of any subsequent payment withholds will cause withholding under this clause to exceed the payment withhold percentage limits in paragraph (d)(3)(i) of this clause, the Contracting Officer will reduce the payment withhold percentage in the final determination to an amount that will not exceed the payment withhold percentage limits.
 - (4) For the purpose of this clause, payment means invoicing for any of the following payments authorized under this contract:
 - (i) Interim payments under— -
 - (A) Cost-reimbursement contracts;
 - (B) Incentive type contracts;
 - (C) Time-and-materials contracts; or
 - (D) Labor-hour contracts.
 - (ii) Progress payments to include fixed-price contracts.
 - (iii) Performance-based payments to include fixed-price contracts.
 - (5) Payment withholding shall not apply to payments on fixed-price line items where performance is complete and the items were accepted by the Government.
 - (6) The withholding of any amount or subsequent payment to the Contractor shall not be construed as a waiver of any rights or remedies the Government has under this contract.
 - (7) Notwithstanding the provisions of any clause in this contract providing for interim, partial, or other payment withholding on any basis, the Contracting Officer may withhold payment in accordance with the provisions of this clause.
 - (8) The payment withholding authorized in this clause is not subject to the interest-penalty provisions of the Prompt Payment Act.
- (e) Correction of deficiencies.

(1) The Contractor shall notify the Contracting Officer, in writing, when the Contractor has corrected the business system's deficiencies.

(2) Once the Contractor has notified the Contracting Officer that all deficiencies have been corrected, the Contracting Officer will take one of the following actions:

- (i) If the Contracting Officer determines that the Contractor has corrected all significant deficiencies as directed by the Contracting Officer's final determination, the Contracting Officer will direct the Contractor, in writing, to discontinue the payment withholding from invoices under this contract associated with the Contracting Officer's final determination, and authorize the Contractor to bill for any monies previously withheld that are not also being withheld due to other significant deficiencies. Any payment withholding under this contract due to other significant deficiencies, will remain in effect until the Contracting Officer determines that those significant deficiencies are corrected.
- (ii) If the Contracting Officer determines that the Contractor still has significant deficiencies, the Contractor shall continue withholding amounts from its invoices in accordance with paragraph (d) of this clause, and not invoice for any monies previously withheld.
- (iii) If the Contracting Officer determines, based on the evidence submitted by the Contractor, that there is a reasonable expectation that the corrective actions have been implemented and are expected to correct the significant deficiencies, the Contracting Officer will discontinue withholding payments, and release any payments previously withheld directly related to the significant deficiencies identified in the Contractor notification, and direct the Contractor, in writing, to discontinue the payment withholding from invoices associated with the Contracting Officer's final determination, and authorize the Contractor to bill for any monies previously withheld.
- (iv) If, within 90 days of receipt of the Contractor notification that the Contractor has corrected the significant deficiencies, the Contracting Officer has not made a determination in accordance with paragraphs (e)(2)(i), (ii), or (iii) of this clause, the Contracting Officer will direct the Contractor, in writing, to reduce the payment withholding from invoices directly related to the significant deficiencies identified in the Contractor notification by a specified percentage that is at least 50 percent, but not authorize the Contractor to bill for any monies previously withheld until the Contracting Officer makes a determination in accordance with paragraphs (e)(2)(i), (ii), or (iii) of this clause.
- (v) At any time after the Contracting Officer directs the Contractor to reduce or discontinue the payment withholding from invoices under this contract, if the Contracting Officer determines that the Contractor has failed to correct the significant deficiencies identified in the Contractor's notification, the Contracting Officer will reinstate or increase withholding and direct the Contractor, in writing, to reinstate or increase the percentage withheld on invoices to the percentage initially withheld, until the Contracting Officer

determines that the Contractor has corrected all significant deficiencies as directed by the Contracting Officer's final determination.

H.15 DOE-H-2023 COST ESTIMATING SYSTEM REQUIREMENTS (OCT 2014)

(a) Definitions.

-Acceptable estimating system means an estimating system that complies with the system criteria in paragraph (d) of this clause, and provides for a system that— -

- (1) Is maintained, reliable, and consistently applied;
- (2) Produces verifiable, supportable, documented, and timely cost estimates that are an acceptable basis for negotiation of fair and reasonable prices;
- (3) Is consistent with and integrated with the Contractor's related management systems; and
- (4) Is subject to applicable financial control systems.

-Estimating system means the Contractor's policies, procedures, and practices for budgeting and planning controls, and generating estimates of costs and other data included in proposals submitted to customers in the expectation of receiving contract awards or contract modifications. Estimating system includes the Contractor's— -

- (1) Organizational structure;
- (2) Established lines of authority, duties, and responsibilities;
- (3) Internal controls and managerial reviews;
- (4) Flow of work, coordination, and communication; and
- (5) Budgeting, planning, estimating methods, techniques, accumulation of historical costs, and other analyses used to generate cost estimates.

-Significant deficiency means a shortcoming in the system that materially affects the ability of officials of the Department of Energy to rely upon information produced by the system that is needed for management purposes.

(b) General. The Contractor shall establish, maintain, and comply with an acceptable estimating system.

(c) Applicability. Paragraphs (d) and (e) of this clause apply if the Contractor is a large business to include a contractor teaming arrangement, as defined at 48 CFR 9.601(1), performing a contract in support of a Capital Asset Project (other than a management and operating contract as described at 917.6), as prescribed in DOE Order (DOE O) 413.3B, or current version; or a non-capital asset project and either—

- (1) The total prime contract value exceeds \$50 million, including options; or
- (2) The Contractor was notified, in writing, by the Contracting Officer that paragraphs (d) and (e) of this clause apply.

(d) System requirements.

- (1) The Contractor shall disclose its estimating system to the Contracting Officer, in writing. If the Contractor wishes the Government to protect the information as privileged or confidential, the Contractor must mark the documents with the appropriate legends before submission. If the Contractor plans to adopt the existing system from the previous Contractor, the Contractor is responsible for the system and shall comply with the system requirements required in this clause.
- (2) An estimating system disclosure is acceptable when the Contractor has provided the Contracting Officer with documentation no later than 60 days after the Notice to Proceed is issued that:
 - (i) Accurately describes those policies, procedures, and practices that the Contractor currently uses in preparing cost proposals; and
 - (ii) Provides sufficient detail for the Government to reasonably make an informed judgment regarding the acceptability of the Contractor's estimating practices.
- (3) The Contractor shall—
 - (i) Comply with its disclosed estimating system; and
 - (ii) Disclose significant changes to the cost estimating system to the Contracting Officer on a timely basis.
- (4) The Contractor's estimating system shall provide for the use of appropriate source data, utilize sound estimating techniques and good judgment, maintain a consistent approach, and adhere to established policies and procedures. An acceptable estimating system shall accomplish the following functions:
 - (i) Establish clear responsibility for preparation, review, and approval of cost estimates and budgets.
 - (ii) Provide a written description of the organization and duties of the personnel responsible for preparing, reviewing, and approving cost estimates and budgets.
 - (iii) Ensure that relevant personnel have sufficient training, experience, and guidance to perform estimating and budgeting tasks in accordance with the Contractor's established procedures.
 - (iv) Identify and document the sources of data and the estimating methods and rationale used in developing cost estimates and budgets.
 - (v) Provide for adequate supervision throughout the estimating and budgeting process.
 - (vi) Provide for consistent application of estimating and budgeting techniques.
 - (vii) Provide for detection and timely correction of errors.
 - (viii) Protect against cost duplication and omissions.
 - (ix) Provide for the use of historical experience, including historical vendor pricing information, where appropriate.

- (x) Require use of appropriate analytical methods.
 - (xi) Integrate information available from other management systems.
 - (xii) Require management review, including verification of compliance with the company's estimating and budgeting policies, procedures, and practices.
 - (xiii) Provide for internal review of, and accountability for, the acceptability of the estimating system, including the budgetary data supporting indirect cost estimates and comparisons of projected results to actual results, and an analysis of any differences.
 - (xiv) Provide procedures to update cost estimates and notify the Contracting Officer in a timely manner.
 - (xv) Provide procedures that ensure subcontract prices are reasonable based on a documented review and analysis provided with the prime proposal, when practicable.
 - (xvi) Provide estimating and budgeting practices that consistently generate sound proposals that are compliant with the provisions of the solicitation and are adequate to serve as a basis to reach a fair and reasonable price.
 - (xvii) Have an adequate system description, including policies, procedures, and estimating and budgeting practices, that comply with the Federal Acquisition Regulation (48 CFR chapter 1) and Department of Energy Acquisition Regulation (48 CFR chapter 9).
- (e) Significant deficiencies.
- (1) The Contracting Officer will provide an initial determination to the Contractor, in writing, of any significant deficiencies. The initial determination will describe the deficiency in sufficient detail to allow the Contractor to understand the deficiency.
 - (2) The Contractor shall respond within 30 days to a written initial determination from the Contracting Officer that identifies significant deficiencies in the Contractor's estimating system. If the Contractor disagrees with the initial determination, the Contractor shall state, in writing, its rationale for disagreeing. In the event the Contractor did not respond in writing to the initial determination within the response time, this lack of response shall indicate that the Contractor agrees with the initial determination.
 - (3) The Contracting Officer will evaluate the Contractor's response or the Contractor's lack of response and notify the Contractor, in writing, of the Contracting Officer's final determination concerning—
 - (i) Remaining significant deficiencies;
 - (ii) The adequacy of any proposed or completed corrective action; and

- (iii) System disapproval, if the Contracting Officer determines that one or more significant deficiencies remain.
- (f) If the Contractor receives the Contracting Officer's final determination of significant deficiencies, the Contractor shall, within 45 days of receipt of the final determination, either correct the significant deficiencies or submit an acceptable corrective action plan showing milestones and actions to eliminate the significant deficiencies.
- (g) Withholding payments. If the Contracting Officer makes a final determination to disapprove the Contractor's estimating system, and the contract includes the Section H clause Contractor Business Systems, the Contracting Officer will withhold payments in accordance with that clause.

H.16 DOE-H-2024 EARNED VALUE MANAGEMENT SYSTEM (OCT 2014) (REVISED)

- (a) Definitions. As used in this clause—
 - Acceptable earned value management system means an earned value management system that generally complies with system criteria in paragraph (b) of this clause.
 - Earned value management system means an earned value management system that complies with the earned value management system guidelines in the EIA-748.
 - Over Target Baseline means an overrun to the Contract Budget Base (CBB) which is formally incorporated into the Performance Measurement Baseline (PMB) for management purposes.
 - Over Target Schedule means the term used to describe a condition where a baseline schedule is time-phased beyond the contract completion date.
 - Significant deficiency means a shortcoming in the system that materially affects the ability of officials of the Department of Energy to rely upon information produced by the system that is needed for management purposes.
- (b) System criteria. In the performance of this contract, the Contractor shall use-
 - (1) An Earned Value Management System (EVMS) that complies with the EVMS guidelines in the Electronic Industries Alliance Standard 748, Earned Value Management Systems (EIA-748, current version at time of award); and
 - (2) Management procedures.
 - (i) Management procedures provide for generation of timely, reliable, and verifiable information for DOE Integrated Program Management Report (IPMR) data item of this contract.
 - (ii) The Contractor shall use Department of Defense's Data Item Description (DID) Integrated Program Management Report (IPMR), DI-MGMT-81861, (current version at time of award) which contains data for measuring cost and schedule performance for this DOE contract. The report's structure has seven formats that contain the content and relationships required for electronic submissions. DOE does not use section 2.8 Applicability of DI-MGMT-81861 for electronic data submissions, in lieu of this section, the Contractor shall use Project Assessment and Reporting System (PARS

- II). Data shall be submitted by the Contractor electronically by uploading the data into the PARS II in accordance with the "Contractor Project Performance Upload Requirements" document maintained by the DOE Office of Acquisition and Project Management (OAPM). All requested data shall be submitted timely and accurately, and shall be current as of the close of the previous month's accounting period.
- (c) If the Contractor has one or more DOE contracts valued at \$20,000,000 or greater per contract for a total contract value of \$50,000,000 or more which support DOE Capital Asset Projects, the Contractor shall use an EVMS that has been determined to be acceptable by DOE. If, at the time of award, the Contractor's EVMS has not been determined by DOE to be in compliance with the EVMS guidelines as stated in paragraph (b)(1) of this clause, the Contractor shall apply its current system to the contract and shall take necessary actions to meet the milestones in the Contractor's EVMS plan.
- (d) If this contract has a total value of less than \$50,000,000 and does not meet the condition described at (c) above, the Government will not make a formal determination that the Contractor's EVMS complies with the EVMS guidelines in EIA-748 with respect to the contract. The use of the Contractor's EVMS for this contract does not imply a Government determination of the Contractor's compliance with the EVMS guidelines in EIA-748 for application to future contracts.
- (e) The Contractor shall submit notification of all proposed changes to the EVMS procedures and the impact of those changes to DOE. If this contractor has one or more contracts in support of DOE Capital Asset Projects and the total contract values are \$20,000,000 or greater per contract for total contract values of \$50,000,000 or more, unless a waiver is granted by DOE, any EVMS changes proposed by the Contractor require approval of DOE prior to implementation. DOE will advise the Contractor of the acceptability of such changes as soon as practicable (generally within 30 calendar days) after receipt of the Contractor's notice of proposed changes. If DOE waives the advance approval requirements, the Contractor shall disclose EVMS changes to DOE at least 14 calendar days prior to the effective date of implementation.
- (f) Integrated baseline reviews.
- (1) The purpose of the integrated baseline reviews (IBR) is to verify the technical content and the realism of the related performance budgets, resources, and schedules. It should provide a mutual understanding of the inherent risks in the Offerors'/contractors' performance plans and the underlying management control systems, and it should formulate a plan to handle these risks. DOE and the Contractor will use the IBR process described in the National Defense Industrial Association Program Management Systems Committee Integrated Baseline Review (NDIA PMSC IBR) Guide (current version at time of award).
- (2) The Government will schedule IBRs as early as practicable, and the review process will be conducted not later than 180 calendar days after—
- (i) The Notice to Proceed is issued;
 - (ii) The exercise of significant contract options; and

(iii) The incorporation of major modifications.

During such reviews, the Government and the Contractor will jointly assess the Contractor's baseline to be used for performance measurement to ensure complete coverage of the statement of work, logical scheduling of the work activities, adequate resourcing, and identification of inherent risks.

- (g) The Contractor shall provide access to all pertinent records and data requested by the Contracting Officer or duly authorized representative as necessary to permit Government surveillance to ensure that the EVMS complies, and continues to comply, with the performance criteria referenced in paragraph (b) of this clause.
- (h) When indicated by contract performance, the Contractor shall submit a request for approval to initiate an over-target baseline or over-target schedule to the Contracting Officer. The request shall include a top-level projection of cost and/or schedule growth, a determination of whether or not performance variances will be retained, and a schedule of implementation for the rebaselining. The Government will acknowledge receipt of the request in a timely manner (generally within 30 calendar days).
- (i) Significant deficiencies.
 - (1) The Contracting Officer will provide an initial determination to the Contractor, in writing, on any significant deficiencies. The initial determination will describe the deficiency in sufficient detail to allow the Contractor to understand the deficiency.
 - (2) The Contractor shall respond within 30 days to a written initial determination from the Contracting Officer that identifies significant deficiencies in the Contractor's EVMS. If the Contractor disagrees with the initial determination, the Contractor shall state, in writing, its rationale for disagreeing. In the event the Contractor did not respond in writing to the initial determination within the response time, this lack of response shall indicate that the Contractor agrees with the initial determination.
 - (3) The Contracting Officer will evaluate the Contractor's response or the Contractor's lack of response and notify the Contractor, in writing, of the Contracting Officer's final determination concerning—
 - (i) Remaining significant deficiencies;
 - (ii) The adequacy of any proposed or completed corrective action;
 - (iii) System noncompliance, when the Contractor's existing EVMS fails to comply with the earned value management system guidelines in the EIA-748; and
 - (iv) System disapproval, if initial EVMS validation is not successfully completed within the timeframe approved by the Contracting Officer, or if the Contracting Officer determines that the Contractor's earned value management system contains one or more significant deficiencies in high-risk guidelines in EIA-748 standards (guidelines 1, 3, 6, 7, 8, 9, 10, 12, 16, 21, 23, 26, 27, 28, 30, or

32). When the Contracting Officer determines that the existing earned value management system contains one or more significant deficiencies in one or more of the remaining 16 guidelines in EIA-748 standards, the contracting officer will use discretion to disapprove the system based on input received from the DOE Office of Acquisition and Project Management or the DOE Program Office, herein referred to as the functional specialists.

- (4) If the Contractor receives the Contracting Officer's final determination of significant deficiencies, the Contractor shall, within 45 days of receipt of the final determination, either correct the significant deficiencies or submit an acceptable corrective action plan showing milestones and actions to eliminate the significant deficiencies.
- (j) Withholding payments. If the Contracting Officer makes a final determination to disapprove the Contractor's EVMS, and the contract includes the Section H clause Contractor Business Systems, the Contracting Officer will withhold payments in accordance with that clause.
- (k) With the exception of paragraphs (i) and (j) of this clause, for contracts valued at \$20 million or more requiring EVMS, the contractor shall flow down appropriate EVMS requirements to its subcontractors in order for the contractor to meet all requirements of this clause.
- [Contracting Officer to insert names of subcontractors (or subcontracted effort if subcontractors have not been selected) designated for application of the EVMS requirements of this clause.]
- (l) Adopting previous Contractor's previously certified earned value management (EVM) process. If the Contractor plans to adopt the existing system from the previous Contractor or DOE-site, the Contractor is responsible for the system and shall comply with the system requirements required in this clause. The existing system shall utilize the same DOE approved EVM Process Description and the same EVM training as the previous system. The Contractor shall—
- (1) Identify the corporate entity which owns the certified EVM process and provide the certification documentation;
 - (2) Obtain DOE prior approval or Advanced Agreement including DOE approval of process changes and joint surveillance;
 - (3) Be responsible for compliance with the system criteria required in paragraph (b) of this clause; and
 - (4) Be responsible for correcting any significant deficiencies previously identified to the previous Contractor by the Contracting Officer in accordance with paragraph (i) of this clause. Within 45 days after receiving a copy of the previous contractor's final determination, the Contractor shall follow paragraph (i)(4) and either correct any significant deficiencies or submit an acceptable corrective action plan. The Contracting Officer or designee will provide a copy of the previous contractor's final determination.

H.17 DOE-H-2025 ACCOUNTING SYSTEM ADMINISTRATION (OCT 2014)

(a) Definitions. As used in this clause—

(1) Acceptable accounting system means a system that complies with the system criteria in paragraph (c) of this clause to provide reasonable assurance that—

(i) Applicable laws and regulations are complied with;

(ii) The accounting system and cost data are reliable;

(iii) Risk of misallocations and mischarges are minimized; and

(iv) Contract allocations and charges are consistent with billing procedures.

(2) Accounting system means the Contractor's system or systems for accounting methods, procedures, and controls established to gather, record, classify, analyze, summarize, interpret, and present accurate and timely financial data for reporting in compliance with applicable laws, regulations, and management decisions, and may include subsystems for specific areas such as indirect and other direct costs, compensation, billing, labor, and general information technology.

(3) Significant deficiency means a shortcoming in the system that materially affects the ability of officials of the Department of Energy to rely upon information produced by the system that is needed for management purposes.

(b) General.

The Contractor shall establish and maintain an acceptable accounting system. If the Contractor plans to adopt the existing system from the previous Contractor, the Contractor is responsible for the system and shall comply with the system criteria required in this clause. The Contractor shall provide in writing to the Contracting Officer documentation that its accounting system meets the system criteria in paragraph (c) of this clause no later than 60 days after the Notice to Proceed is issued. Failure to maintain an acceptable accounting system, as defined in this clause, shall result in the withholding of payments if the contract includes the Section H clause Contractor Business Systems, and also may result in disapproval of the system.

(c) System criteria.

The Contractor's accounting system shall provide for—

(1) A sound internal control environment, accounting framework, and organizational structure;

(2) Proper segregation of direct costs from indirect costs;

(3) Identification and accumulation of direct costs by contract;

- (4) A logical and consistent method for the accumulation and allocation of indirect costs to intermediate and final cost objectives;
 - (5) Accumulation of costs under general ledger control;
 - (6) Reconciliation of subsidiary cost ledgers and cost objectives to general ledger;
 - (7) Approval and documentation of adjusting entries;
 - (8) Management reviews or internal audits of the system to ensure compliance with the Contractor's established policies, procedures, and accounting practices;
 - (9) A timekeeping system that identifies employees' labor by intermediate or final cost objectives;
 - (10) A labor distribution system that charges direct and indirect labor to the appropriate cost objectives;
 - (11) Interim (at least monthly) determination of costs charged to a contract through routine posting of books of account;
 - (12) Exclusion from costs charged to Government contracts of amounts which are not allowable in terms of 48 CFR part 31, Contract Cost Principles and Procedures, and other contract provisions;
 - (13) Identification of costs by contract line item and by units (as if each unit or line item were a separate contract), if required by the contract;
 - (14) Segregation of preproduction costs from production costs, as applicable;
 - (15) Cost accounting information, as required—
 - (i) By contract clauses concerning limitation of cost (48 CFR 52.232-20), limitation of funds (48 CFR 52.232-22), or allowable cost and payment (48 CFR 52.216-7); and
 - (ii) To readily calculate indirect cost rates from the books of accounts;
 - (16) Billings that can be reconciled to the cost accounts for both current and cumulative amounts claimed and comply with contract terms;
 - (17) Adequate, reliable data for use in pricing follow-on acquisitions; and
 - (18) Accounting practices in accordance with standards promulgated by the Cost Accounting Standards Board, if applicable, otherwise, Generally Accepted Accounting Principles.
- (d) Significant deficiencies.
- (1) The Contracting Officer will provide an initial determination to the Contractor, in writing, on any significant deficiencies. The initial determination will describe the deficiency in sufficient detail to allow the Contractor to understand the deficiency.

- (2) The Contractor shall respond within 30 days to a written initial determination from the Contracting Officer that identifies significant deficiencies in the Contractor's accounting system. If the Contractor disagrees with the initial determination, the Contractor shall state, in writing, its rationale for disagreeing. In the event the Contractor did not respond in writing to the initial determination within the response time, this lack of response shall indicate that the Contractor agrees with the initial determination.
- (3) The Contracting Officer will evaluate the Contractor's response or the Contractor's lack of response and notify the Contractor, in writing, of the Contracting Officer's final determination concerning—
 - (i) Remaining significant deficiencies;
 - (ii) The adequacy of any proposed or completed corrective action; and
 - (iii) System disapproval, if the Contracting Officer determines that one or more significant deficiencies remain.
- (e) If the Contractor receives the Contracting Officer's final determination of significant deficiencies, the Contractor shall, within 45 days of receipt of the final determination, either correct the significant deficiencies or submit an acceptable corrective action plan showing milestones and actions to eliminate the significant deficiencies.
- (f) Withholding payments. If the Contracting Officer makes a final determination to disapprove the Contractor's accounting system, and the contract includes the Section H clause Contractor Business Systems, the Contracting Officer will withhold payments in accordance with that clause.

H.18 DOE-H-2026 CONTRACTOR PURCHASING SYSTEM ADMINISTRATION (OCT 2014)

- (a) Definitions. As used in this clause—
 - Acceptable purchasing system means a purchasing system that complies with the system criteria in paragraph (c) of this clause.
 - Purchasing system means the Contractor's system or systems for purchasing and subcontracting, including make-or-buy decisions, the selection of vendors, analysis of quoted prices, negotiation of prices with vendors, placing and administering of orders, and expediting delivery of materials.
 - Significant deficiency means a shortcoming in the system that materially affects the ability of officials of the Department of Energy to rely upon information produced by the system that is needed for management purposes.
- (b) General.

The Contractor shall establish and maintain an acceptable purchasing system. If the Contractor plans to adopt the existing system from the previous Contractor, the Contractor is responsible for the system and shall comply with the system criteria required in this clause. The Contractor shall provide in writing to the Contracting Officer documentation that its purchasing system meets the system criteria in

paragraph (c) of this clause no later than 60 days after the Notice to Proceed is issued. Failure to maintain an acceptable purchasing system, as defined in this clause, may result in disapproval of the system by the Contracting Officer and/or withholding of payments.

(c) System criteria.

The Contractor's purchasing system shall—

- (1) Have an adequate system description including policies, procedures, and purchasing practices that comply with the Federal Acquisition Regulation (FAR) (48 CFR Chapter 1) and the Department of Energy Acquisition Regulation (48 CFR Chapter 9);
- (2) Ensure that all applicable purchase orders and subcontracts contain all flow down clauses, including terms and conditions and any other clauses needed to carry out the requirements of the prime contract;
- (3) Maintain an organization plan that establishes clear lines of authority and responsibility;
- (4) Ensure all purchase orders are based on authorized requisitions and include a complete and accurate history of purchase transactions to support vendor selected, price paid, and document the subcontract/purchase order files which are subject to Government review;
- (5) Establish and maintain adequate documentation to provide a complete and accurate history of purchase transactions to support vendors selected and prices paid;
- (6) Apply a consistent make-or-buy policy that is in the best interest of the Government;
- (7) Use competitive sourcing to the maximum extent practicable, and ensure debarred or suspended contractors are properly excluded from contract award;
- (8) Evaluate price, quality, delivery, technical capabilities, and financial capabilities of competing vendors to ensure fair and reasonable prices;
- (9) Require management level justification and adequate cost or price analysis, as applicable, for any sole or single source award;
- (10) Perform timely and adequate cost or price analysis and technical evaluation for each subcontractor and supplier proposal or quote to ensure fair and reasonable subcontract prices;
- (11) Document negotiations in accordance with 48 CFR 15.406-3;
- (12) Seek, take, and document economically feasible purchase discounts, including cash discounts, trade discounts, quantity discounts, rebates, freight allowances, and company-wide volume discounts;

- (13) Ensure proper type of contract selection and prohibit issuance of cost-plus-a-percentage-of-cost subcontracts;
- (14) Maintain subcontract surveillance to ensure timely delivery of an acceptable product and procedures to notify the Government of potential subcontract problems that may impact delivery, quantity, or price;
- (15) Document and justify reasons for subcontract changes that affect cost or price;
- (16) Notify the Government of the award of all subcontracts that contain the 48 CFR Chapter 1 and 48 CFR Chapter 9 flow down clauses that allow for Government audit of those subcontracts, and ensure the performance of audits of those subcontracts;
- (17) Enforce adequate policies on conflict of interest, gifts, and gratuities, including the requirements of the 41 U.S.C. chapter 87, Kickbacks;
- (18) Perform internal audits or management reviews, training, and maintain policies and procedures for the purchasing department to ensure the integrity of the purchasing system;
- (19) Establish and maintain policies and procedures to ensure purchase orders and subcontracts contain mandatory and applicable flow down clauses, as required by the 48 CFR chapter 1, including terms and conditions required by the prime contract and any clauses required to carry out the requirements of the prime contract;
- (20) Provide for an organizational and administrative structure that ensures effective and efficient procurement of required quality materials and parts at the best value from responsible and reliable sources;
- (21) Establish and maintain selection processes to ensure the most responsive and responsible sources for furnishing required quality parts and materials and to promote competitive sourcing among dependable suppliers so that purchases are reasonably priced and from sources that meet contractor quality requirements;
- (22) Establish and maintain procedures to ensure performance of adequate price or cost analysis on purchasing actions;
- (23) Establish and maintain procedures to ensure that proper types of subcontracts are selected, and that there are controls over subcontracting, including oversight and surveillance of subcontracted effort; and
- (24) Establish and maintain procedures to timely notify the Contracting Officer, in writing, if-
 - (i) The Contractor changes the amount of subcontract effort after award such that it exceeds 70 percent of the total cost of the work to be performed under the

contract, task order, or delivery order. The notification shall identify the revised cost of the subcontract effort and shall include verification that the Contractor will provide added value; or

- (ii) Any subcontractor changes the amount of lower-tier subcontractor effort after award such that it exceeds 70 percent of the total cost of the work to be performed under its subcontract. The notification shall identify the revised cost of the subcontract effort and shall include verification that the subcontractor will provide added value as related to the work to be performed by the lower-tier subcontractor(s).

(d) Significant deficiencies.

- (1) The Contracting Officer will provide notification of initial determination to the Contractor, in writing, of any significant deficiencies. The initial determination will describe the deficiency in sufficient detail to allow the Contractor to understand the deficiency.
- (2) The Contractor shall respond within 30 days to a written initial determination from the Contracting Officer that identifies significant deficiencies in the Contractor's purchasing system. If the Contractor disagrees with the initial determination, the Contractor shall state, in writing, its rationale for disagreeing. In the event the Contractor did not respond in writing to the initial determination within the response time, this lack of response shall indicate that the Contractor agrees with the initial determination.
- (3) The Contracting Officer will evaluate the Contractor's response or the Contractor's lack of response and notify the Contractor, in writing, of the Contracting Officer's final determination concerning—
 - (i) Remaining significant deficiencies;
 - (ii) The adequacy of any proposed or completed corrective action; and
 - (iii) System disapproval, if the Contracting Officer determines that one or more significant deficiencies remain.
- (e) If the Contractor receives the Contracting Officer's final determination of significant deficiencies, the Contractor shall, within 45 days of receipt of the final determination, either correct the significant deficiencies or submit an acceptable corrective action plan showing milestones and actions to eliminate the deficiencies.
- (f) Withholding payments. If the Contracting Officer makes a final determination to disapprove the Contractor's purchasing system, and the contract includes the Section H clause Contractor Business Systems, the Contracting Officer will withhold payments in accordance with that clause.

**H.19 DOE-H-2027 CONTRACTOR PROPERTY MANAGEMENT SYSTEM
ADMINISTRATION (OCT 2014)**

(a) Definitions. As used in this clause—

- Acceptable property management system means a property system that complies with the system criteria in paragraph (c) of this clause.
- Property management system means the Contractor's system or systems for managing and controlling Government property.
- Significant deficiency means a shortcoming in the system that materially affects the ability of officials of the Department of Energy to rely upon information produced by the system that is needed for management purposes.

(b) General.

The Contractor shall establish and maintain an acceptable property management system. If the Contractor plans to adopt the existing system from the previous Contractor, the Contractor is responsible for the system and shall comply with the system criteria required in this clause. The Contractor shall provide in writing to the Contracting Officer documentation that its property management system meets the system criteria in paragraph (c) of this clause no later than 60 days after the Notice to Proceed is issued. Failure to maintain an acceptable property management system, as defined in this clause, may result in disapproval of the system by the Contracting Officer and/or withholding of payments.

(c) System criteria.

The Contractor's property management system shall be in accordance with paragraph (f) of the contract clause at 48 CFR 52.245-1.

(d) Significant deficiencies.

- (1) The Contracting Officer will provide an initial determination to the Contractor, in writing, of any significant deficiencies. The initial determination will describe the deficiency in sufficient detail to allow the Contractor to understand the deficiency.
- (2) The Contractor shall respond within 30 days to a written initial determination from the Contracting Officer that identifies significant deficiencies in the Contractor's property management system. If the Contractor disagrees with the initial determination, the Contractor shall state, in writing, its rationale for disagreeing. In the event the Contractor did not respond in writing to the initial determination within the response time, this lack of response shall indicate that the Contractor agrees with the initial determination.
- (3) The Contracting Officer will evaluate the Contractor's response or the Contractor's lack of response and notify the Contractor, in writing, of the Contracting Officer's final determination concerning—

(i) Remaining significant deficiencies;

- (ii) The adequacy of any proposed or completed corrective action; and
- (iii) System disapproval, if the Contracting Officer determines that one or more significant deficiencies remain.
- (e) If the Contractor receives the Contracting Officer's final determination of significant deficiencies, the Contractor shall, within 45 days of receipt of the final determination, either correct the significant deficiencies or submit an acceptable corrective action plan showing milestones and actions to eliminate the significant deficiencies.
- (f) Withholding payments. If the Contracting Officer makes a final determination to disapprove the Contractor's property management system, and the contract includes the Section H clause Contractor Business Systems, the Contracting Officer will withhold payments in accordance with that clause.

DOE CORPORATE CLAUSES OTHER THAN CHRM OR BUSINESS SYSTEMS

H.20 DOE-H-2006 DEFENSE NUCLEAR FACILITY SAFETY BOARD (OCT 2014)

The Contractor shall conduct activities in accordance with those DOE commitments to the Defense Nuclear Facilities Safety Board (DNFSB) which are contained in implementation plans and other DOE correspondence to the DNFSB. The Contractor shall support preparation of DOE responses to DNFSB issues and recommendations which affect or can affect contract work. Based on the Contracting Officer's Representative direction, the Contractor shall fully cooperate with the DNFSB and provide access to such work areas, personnel, and information as necessary. The Contractor shall maintain a document process consistent with the DOE manual on interface with the DNFSB. The Contractor shall be accountable for ensuring that subcontractors adhere to these requirements.

H.21 DOE-H-2012 SUSTAINABLE ACQUISITIONS UNDER DOE CONSTRUCTION CONTRACTS (OCT 2014)

Pursuant to Executive Order 13423, Strengthening Federal Environmental, Energy and Transportation Management, and 13514, Federal Leadership in Environmental, Energy, and Economic Performance, the Department of Energy is committed to managing its facilities in an environmentally preferable manner that will promote the natural environment and protect the health and well being of its Federal employees and contractor service providers. In the performance of work under this contract, the Contractor shall exert its best efforts to provide its services in a manner that will promote the natural environment and protect the health and well being of Federal and contract employees at the facility. Sustainable acquisition or environmentally preferable contracting has several interacting initiatives. Among the initiatives are the following:

- Recycled Content Products are described at <http://epa.gov/cpg>
- Biobased Products are described at <http://www.biopreferred.gov/>
- Energy efficient products are at <http://energystar.gov/products> for Energy Star products

- Energy efficient products are at <http://www.eere.energy.gov/femp/procurement> for FEMP designated products
- Environmentally Preferable Computers are at <http://www.epeat.net>
- Non-Ozone Depleting Alternative Products are at <http://www.epa.gov/ozone/strathome.html>
- Water efficient plumbing products are at <http://epa.gov/watersense>

To the extent that the services provided by the Contractor require provision of any of the above types of products, the Contractor is expected to provide the sustainable, environmentally preferable type of product unless that type of product is not available competitively within a reasonable time, at a reasonable price, is not life cycle cost efficient in the case of energy consuming products, or does not meet reasonable performance standards. The clauses at FAR 52.223-2, Affirmative Procurement of Biobased Products under Service and Construction Contracts, 52.223-15, Energy Efficiency in Energy Consuming Products, and 52.223-17 Affirmative Procurement of EPA-Designated Items in Service and Construction Contracts, in Section I of this contract require the use of products that have biobased content, are energy efficient, or have recycled content.

In case of an apparent inconsistency between this provision and any specification elsewhere in the contract, consult the contracting officer for resolution.

H.22 DOE-H-2014 CONTRACTOR ACCEPTANCE OF NOTICE OF VIOLATION OR ALLEGED VIOLATIONS, FINES, AND PENALTIES (OCT 2014) (REVISED)

- (a) The Contractor shall accept, in its own name, notices of violation(s) or alleged violations (NOVs/NOAVs) issued by federal or state regulators to the Contractor resulting from the Contractor's performance of work under this contract, without regard to liability. The allowability of the costs associated with fines and penalties shall be subject to other provisions of this contract.
- (b) Liability and responsibility for fines or penalties and associated costs arising from or related to violations of environmental requirements imposed by applicable Federal, state, and local environmental laws and regulations, including, without limitation, statutes, ordinances, regulations, court orders, consent decrees, administrative orders, or compliance agreements, consent orders (to include the Compliance Order of Consent for the Los Alamos National Laboratory dated June 2016), permits, and licenses; and safety, health or quality requirements shall be borne by the party that caused the violation(s). This clause resolves liability for fines and penalties though the cognizant regulatory authority may assess such fines or penalties upon either party or both parties without regard to the allocation of responsibility or liability under this contract. The allocation of liability for such fine or penalty is effective regardless of which party signs permit application, manifest, reports or other required documents, is assessed a fine or penalty, is a permittee, or is named subject of an enforcement action.
- (c) After providing DOE advance written notice, the Contractor shall conduct negotiations with regulators regarding NOVs/NOAVs and fine and penalties. DOE may in its discretion choose to be in charge of, and direct, all negotiations with

regulatory agencies regarding permits, fines, penalties, and any other proposed notice, notice, administrative order, and any similar type of notice as described in paragraphs (a) and (b) above. However, the Contractor shall not make any commitments or offers to regulators that would bind the Government, including monetary obligations, without first obtaining written approval from the CO. Failure to obtain advance written approval may result in otherwise allowable costs being declared unallowable and/or the Contractor being liable for any excess costs to the Government associated with or resulting from such offers/commitments.

- (d) The Contractor shall notify DOE promptly when it receives service from the regulators of NOV/NOAVs and fines and penalties.

H.23 DOE-H-2016 PERFORMANCE GUARANTEE AGREEMENT (OCT 2014)

The contractor's parent organization(s) or all member organizations if the Contractor is a joint venture, limited liability company, or other similar entity, shall guarantee performance of the contract as evidenced by the Performance Guarantee Agreement incorporated in the contract in Section J, Attachment J-21. If the Contractor is a joint venture, limited liability company, or other similar entity where more than one organization is involved, the parent(s) or all member organizations shall assume joint and severable liability for the performance of the contract. In the event any of the signatories to the Performance Guarantee Agreement enters into proceedings related to bankruptcy, whether voluntary or involuntary, the Contractor agrees to furnish written notification of the bankruptcy to the Contracting Officer.

H.24 DOE-H-2017 RESPONSIBLE CORPORATE OFFICIAL AND CORPORATE BOARD OF DIRECTORS (OCT 2014)

The Contractor has provided a guarantee of performance from its parent company(s) in the form set forth in the Section J Attachment J-21 entitled, "Performance Guarantee Agreement." The individual signing the "Performance Guarantee Agreement" for the parent company(s) should be the Responsible Corporate Official. The Responsible Corporate Official is the person who has sole corporate (parent company(s)) authority and accountability for Contractor performance. DOE may contact, as necessary, the single Responsible Corporate Official identified below regarding Contract performance issues.

Responsible Corporate Official:

Name: D. R. Wyatt

Position: Corporate Vice President and Treasurer

Company/Organization: Huntington Ingalls Industries, Inc.

Address: 4101 Washington Ave., Newport News, VA 23607

Phone: (757) 380-2101 (w)

Facsimile: (757) 688-6449

Email: rick.wyatt@hii-co.com

Should the Responsible Corporate Official or their contact information change during the period of the Contract, the Contractor shall promptly notify the Contracting Officer in writing of the change.

Identified below is each member of the Corporate Board of Directors that will have corporate oversight. DOE may contact, as necessary, any member of the Corporate Board of Directors, who is accountable for corporate oversight of the Contractor organization and key personnel.

Corporate Board of Directors:

Name: Michael K. Lempke
Position: President, Nuclear and Environmental Group
Company/Organization: Huntington Ingalls Industries, Inc.
Address: 300 M St., S.E. Suite 350, Washington, DC 20003
Phone: (202) 264-7190 (w) (757) 647-7610 (c)
Facsimile: (757) 380-7000
Email: Michael.k.lempke@hii-nns.com

Corporate Board of Directors:

Name: Curtis G. Hull
Position: Chief Operating Officer
Company/Organization: Stoller Newport News Nuclear, Inc..
Address: 105 Technology Drive, Suite 190, Broomfield, CO 80021
Phone: 303-546-4314
Facsimile: (303) 443-1408
Email: chull@hii-sn3.com

Corporate Board of Directors:

Name: D. R. Wyatt
Position: Corporate Vice President and Treasurer
Company/Organization: Huntington Ingalls Industries, Inc.
Address: 4101 Washington Ave., Newport News, VA 23607
Phone: (757) 380-2101 (w)
Facsimile: (757) 688-6449
Email: rick.wyatt@hii-co.com

Corporate Board of Directors:

Name: David J. Richardson
Position: Chief Operating Officer – Technical Services Group
Company/Organization: BWX Technologies, Inc.
Address: 2016 Mt. Athos Road, Lynchburg, VA 24504
Phone: (208) 206-1539
Facsimile: (434) 316-7535
Email: djrichardson@bwxt.com

Corporate Board of Directors:

Name: Kenneth R. Camplin
Position: President, BWXT Technical Services Group
Company/Organization: BWX Technologies, Inc.
Address: 2016 Mt. Athos Road, Lynchburg, VA 24504

Phone: (434) 316-7550
Facsimile: (434) 316-7535
Email: krcamplin@bwxt.com

Should any change occur to the Corporate Board of Directors or their contact information during the period of the Contract, the Contractor shall promptly notify the Contracting Officer in writing of the change.

H.25 DOE-H-2018 PRIVACY ACT SYSTEMS OF RECORDS (OCT 2014) (REVISED)

The Contractor shall design, develop, or adopt the following systems of records on individuals to accomplish an agency function pursuant to the Section I Clause entitled, FAR 52.224-2, Privacy Act.

DOE Privacy Act System Number	DOE Privacy Act System Description
DOE-5	Personnel Records of Former Contractor Employees (includes all former workers)
DOE-10	Energy Employees Occupational Illness Compensation Program Act Files
DOE-11	Emergency Operations Notification Call List
DOE-14	Report of Compensation
DOE-15	Intelligence Related Access Authorization
DOE-28	General Training Records
DOE-33	Personnel Medical Records (present and former DOE employees and Contractor employees)
DOE-35	Personnel Radiation Exposure Records
DOE-38	Occupational and Industrial Accident Records
DOE-43	Personnel Security Clearance Files
DOE-48	Security Education and/or Infraction Reports
DOE-51	Employee and Visitor Access Control Records
DOE-52	Access Control Records of International Visits, Assignments, and Employment at DOE Facilities and Contractor Sites
DOE-53	Access Authorization for ADP Equipment
DOE-81	Counterintelligence Administrative and Analytical Records and Reports
DOE-84	Counterintelligence Investigative Records
DOE-88	Epidemiologic and Other Health Studies, Surveys, and Surveillances

If the above list does not address all of the systems of records that are generated based on contract performance, then the contractor shall notify the Contracting Officer prior to contract award or as soon as the discrepancy is discovered. The contractor shall monitor the identified systems and notify the Contracting Officer immediately if there is a change to an existing system or if a new system is needed. Lack of notification does not exempt the contractor from complying with the Privacy Act. To ensure that systems are

monitored consistently, contractors must review the list annually and notify the Contracting Officer, in writing, that the list is accurate and up to date.

The above list shall be revised by mutual agreement between the contractor and the Contracting Officer, in consultation with the local PAO and/or General Counsel, as necessary, to keep it current. A formal modification to the contract is not required to incorporate these revisions; however, the revisions become effective upon mutual written agreement of the parties. The mutually agreed upon revisions shall have the same effect as if they were actually among the systems listed in the table above, for the purpose of satisfying the listing requirement contained in paragraph (a)(1) of the contract clause for FAR 52.224-2, *Privacy Act*. The revisions will be formally incorporated at the next convenient contract modification. Additional information on Privacy Act Systems of Records can be found on the DOE Privacy Office home page.

The "Privacy Act Notification" (FAR 52.224-1) and "Privacy Act" (FAR 52.224-2) clauses are mandatory flow-down clauses that must be included in any subcontract requiring design, development, or operation of a Privacy Act system of record, including third-party medical services contracts. Such subcontracts also require flow down of clauses specifically identifying applicable Privacy Act systems of records into the subcontracts. For example, medical services contracts must include the substance of the H clause above identifying system of record DOE-33, "Personnel Medical Records," along with language on records turnover when employees terminate. Subcontracts must also contain scope requirements necessary to ensure DOE and contractor compliance with applicable records management and Privacy Act requirements.

H.26 DOE-H-2019 DISPOSITION OF INTELLECTUAL PROPERTY – FAILURE TO COMPLETE CONTRACT PERFORMANCE (OCT 2014)

The following provisions shall apply in the event the Contractor does not complete Contract performance for any reason:

- (a) The Government may take possession of and use all technical data, including limited rights data, restricted computer software, and data and software obtained from subcontractors, licensors, and licensees, necessary to complete the work in conformance with this contract, including the right to use the data in any Government solicitations for the completion of the work contemplated under this contract. Technical data includes, but is not limited to, specifications, designs, drawings, operations manuals, flowcharts, software, databases and any other information necessary for the completion of the work under this contract. Limited rights data and restricted computer software will be protected in accordance with the provisions of the Section I Clause entitled DEAR 970.5227-1 Rights in Data-Facilities. The Contractor shall ensure that its subcontractors and licensors make similar rights available to the Government and its contractors.

- (b) The Contractor agrees to and does hereby grant to the Government an irrevocable, non-exclusive, paid-up license in and to any inventions or discoveries regardless of when conceived or actually reduced to practice by the Contractor, and any other intellectual property, including technical data, which are owned or controlled by the Contractor, at any time through completion of this contract and which are incorporated or embodied in the construction of the facilities or which are utilized in the operation or remediation of the facilities or which cover articles, materials or products manufactured at a facility: (1) to practice or to have practiced by or for the Government at the facility; and (2) to transfer such license with the transfer of that facility. The acceptance or exercise by the Government of the aforesaid rights and license shall not prevent the Government at any time from contesting the enforceability, validity or scope of, or title to, any rights or patents or other intellectual property herein licensed.
- (c) In addition, the Contractor will take all necessary steps to assign permits, authorizations, leases, and licenses in any third party intellectual property to the Government, or such other third party as the Government may designate, that are necessary for the completion of the work contemplated under this Contract.

H.27 DOE-H-2020 PRICE-ANDERSON AMENDMENTS ACT NONCOMPLIANCE (OCT 2014)

The Contractor shall establish an internal Price-Anderson Amendments Act (PAAA) noncompliance identification, tracking, and corrective action system and shall provide access to and fully support DOE reviews of the system. The Contractor shall also implement a Price- Anderson Amendments Act reporting process which meets applicable DOE standards. The Contractor shall be accountable for ensuring that subcontractors adhere to these requirements.

H.28 DOE-H-2021 WORK STOPPAGE AND SHUTDOWN AUTHORIZATION (OCT 2014)

- (a) Imminent Health and Safety Hazard is a given condition or situation which, if not immediately corrected, could result in a serious injury or death, including exposure to radiation and toxic/hazardous chemicals. Imminent Danger in relation to the facility safety envelope is a condition, situation, or proposed activity which, if not terminated, could cause, prevent mitigation of, or seriously increase the risk of (1) nuclear criticality, (2) radiation exposure, (3) fire/explosion, and/or (4) toxic hazardous chemical exposure.
- (b) Work Stoppage. In the event of an Imminent Health and Safety Hazard, identified by facility line management or operators or facility health and safety personnel overseeing facility operations, or other individuals, the individual or group identifying the imminent hazard situation shall immediately take actions to eliminate or mitigate the hazard (i.e., by directing the operator/implementer of the activity or process causing the imminent hazard to stop work, or by initiating emergency response actions or other actions) to protect the health and safety of the workers and the public, and to protect U.S. Department of Energy (DOE) facilities and the environment. In the event an imminent health and safety hazard is identified, the individual or group identifying the hazard should coordinate with an appropriate

Contractor official, who will direct the shutdown or other actions, as required. Such mitigating action should subsequently be coordinated with the DOE and Contractor management. The suspension or stop-work order should be promptly confirmed in writing by the Contracting Officer.

- (c) Shutdown. In the event of an imminent danger in relation to the facility safety envelope or a non-Imminent Health and Safety Hazard identified by facility line managers, facility operators, health and safety personnel overseeing facility operations, or other individuals, the individual or group identifying the potential health and safety hazard may recommend facility shutdown in addition to any immediate actions needed to mitigate the situation. However, the recommendation must be coordinated with Contractor management, and the DOE Site Manager. Any written direction to suspend operations shall be issued by the Contracting Officer, pursuant to the Clause entitled, "FAR 52.242-15, Stop-Work Order."
- (d) Facility Representatives. DOE personnel designated as Facility Representatives provide the technical/safety oversight of operations. The Facility Representative has the authority to "stop work," which applies to the shutdown of an entire plant, activity, or job. This stop-work authority will be used for an operation of a facility which is performing work the Facility Representative believes:
 - (1) Poses an imminent danger to health and safety of workers or the public if allowed to continue;
 - (2) Could adversely affect the safe operation of, or could cause serious damage to the facility if allowed to continue; or
 - (3) Could result in the release of radiological or chemical hazards to the environment in excess of regulatory limits.
- (e) This clause flows down to all subcontractors at all tiers. Therefore, the Contractor shall insert a clause, modified appropriately to substitute "Contractor Representatives" for "the Contracting Officer" in all subcontracts.

H.29 DOE-H-2033 ALTERNATIVE DISPUTE RESOLUTION (OCT 2014)

- (a) The DOE and the Contractor both recognize that methods for fair and efficient resolution of contractual issues in controversy by mutual agreement are essential to the successful and timely completion of contract requirements. Accordingly, DOE and the Contractor shall use their best efforts to informally resolve any contractual issue in controversy by mutual agreement. Issues of controversy may include a dispute, claim, question, or other disagreement. The parties agree to negotiate with each other in good faith, recognizing their mutual interests, and attempt to reach a just and equitable solution satisfactory to both parties.
- (b) If a mutual agreement cannot be reached through negotiations within a reasonable period of time, the parties may use a process of alternate dispute resolution (ADR) in accordance with the clause at FAR 52.233-1, Disputes. The ADR process may involve mediation, facilitation, fact-finding, group conflict management, and conflict coaching by a neutral party. The neutral party may be an individual, a board comprised of independent experts, or a company with specific expertise in conflict resolution or expertise in the specific area of controversy. The neutral party will not

render a binding decision, but will assist the parties in reaching a mutually satisfactory agreement. Any opinions of the neutral party shall not be admissible in evidence in any subsequent litigation proceedings.

- (c) Either party may request that the ADR process be used. The Contractor shall make a written request to the Contracting Officer, and the Contracting Officer shall make a written request to the appropriate official of the Contractor. A voluntary election by both parties is required to participate in the ADR process. The parties must agree on the procedures and terms of the process, and officials of both parties who have the authority to resolve the issue must participate in the agreed upon process.
- (d) ADR procedures may be used at any time that the Contracting Officer has the authority to resolve the issue in controversy. If a claim has been submitted by the Contractor, ADR procedures may be applied to all or a portion of the claim. If ADR procedures are used subsequent to issuance of a Contracting Officer's final decision under the clause at FAR 52.233-1, Disputes, their use does not alter any of the time limitations or procedural requirements for filing an appeal of the Contracting Officer's final decision and does not constitute reconsideration of the final decision.
- (e) If the Contracting Officer rejects the Contractor's request for ADR proceedings, the Contracting Officer shall provide the Contractor with a written explanation of the specific reasons the ADR process is not appropriate for the resolution of the dispute. If the Contractor rejects the Contracting Officer's request to use ADR procedures, the Contractor shall provide the Contracting Officer with the reasons for rejecting the request.

H.30 DOE-H-2034 CONTRACTOR INTERFACE WITH OTHER CONTRACTORS AND/OR GOVERNMENT EMPLOYEES (OCT 2014)

The Government may award contracts to other contractors for work to be performed at a DOE-owned or –controlled site or facility. The Contractor shall cooperate fully with all other on-site DOE contractors and Government employees. The Contractor shall coordinate its own work with such other work as may be directed by the Contracting Officer or a duly authorized representative. The Contractor shall not commit or permit any act which will interfere with the performance of work by any other contractor or by a Government employee.

The Contractor shall cooperate in a timely manner with DOE and any DOE contractor performing work at the site, especially DOE prime contractors. Cooperation includes, but is not limited to, working together to resolve interface and work performance issues; establishing schedules to support accommodation of the work being performed under the other contract(s); establishing work groups; participating in meetings (including quarterly DOE/Contractor interface meetings); providing access to applicable technical and contract information and data, such as schedule and milestone data; discussing technical matters related to EM-LA; and, providing access to Contractor facilities or areas. The Contractor shall ensure that its activities in support of the other prime contractors are fully coordinated with DOE and the other prime contractors.

The Contractor is not authorized to direct and/or to provide oversight to any other EM-LA contractor, except as specified elsewhere in this contract or as directed by the CO. The CO has the authority to direct the Contractor to cease interference in the activities of other DOE contractors, and DOE retains oversight and approval authority for all EM-LA contracts.

The Contractor shall immediately notify the CO in writing if the Contractor's activities will interfere with any DOE contractor or if there is an interference or conflict with any DOE contractor in performance of the Contractor's activities in support of DOE or another DOE contractor.

H.31 DOE-H-2035 ORGANIZATIONAL CONFLICT OF INTEREST MANAGEMENT PLAN (OCT 2014) (REVISED)

Within 10 days after the Notice to Proceed, the Contractor shall submit to the Contracting Officer for approval an Organizational Conflict of Interest (OCI) Management Plan (Plan). The Plan shall describe the Contractor's program to identify, avoid, neutralize, or mitigate potential or actual conflicts of interest that exist or may arise during contract performance and otherwise comply with the requirements of the clause at DEAR 952.209-72, Organizational Conflicts of Interest. The Plan shall be periodically updated as required during the term of the contract. The Plan shall include, as a minimum, the following:

- (a) The procedures for identifying and evaluating past, present, and anticipated contracts of the Contractor, its related entities and other performing entities under the contract.
- (b) The procedures the Contractor will utilize to avoid, neutralize, or mitigate potential or actual conflicts of interest.
- (c) The procedures for reporting actual or potential conflicts of interest to the Contracting Officer.
- (d) The procedures the Contractor will utilize to oversee, implement, and update the Plan, to include assigning responsibility for management, oversight and compliance to an individual in the Contractor's organization with full authority to implement the Plan.
- (e) The procedures for ensuring all required representations, certifications and factual analyses are submitted to the Contracting Officer for approval in a timely manner.
- (f) The procedures for protecting agency information that could lead to an unfair competitive advantage if disclosed including collecting disclosure agreements covering all individuals, subcontractors, and other entities with access to agency-sensitive information and physical safeguarding of such information.
- (g) An OCI training and awareness program that includes periodic, recurring training and a process to evidence employee participation.

- (h) The enforceable, employee disciplinary actions to be used by the Contractor for violation of OCI requirements.

H.32 DOE-H-2037 NATIONAL ENVIRONMENTAL POLICY ACT (OCT 2014)

The work under this contract requires activities to be subject to the National Environmental Policy Act of 1969 (NEPA). The Contractor shall supply to DOE certain environmental information, as requested, in order for DOE to comply with NEPA and its implementing policies and regulations. Funds obligated under this contract shall only be expended by the Contractor on the activities set out below, unless the Contracting Officer modifies the listed activities or notifies the Contractor that NEPA requirements have been satisfied and the Contractor is authorized to perform the complete work required under the contract.

All contract activities including groundwater monitoring and investigations, aggregate area investigations and cleanups, material disposal area investigations and evaluations, contact-handled transuranic waste processing, and programmatic type support can be performed without specific NEPA impacts. However, during this period should sufficient progress be made in the areas of specific capital project development and potential groundwater remedy projects or activities, some activities may require support for NEPA activities before additional progress can be made.

H.33 DOE-H-2041 SUSTAINABLE ACQUISITION UNDER DOE SERVICE CONTRACTS (OCT 2014)

- (a) Pursuant to Executive Orders 13423, Strengthening Federal Environmental, Energy and Transportation Management, and 13514, Federal Leadership in Environmental, Energy, and Economic Performance, the Department of Energy (DOE) is committed to managing its facilities in a manner that will promote the natural environment and protect the health and well-being of its Federal employees and contractor service providers. The Contractor shall use its best efforts to support DOE in meeting those commitments, including sustainable acquisition or environmentally preferable contracting which may involve several interacting initiatives, such as -
- (1) Alternative Fueled Vehicles and Alternative Fuels;
 - (2) Biobased Content Products (USDA Designated Products);
 - (3) Energy Efficient Products;
 - (4) Non-Ozone Depleting Alternative Products;
 - (5) Recycled Content Products (EPA Designated Products); and
 - (6) Water Efficient Products (EPA WaterSense Labeled Products).
- (b) The Contractor should become familiar with these information resources:
- (1) Recycled Products are described at <http://epa.gov/cpg>.
 - (2) Biobased Products are described at <http://www.biopreferred.gov/>.
 - (3) Energy efficient products are described at <http://energystar.gov/products> for Energy Star products.
 - (4) FEMP designated products are described at <http://www.eere.energy.gov/femp/procurement>
 - (5) Environmentally Preferable Computers are described at <http://www.epeat.net>.

- (6) Non-Ozone Depleting Alternative Products are described at <http://www.epa.gov/ozone/strathome.html>.
- (7) Water efficient plumbing fixtures are described at <http://epa.gov/watersense>.
- (c) If, in the course of providing services at the DOE site, the Contractor's services necessitate the acquisition of any of the above types of products, it is expected that the Contractor will acquire the sustainable, environmentally preferable models unless the product is not available competitively within a reasonable time, at a reasonable price, is not life cycle cost efficient in the case of energy consuming products, or does not meet reasonable performance standards. While there is no formal reporting, DOE prepares a sustainable acquisition annual report and the Contractor may be asked by the Contracting Officer to provide information in support of DOE's report.

H.34 Reserved

H.35 DOE-H-2043 ASSIGNMENT AND TRANSFER OF SUBCONTRACTS (OCT 2014)

- (a) Assignment of DOE Prime Contracts. During the period of performance of this contract it may become necessary for the U.S. Department of Energy (DOE) to transfer and assign existing or future DOE prime contracts supporting site work to this contract. The Contractor shall accept the transfers and assignments of contracts. Any recommendations and/or suggestions on individual transfers shall be submitted in writing to the Contracting Officer prior to the transfer or assignment.
- (b) Transfer of Subcontracts. As the successor contractor, the Contractor agrees to accept transfer of existing subcontracts as determined necessary by DOE for continuity of operations. The Contractor shall use its best efforts to negotiate changes to the assigned subcontracts incorporating mandatory flow-down provisions at no cost. If the subcontractor refuses to accept the changes or requests price adjustments, the Contractor will notify the Contracting Officer in writing. DOE reserves the right to direct the Contractor to transfer to DOE or another Contractor any subcontract awarded under this contract.

H.36 DOE-H-2044 MATERIAL SAFETY DATA SHEET AVAILABILITY (OCT 2014)

In implementation of the clause at FAR 52.223-3, Hazardous Material Identification and Material Safety Data, the Contractor shall obtain, review and maintain a Material Safety Data Sheet (MSDS) in a readily accessible manner for each hazardous material (or mixture containing a hazardous material) ordered, delivered, stored or used; and maintain an accurate inventory and history of use of hazardous materials at each use and storage location. The MSDS shall conform to the requirements of 29 CFR 1910.1200(g).

H.37 DOE-H-2045 CONTRACTOR COMMUNITY COMMITMENT (OCT 2014) (REVISED)

- (A) The Contractor, in fulfilling its commitments pursuant to the clause at DEAR 970.5226-3, Community Commitment, shall submit to DOE an annual plan for community commitment activities and report on program progress semi-annually.
- (B) The Contractor's annual plan for community commitment activities will identify those meaningful actions and activities that it intends to implement within the surrounding counties and local municipalities. The Contractor may engage in any community actions or activities it determines meets the objectives of DOE's community commitment policy. Actions and activities in the areas listed below are representative of the areas in which the Contractor may choose to perform. However, the list is not all inclusive and is not intended to preclude the Contractor from initiating and performing other constructive community activities nor involvement in charitable endeavors it deems worthwhile.
- (1) Regional educational outreach programs. The objectives of these programs include teacher enhancement, student support, curriculum enhancement, educational technology, public understanding, and providing the services of contractor employees to schools, colleges, and universities. Regional educational outreach programs could involve providing contractor employees the opportunity to improve their employment skills and opportunities by an educational assistance allowance, provision for outside training programs either during or outside regular work hours, or executive training programs for non-executive employees. This could also involve participating in activities that foster relationships with regional educational institutions and other institutions of higher learning or encouraging students to pursue science, engineering, and technology careers.
- (2) Community support. The Contractor may directly sponsor specific local community activities or sponsor individual employees to work with a specific local community activity. The Contractor may provide support and assistance to community service organizations. The Contractor may support strategic partnerships with professional and scientific organizations to enhance recruitment into all levels of its organization.
- (C) The Contractor may use fee dollars to pay for its community commitment actions as it deems appropriate. All costs to be incurred by the Contractor for community commitment actions and activities are unallowable and non-reimbursable under the contract.

The Contractor shall encourage its subcontractors, at all tiers, to participate in these activities.

H.38 DOE-H-2046 DIVERSITY PROGRAM (OCT 2014) (REVISED)

- (a) The Contractor shall develop and implement a diversity program consistent with and in support of the DOE's diversity program. A diversity plan covering the full period of performance (base and option periods) shall be submitted to the Contracting Officer for approval within sixty (60) calendar days after the Notice to Proceed. Once the diversity plan is approved by the Contracting Officer, the Contractor shall implement

the diversity plan within thirty (30) calendar days of its approval by the Contracting Officer.

- (b) The diversity plan shall address, at a minimum, the Contractor's approach to ensure an effective diversity program (including addressing applicable affirmative action and equal employment opportunity regulations) to include:
- (1) a statement of the Contractor's policies and practices; and
 - (2) planned initiatives and activities which demonstrate a commitment to a diversity program, including recruitment strategies for hiring a diverse work force. The diversity plan shall also address, as a minimum, the Contractor's approach for promoting diversity through (1) the Contractor's work force; (2) educational outreach, including a mentor/protégé program; (3) stakeholder involvement and outreach; (4) subcontracting; and (5) economic development.

An annual diversity report shall be submitted pursuant to Section J, Attachment J-2, *Summary of Contract Deliverables*. This report shall provide a list of accomplishments achieved, both internally and externally during the current reporting period, and projected initiatives during the next reporting period. The report shall also list any proposed changes to the diversity plan which shall be subject to the Contracting Officer's approval.

H.39 DOE-H-2047 Federal Holidays and Other Closures (OCT 2014) (REVISED)

- (a) Designated Federal holidays. Federal employees observe the following Federal holidays:

- (1) New Year's Day
- (2) Birthday of Martin Luther King, Jr.
- (3) Washington's Birthday
- (4) Memorial Day
- (5) Independence Day
- (6) Labor Day
- (7) Columbus Day
- (8) Veterans Day
- (9) Thanksgiving Day
- (10) Christmas Day

Generally, Federal holidays that fall on Saturday are observed on the preceding Friday; and holidays that fall on Sunday are observed on the following Monday. The exact calendar day and/or date on which any of the listed holidays are observed may change year to year.

- (b) Other Federal Holidays. In addition to the holidays specified above in paragraph (a), Federal employees may observe other holidays designated by Federal Statute, Executive Order, or Presidential Proclamation as a one-time, day-off such as Inauguration Day for the President of the United States.
- (c) Unscheduled closures. Occasionally, an individual Federally-owned or -

controlled site or facility will be closed or have an early closure on a normal work day for other reasons such as inclement weather or facility conditions. If an unplanned closure occurs, the Contractor will be notified as soon as possible after the determination that the Federally-owned or -controlled site or facility will be closed. If the Contractor determines it is necessary to work on a LANL non-work day, the Contractor shall obtain written EM-LA approval and be responsible for the safety of its personnel including storm warning, occupational medicine, HazMat, etc., and listing work on the LANL plan of the day with Emergency Operations Center (EOC).

- (d) The Contractor shall provide the services required by the contract at Federally-owned or –controlled sites or facilities on all regularly scheduled Federal work days and other days as may be required by the contract. The Contractor shall not provide the services required by the contract on those days, or portions thereof, specified in paragraphs (a), (b) and (c), except as required under paragraph (e). Accordingly, the Contractor's employees, whose regular duty station in performance of this contract is a Federally-owned or controlled site or facility, shall not be granted access to the facility during those times specified in paragraphs (a), (b) and (c), unless required by paragraph (e) below.
- (e) There may be times that the Contractor is required to perform the services required by the contract on a Federal holiday or other closure times. In the event that such performance is required, the Contracting Officer will notify the Contractor, in writing, and specify the extent to which performance of the contract will be required. The Contractor shall provide sufficient personnel to perform the contractually-required work on those days, as directed by the Contracting Officer.
- (f) In accordance with the payment and other applicable clauses of the contract, the Government will not pay the Contractor for its employees' regularly scheduled work hours not actually provided directly in performance of the contract due to an unscheduled closure as contemplated in paragraphs (b) and (c) above.

H.40 DOE-H-2048 PUBLIC AFFAIRS – CONTRACTOR RELEASES OF INFORMATION (OCT 2014)

In implementation of the clause at DEAR 952.204-75, Public Affairs, all communications or releases of information to the public, the media, or Members of Congress prepared by the Contractor related to work performed under the contract shall be reviewed and approved by DOE prior to issuance. Therefore, the Contractor shall, at least 7 calendar days prior to the planned issue date, submit a draft copy to the Contracting Officer of any planned communications or releases of information to the public, the media, or Members of Congress related to work performed under this contract. The Contracting Officer will obtain necessary reviews and clearances and provide the Contractor with the results of such reviews prior to the planned issue date.

H.41 DOE-H-2049 INSURANCE REQUIREMENT (OCT 2014)

- (a) In accordance with the clause DEAR 952.231-71, Insurance-Litigation and Claims, the following types and minimum amounts of insurance shall be maintained by the Contractor:
- (1) Workers' compensation – Amount in accordance with applicable Federal and State workers' compensation and occupational disease statutes.
 - (2) Employer's liability - \$100,000 (except in States with exclusive or monopolistic funds that do not permit worker's compensation to be written by private carriers).
 - (3) Comprehensive bodily injury liability - \$500,000.
 - (4) Property damage liability – None, unless otherwise required by the Contracting Officer.
 - (5) Comprehensive automobile bodily injury liability - \$200,000 per person and \$500,000 per occurrence.
 - (6) Comprehensive automobile property damage - \$20,000 per occurrence.
- (b) The Contractor shall provide evidence of such insurance, if requested by the Contracting Officer; and the Contracting Officer may require such evidence to be provided prior to the commencement of work under the contract.

H.42 DOE-H-2050 INCORPORATION OF SMALL BUSINESS SUBCONTRACTING PLAN – ALTERNATE I (OCT 2014)

- (a) In accordance with the clause at FAR 52.219-9, Small Business Subcontracting Plan, the master subcontracting plan contained in Section J, Attachment J-19 is hereby incorporated into and made a part of this contract.
- (b) Prior to the beginning of each Government fiscal year, or other period as required by the Contracting Officer, the Contractor shall submit an individual subcontracting plan containing the annual subcontracting goals required by the clause at FAR 52.219-9, Small Business Subcontracting Plan, and any changes to the master subcontracting plan. The annual, individual subcontracting plan and changes to the master plan are subject to the Contracting Officer's approval; and the approved plan is incorporated by reference into the contract.

H.43 DOE-H-2052 REPRESENTATIONS, CERTIFICATIONS, AND OTHER STATEMENTS OF THE OFFEROR – ALTERNATE I (OCT 2014) (REVISED)

The following additional contractor Representations, Certifications and Other Statements are hereby incorporated into the contract by reference:

EVMS Submission Dated December 6, 2016

H.44 DOE-H-2053 WORKER SAFETY AND HEALTH PROGRAM IN ACCORDANCE WITH 10 CFR 851 (OCT 2014)

- (a) The Contractor shall comply with all applicable safety and health requirements set forth in 10 CFR 851, Worker Safety and Health Program, and any applicable DOE Directives incorporate into the contract. The Contractor shall develop, implement, and maintain a written Worker Safety and Health Plan (WSHP) which shall describe the Contractor's method for complying with and implementing the applicable requirements of 10 CFR 851. The WSHP shall be submitted to and approved by DOE. The approved WSHP must be implemented prior to the start of work. In performance of the work, the Contractor shall provide a safe and healthful workplace, and must comply with its approved WSHP and all applicable Federal and state environment, health, and safety regulations.
- (b) The Contractor shall take all reasonable precautions to protect the environment, health, and safety of its employees, DOE personnel, and members of the public. When more than one contractor works in a shared workplace, the Contractor shall coordinate with the other contractors to ensure roles, responsibilities, and worker safety and health provisions are clearly delineated. The Contractor shall participate in all emergency response drills and exercises related to the Contractor's work and interface with other DOE contractors.
- (c) The Contractor shall take all necessary and reasonable steps to minimize the impact of its work on DOE functions and employees, and immediately report all job-related injuries and/or illnesses which occur in any DOE facility to the Contracting Officer Representative (COR). Upon request, the Contractor shall provide to the COR a copy of occupational safety and health self-assessments and/or inspections of work sites for job hazards for work performed at DOE facilities.
- (d) The Contracting Officer may notify the Contractor, in writing, of any noncompliance with the terms of this clause, and the corrective action(s) to be taken. After receipt of such notice, the Contractor shall immediately take such corrective action(s).
- (e) In the event that the Contractor fails to comply with the terms and conditions of this clause, the Contracting Officer may, without prejudice to any other legal or contractual rights, issue a stop-work order halting all or any part of the work. Thereafter, the Contracting Officer may, at his or her discretion, cancel the stop-work order so that the performance of work may be resumed. The Contractor shall not be entitled to an equitable adjustment of the Contract amount or extension of the performance schedule due to any stop-work order issued under this clause.
- (f) The Contractor shall flow down the requirements of this clause to all subcontracts at any tier.
- (g) In the event of a conflict between the requirements of this clause and 10 CFR 851, the requirements of 10 CFR 851 shall take precedence.

H.45 DOE-H-2055 GOVERNMENT FURNISHED PROPERTY (OCT 2014)

In accordance with the clause FAR 52.245-1, Government Furnished Property List, the Government will provide the property listed in Section J, Attachment J-12.

H.46 DOE-H-2056 ANNUAL INDIRECT BILLING RATES (OCT 2014)

- (a) Pursuant to the clause at FAR 52.216-7, Allowable Cost and Payment, indirect billing rates, revised billing rates (as necessary), and final indirect cost rate agreements must be established between the Contractor and the Department of Energy (DOE) for each of the Contractor's fiscal years for the life of the cost reimbursement type contract. These indirect rate agreements allow the Contractor to recover indirect expenses incurred during a fiscal year for which final indirect rates have not been established.
- (b) Indirect billing and revised indirect billing rate proposals must represent the Contractor's best estimate of the anticipated indirect expenses to be incurred and the estimated allocation base for the current fiscal year in accordance with its approved accounting system. Revised billing rates allow the adjustment of the approved billing rates, based upon updated information, in order to prevent significant over or under billings.
- (c) The establishment of rates for the reimbursement of independent research and development/bid and proposal costs shall be in accordance with the provisions of FAR Subpart 42.7, "Indirect Cost Rates," FAR 31.205-18, "Independent Research and Development and Bid and Proposal Costs," and DEAR 931.205-18, "Independent Research and Development (IR&D) and Bid and Proposal (B&P) Costs."
- (d) Paragraph (e) below, identifies the requirements and process to be followed by the Contractor in establishing indirect rates for contracts when DOE is the Cognizant Federal Agency (CFA) and when DOE is not the CFA. Specific instructions for submittal of indirect rate proposals to agencies other than DOE must be obtained from the agency involved.
- (e) Requirements whether or not DOE is the CFA.
 - (1) Allowability of costs and acceptability of cost allocation methods shall be determined in accordance with the applicable sections of FAR Part 30, Cost Accounting Standards, FAR Part 31 and DEAR 931, Contract Cost Principles and Procedures, in effect as of the date of this contract.
 - (2) Pending settlement of the final indirect expense rates for any period, the Contractor shall be reimbursed at billing rates approved by the CFA subject to acknowledgment by the cognizant DOE Contracting Officer. These billing rates are subject to appropriate adjustments when revised by mutual agreement or when the final indirect rates are settled, either by mutual agreement or unilateral determination by the CFA subject to acknowledgment by the cognizant DOE Contracting Officer.

- (3) The Contractor shall continue to use the latest DOE or CFA approved billing rate(s) which have been acknowledged by the cognizant DOE Contracting Officer until those rates are superseded by establishment of final rates or more current billing rates. In those cases where current billing rates have not been established, the latest approved final rates shall be used for invoicing, unless it is determined by the cognizant DOE Contracting Officer that use of said rates would not provide for an equitable recovery of indirect costs. In those instances, the cognizant DOE Contracting Officer will take whatever steps are necessary to establish rates that DOE considers to be reasonable for billing purposes.

H.47 DOE-H-2058 DESIGNATION AND CONSENT OF CRITICAL SUBCONTRACTS (OCT 2014) (REVISED)

- (a) In accordance with the clause at FAR 52.244-2(j), Subcontracts, the following subcontracts have been determined to be critical subcontracts:
- 1) Longenecker and Associates, Inc.
 - 2) Tech2 Solutions
- (b) In the event that the Contractor plans either to award or use a new critical subcontract or replace an existing, approved critical subcontract identified in paragraph (a) above, the Contractor shall provide advance notification to, and obtain consent from, the Contracting Officer, notwithstanding the consent requirements under any approved purchasing system or any other terms or conditions of the contract. Consent to these subcontracts is retained by the Contracting Officer and will not be delegated.

H.48 DOE-H-2059 PRESERVATION OF ANTIQUITIES, WILDLIFE AND LAND AREAS (OCT 2014)

- (a) Federal Law provides for the protection of antiquities located on land owned or controlled by the Government. Antiquities include Indian graves or campsites, relics and artifacts. The Contractor shall control the movements of its personnel and its subcontractor's personnel at the job site to ensure that any existing antiquities discovered thereon will not be disturbed or destroyed by such personnel. It shall be the duty of the Contractor to report to the Contracting Officer the existence of any antiquities so discovered.
- (b) The Contractor shall also preserve all vegetation (including wetlands) except where such vegetation must be removed for survey or construction purposes. Any removal of vegetation shall be in accordance with the terms of applicable habitat mitigation plans and permits. Furthermore, all wildlife must be protected consistent with programs approved by the Contracting Officer.
- (c) Except as required by or specifically provided for in other provisions of this contract, the Contractor shall not perform any excavations, earth borrow, preparation of

borrow areas, or otherwise disturb the surface soils within the job site without the prior approval of DOE or its designee.

H.49 DOE-H-2061 CHANGE ORDER ACCOUNTING (OCT 2014)

The Contractor shall maintain change order accounting whenever the estimated cost of a change or series of related changes exceeds \$100,000. The Contractor, for each change or series of related changes, shall maintain separate accounts, by job order or other suitable accounting procedure, of all incurred segregable, direct costs (less allocable credits) of work, both changed and not changed, allocable to the change. The Contractor shall maintain such accounts until the parties agree to an equitable adjustment for the changes ordered by the Contracting Officer or the matter is conclusively disposed of in accordance with the Disputes clause.

H.50 DOE-H-2062 PERSONAL IDENTITY VERIFICATION OF CONTRACTOR PERSONNEL - ALTERNATE I (OCT 2014)

- (a) Pursuant to the clause at FAR 52.204-9, Personal Identity Verification of Contractor Personnel, the Contractor shall comply with applicable DOE regulations, policies and directives regarding identification, credential and access management for its personnel who have routine physical access to DOE-owned or -controlled sites or facilities or routine access to DOE information systems.
- (b) The Contractor shall comply with the requirements of those DOE directives, or parts thereof, identified elsewhere in the contract pursuant to the clause at DEAR 970.5204-2, Laws, Regulations and DOE Directives.

H.51 DOE-H-2063 CONFIDENTIALITY OF INFORMATION (OCT 2014)

- (a) Performance of work under this contract may result in the Contractor having access to confidential information via written or electronic documents, or by virtue of having access to DOE's electronic or other systems. Such confidential information includes personally identifiable information (such as social security account numbers) or proprietary business, technical, or financial information belonging to the Government or other companies or organizations. The Contractor shall treat this information as confidential and agrees not to use this information for its own purposes, or to disclose the information to third parties, unless specifically authorized to do so in writing by the Contracting Officer.
- (b) The restrictions set out in paragraph (a) above, however, do not apply to –
 - (1) Information which, at the time of receipt by the Contractor, is in the public domain;
 - (2) Information which, subsequent to receipt by the Contractor, becomes part of the public domain through no fault or action of the Contractor;

- (3) Information which the Contractor can demonstrate was previously in its possession and was not acquired directly or indirectly as a result of access obtained by performing work under this contract;
 - (4) Information which the Contractor can demonstrate was received from a third party who did not require the Contractor to hold it in confidence; or
 - (5) Information which is subject to release under applicable law.
- (c) The Contractor shall obtain a written agreement from each of its employees who are granted access to, or furnished with, confidential information, whereby the employee agrees that he or she will not discuss, divulge, or disclose any such information to any person or entity except those persons within the Contractor's organization directly concerned with the performance of the contract. The agreement shall be in a form satisfactory to the Contracting Officer.
- (d) Upon request of the Contracting Officer, the Contractor agrees to execute an agreement with any party which provides confidential information to the Contractor pursuant to this contract, or whose facilities the Contractor is given access to that restrict use and disclosure of confidential information obtained by the Contractor. A copy of the agreement, which shall include all material aspects of this clause, shall be provided to the Contracting Officer for approval.
- (e) Upon request of the Contracting Officer, the Contractor shall supply the Government with reports itemizing the confidential or proprietary information it receives under this contract and identify the source (company, companies or other organizations) of the information.
- (f) The Contractor agrees to flow down this clause to all subcontracts issued under this contract.

H.52 DOE-H-2064 USE OF INFORMATION TECHNOLOGY EQUIPMENT, SOFTWARE, AND THIRD PARTY SERVICES - ALTERNATE II (OCT 2014) (REVISED)

- (a) Acquisition of Information Technology. The Government may provide information technology equipment, existing computer software (as described in 48 CFR 27.405), and third party services for the Contractor's use in the performance of the contract; and the Contracting Officer may provide guidance to the Contractor regarding usage of such equipment, software, and third party services. The Contractor is not authorized to acquire (lease or purchase) information technology equipment, existing computer software, or third party services at the Government's direct expense without prior written approval of the Contracting Officer. Should the Contractor propose to acquire information technology equipment, existing computer software, or third party services, the Contractor shall provide to the Contracting Officer justification for the need, including a complete description of the equipment, software or third party service to be acquired, and a lease versus purchase analysis if appropriate.

- (b) The Contractor shall immediately provide written notice to the Contracting Officer's Representative when an employee of the Contractor no longer requires access to the Government information technology systems.
- (c) The Contractor shall not violate any software licensing agreement, or cause the Government to violate any licensing agreement.
- (d) The Contractor agrees that its employees will not use, copy, disclose, modify, or reverse engineer existing computer software provided to it by the Government except as permitted by the license agreement or any other terms and conditions under which the software is made available to the Contractor.
- (e) If at any time during the performance of this contract the Contractor has reason to believe that its utilization of Government furnished existing computer software may involve or result in a violation of the software licensing agreement, the Contractor shall promptly notify the Contracting Officer, in writing, of the pertinent facts and circumstances. Pending direction from the Contracting Officer, the Contractor shall continue performance of the work required under this contract without utilizing the software.
- (f) The Contractor agrees to include the requirements of this clause in all subcontracts at any tier.
- (g) The Contractor shall comply with the requirements of those DOE directives, or parts thereof, identified elsewhere in the contract Section J, Attachment J-1, Requirements Sources and Implementing Documents (List A) and List of Applicable DOE Directives (List B).

H.53 DOE-H-2065 REPORTING OF FRAUD, WASTE, ABUSE, CORRUPTION, OR MISMANAGEMENT (OCT 2014)

The Contractor shall comply with the following:

- (a) Notify employees annually of their duty to report allegations of fraud, waste, abuse, misuse, corruption, criminal acts, or mismanagement relating to DOE programs, operations, facilities, contracts, or information technology systems to an appropriate authority (e.g., OIG, other law enforcement, supervisor, employee concerns office, security officials). Examples of violations to be reported include, but are not limited to, allegations of false statements; false claims; bribery; kickbacks; fraud; DOE environment, safety, and health violations; theft; computer crimes; contractor mischarging; conflicts of interest; and conspiracy to commit any of these acts. Contractors must also ensure that their employees are aware that they may always report incidents or information directly to the Office of Inspector General (OIG).
- (b) Display the OIG hotline telephone number in buildings and common areas such as cafeterias, public telephone areas, official bulletin boards, reception rooms, and building lobbies.
- (c) Publish the OIG hotline telephone number in telephone books and newsletters under the Contractor's cognizance.

- (d) Ensure that its employees report to the OIG within a reasonable period of time, but not later than 24 hours after discovery, all alleged violations of law, regulations, or policy, including incidents of fraud, waste, abuse, misuse, corruption, criminal acts, or mismanagement, that have been referred to Federal, State, or local law enforcement entities.
- (e) Ensure that its employees report to the OIG any allegations of reprisals taken against employees who have reported to the OIG fraud, waste, abuse, misuse, corruption, criminal acts, or mismanagement.
- (f) Ensure that its managers do not retaliate against DOE contractor employees who report fraud, waste, abuse, misuse, corruption, criminal acts, or mismanagement.
- (g) Ensure that all their employees understand that they must –
 - (1) Comply with requests for interviews and briefings and must provide affidavits or sworn statements, if so requested by an employee of the OIG so designated to take affidavits or sworn statements;
 - (2) Not impede or hinder another employee's cooperation with the OIG; and
 - (3) Not take reprisals against DOE contractor employees who cooperate with or disclose information to the OIG or other lawful appropriate authority.
- (h) Seek more specific guidance concerning reporting of fraud, waste, abuse, corruption, or mismanagement, and cooperation with the Inspector General, in DOE directives.

H.54 DOE-H-2066 SAFEGUARDS AND SECURITY PROGRAM – ALTERNATE I (OCT 2014)

- (a) Pursuant to the clause at DEAR 952.204-2, Security, the Contractor agrees to comply with all security regulations and contract requirements as incorporated into the contract.
- (b) The Contractor shall comply with the requirements of those DOE directives, or parts thereof, identified elsewhere in the contract pursuant to the clause at DEAR 970.5204-2, Laws, Regulations and DOE Directives.

H.55 DOE-H-2068 CONFERENCE MANAGEMENT (OCT 2014)

The Contractor agrees that:

- (a) The contractor shall ensure that contractor-sponsored conferences reflect the DOE/NNSA's commitment to fiscal responsibility, appropriate stewardship of taxpayer funds and support the mission of DOE/NNSA as well as other sponsors of work. In addition, the contractor will ensure conferences do not include any activities that create the appearance of taxpayer funds being used in a questionable manner.

- (b) For the purposes of this clause, "conference" is defined in Attachment 2 to the Deputy Secretary's memorandum of August 17, 2015, entitled "Updated Guidance on Conference-Related Activities and Spending."
- (c) Contractor-sponsored conferences include those events that meet the conference definition and either or both of the following:
 - (1) The contractor provides funding to plan, promote, or implement an event, except in instances where a contractor:
 - (i) covers participation costs in a conference for specified individuals (e.g. students, retirees, speakers, etc.) in a total amount not to exceed \$10,000 (by individual contractor for a specific conference) or
 - (ii) purchases goods or services from the conference planners (e.g., attendee registration fees, renting booth space).
 - (2) The contractor authorizes use of its official seal, or other seals/logos/ trademarks to promote a conference. Exceptions include non-M&O contractors who use their seal to promote a conference that is unrelated to their DOE contract(s) (e.g., if a DOE IT contractor were to host a general conference on cyber security).
- (d) Attending a conference, giving a speech or serving as an honorary chairperson does not connote sponsorship.
- (e) The contractor will provide information on conferences they plan to sponsor with expected costs exceeding \$100,000 in the Department's Conference Management Tool, including:
 - (1) Conference title, description, and date
 - (2) Location and venue
 - (3) Description of any unusual expenses (e.g., promotional items)
 - (4) Description of contracting procedures used (e.g., competition for space/support)
 - (5) Costs for space, food/beverages, audio visual, travel/per diem, registration costs, recovered costs (e.g., through exhibit fees)
 - (6) Number of attendees
- (f) The contractor will not expend funds on the proposed contractor-sponsored conferences with expenditures estimated to exceed \$100,000 until notified of approval by the contracting officer.
- (g) For DOE-sponsored conferences, the contractor will not expend funds on the proposed conference until notified by the contracting officer.
 - (1) DOE-sponsored conferences include events that meet the definition of a conference and where the Department provides funding to plan, promote, or implement the conference and/or authorizes use of the official DOE seal, or other seals/logos/ trademarks to promote a conference. Exceptions include instances where DOE:
 - (i) covers participation costs in a conference for specified individuals (e.g. students, retirees, speakers, etc.) in a total amount not to exceed \$10,000 (by individual contractor for a specific conference) or

- (ii) purchases goods or services from the conference planners (e.g., attendee registration fees; renting booth space); or provide funding to the conference planners through Federal grants.
- (2) Attending a conference, giving a speech, or serving as an honorary chairperson does not connote sponsorship.
- (3) The contractor will provide cost and attendance information on their participation in all DOE-sponsored conference in the DOE Conference Management Tool.
- (h) For non-contractor sponsored conferences, the contractor shall develop and implement a process to ensure costs related to conferences are allowable, allocable, reasonable, and further the mission of DOE/NNSA. This process must at a minimum:
 - (1) Track all conference expenses.
 - (2) Require the Laboratory Director (or equivalent) or Chief Operating Officer approve a single conference with net costs to the contractor of \$100,000 or greater.
- (i) Contractors are not required to enter information on non-sponsored conferences in DOE'S Conference Management Tool.

Once funds have been expended on a non-sponsored conference, contractors may not authorize the use of their trademarks/logos for the conference, provide the conference planners with more than \$10,000 for specified individuals to participate in the conference, or provide any other sponsorship funding for the conference. If a contractor does so, its expenditures for the conference may be deemed unallowable.

H.56 DOE-H-2069 PAYMENTS FOR DOMESTIC EXTENDED PERSONNEL ASSIGNMENTS (OCT 2014) (Revised)

- (a) Definition.

For purposes of this clause, "domestic extended personnel assignments" are defined as any assignment of contractor personnel to a domestic location different than their permanent duty station for a period expected to exceed 30 consecutive calendar days.
- (b) The Contractor's personnel shall be physically located at or near the Los Alamos National Laboratory to perform the requirements of the Contract in accordance with Section F.2, DOE-F-2002, PLACE OF PERFORMANCE – SERVICES (OCT 2014).
- (c) For domestic extended personnel assignments, the Contractor shall be reimbursed the lesser of temporary relocation costs (Temporary Change of Station allowances as described in the Federal Travel Regulation at §302-3.400 - §302-3.429) or a reduced per diem (Extended Travel Duty) in accordance with the allowable cost provisions of the contract and the following:
 - (1) When a reduced per diem method (Extended Travel Duty) is utilized, the allowances are as follows:

- (i) Lodging. For the first 60 days and last 30 days of the assignment, the Government will reimburse costs associated with lodging at the lesser of actual cost or 100% of the Federal per diem rate at the assignment location. The intervening days lodging will be reimbursed at the lesser of actual cost or 55% of Federal per diem.
 - (ii) Meals and Incidental Expenses. For the first 30 days and last 30 days of the assignment, the Government will reimburse costs associated with meals and incidental expenses (M&IE) at the lesser of actual cost or 100% of the Federal per diem rate at the assignment location. The intervening days M&IE will be reimbursed at the lesser of actual cost or 55% of Federal per diem.
- (2) The Government will not reimburse any costs associated with per diem (except for en-route travel) unless the contractor employee maintains a residence at the permanent duty station.
- (3) The Government will not reimburse costs associated with salary premiums, per diem, lodging, or other subsidies for contractor employees on domestic extended personnel assignments after 3 years (except for the reimbursements described above during the last 30 days of the assignment).
- (4) If an assignment has breaks within a three year period, the calculation of the total length of the assignment will be as follows: If the break between assignments is less than 12 months, the Government will consider the assignment continuous for purposes of the three year clock. For instance, if a contractor employee completes a 2 year assignment at location A and returns to his/her permanent duty station for 12 months, a subsequent new 2 year assignment back to location A will restart the 3 year clock. The assignments will be considered two separate 2 year assignments. On the other hand, if in the previous example the employee's return to his/her permanent duty station was 6 months, the Government would consider the second assignment to be a continuation of the first for purposes of the 3 year rule.
- (5) The Government will not reimburse costs associated with salary premiums that exceed 10%.
- (6) The Contractor shall include the substance of this clause in all subcontracts in which travel will be reimbursed at cost.

H.57 DOE-H-2070 KEY PERSONNEL – ALTERNATE I (OCT 2014)

- (a) Pursuant to the clause at DEAR 952.215-70, Key Personnel, the key personnel for this contract are identified below:

Name	Position
Nicholas J. Lombardo	Program Manager
Joseph A. Legare	Environmental Remediation Program Manager
Charles D. Nichols	CH-TRU Program Manager
Elizabeth A. Lowes	ES&H Program Manager

Frazer R. Lockhart	Regulatory and Stakeholder Interface Manager
Gary E. Pool	Quality Assurance and Transformation Manager
Glenn J. Morgan	Engineering and Nuclear Safety Manager

In addition to the requirement for the Contracting Officer's approval before removing, replacing, or diverting any of the listed key personnel, the Contracting Officer's approval is also required for any change to the position assignment of a current key person.

- (b) Key personnel team requirements. The Contracting Officer and designated Contracting Officer's Representative(s) shall have direct access to the key personnel assigned to the contract. All key personnel shall be permanently assigned to their respective positions.
- (c) Definitions. In addition to the definitions contained in the clause at DEAR 952.215-70, the following shall apply:
 - (1) Key personnel are considered "managerial personnel" under the clause at DEAR 952.231-71, Insurance – Litigation and Claims.
- (d) Contract fee reductions for changes to key personnel.
 - (1) Notwithstanding the approval by the Contracting Officer, any time the Program Manager is removed, replaced, or diverted within two (2) years of being placed in the position, the earned fee under the contract may be permanently reduced by \$250,000 for each and every such occurrence.
 - (2) Notwithstanding the approval by the Contracting Officer, any time a key person other than the Program Manager is removed, replaced, or diverted within two (2) years of being placed in the position, the earned fee may be permanently reduced by \$150,000 for each and every such occurrence.
 - (3) The Contractor may request in writing that the Contracting Officer consider waiving all or part of a reduction in earned fee. Such written request shall include the Contractor's basis for the removal, replacement, or diversion of any key personnel. The Contracting Officer shall have the unilateral discretion to make the determination to waive all or part of the reduction in earned fee.

H.58 DOE-H-2071 DEPARTMENT OF ENERGY DIRECTIVES (OCT 2014)

- (a) In performing work under this contract, the Contractor shall comply with the requirements of those Department of Energy (DOE) directives, or parts thereof listed in Section J, Attachment J-1 or identified elsewhere in the contract.
- (b) The Contracting Officer may, at any time, unilaterally amend this clause, or other clauses which incorporate DOE directives, in order to add, modify or delete specific requirements. Prior to revising the listing of directives, the Contracting Officer shall

notify the Contractor in writing of the Department's intent to revise the list, and the Contractor shall be provided with the opportunity to assess the effect of the Contractor's compliance with the revised list on contract cost and funding, technical performance, and schedule, and identify any potential inconsistencies between the revised list and the other terms and conditions of the contract. Within 30 days after receipt of the Contracting Officer's notice, the Contractor shall advise the Contracting Officer in writing of the potential impact of the Contractor's compliance with the revised list. Based on the information provided by the Contractor and any other information available, the Contracting Officer shall decide whether to revise the listing of directives and so advise the Contractor not later than 30 days prior to the effective date of the revision.

- (c) Notwithstanding the process described in paragraph (b), the Contracting Officer may direct the Contractor to immediately begin compliance with the requirements of any directive.
- (d) The Contractor and the Contracting Officer shall identify and, if appropriate, agree to any changes to other contract terms and conditions, including cost and schedule, associated with the revision pursuant to the clause of this contract at FAR 52.243-2, Changes – Cost Reimbursement (Aug 1987) – Alt II and III (Apr 1984).
- (e) Regardless of the performer of the work, the Contractor is responsible for compliance with the requirements of this clause. The Contractor shall include this clause in all subcontracts to the extent necessary to ensure the Contractor's compliance with these requirements.

H.59 DOE-H-2072 USE OF GOVERNMENT VEHICLES BY CONTRACTOR EMPLOYEES (OCT 2014)

- (a) The Government will provide Government-owned and/or –leased motor vehicles for the Contractor's use in performance of this contract in accordance with the clause FAR 52.245-1, Government Property and FAR 52.251-2, Interagency Fleet Management System (IFMS) Vehicles and Related Services.
- (b) The Contractor shall ensure that its employees use and operate Government-owned and/or –leased motor vehicles in a responsible and safe manner to include the following requirements:
 - (1) Use vehicles only for official purposes and solely in the performance of the contract.
 - (2) Do not use vehicles for transportation between an employee's residence and place of employment unless authorized by the Contracting Officer.
 - (3) Comply with Federal, State and local laws and regulations for the operation of motor vehicles.
 - (4) Possess a valid State, District of Columbia, or commonwealth's operator license or permit for the type of vehicle to be operated.

- (5) Operate vehicles in accordance with the operator's packet furnished with each vehicle.
 - (6) Use seat belts while operating or riding in a Government vehicle.
 - (7) Do not use tobacco products while operating or riding in a Government vehicle.
 - (8) Do not provide transportation to strangers or hitchhikers.
 - (9) Do not engage in "text messaging" while operating a Government vehicle, which includes those activities defined in the clause at FAR 52.233-18, Encouraging Contractor Policies to Ban Text Messaging While Driving.
 - (10) In the event of an accident, provide information as may be required by State, county or municipal authorities and as directed by the Contracting Officer.
- (c) The Contractor shall -
- (1) Establish and enforce suitable penalties against employees who use, or authorize the use of Government vehicles for unofficial purposes or for other than in the performance of the contract; and
 - (2) Pay any expenses or cost, without Government reimbursement, for using Government vehicles other than in the performance of the contract.
- (d) The Contractor shall insert this clause in all subcontracts in which Government-owned and/or -leased vehicles are to be provided for use by subcontractor employees.

H.60 DOE-H-2073 RISK MANAGEMENT AND INSURANCE PROGRAMS (DEC 2014)

Contractor officials shall ensure that the requirements set forth below are applied in the establishment and administration of DOE-funded prime cost reimbursement contracts for management and operation of DOE facilities and other designated long-lived onsite contracts for which the contractor has established separate operating business units.

(1) BASIC REQUIREMENTS

- (a) Maintain commercial insurance or a self-insured program, (i.e., any insurance policy or coverage that protects the contractor from the risk of legal liability for adverse actions associated with its operation, including malpractice, injury, or negligence) as required by the terms of the contract. Types of insurance include automobile, general liability, and other third party liability insurance. Other forms of coverage must be justified as necessary in the operation of the Department facility and/or the performance of the contract, and approved by the DOE.
- (b) Contractors shall not purchase insurance to cover public liability for nuclear incidents without DOE authorization (See DEAR 970.5070, Indemnification, and DEAR 950.70, Nuclear Indemnification of DOE Contractors).

- (c) Demonstrate that insurance programs and costs comply with the cost limitations and exclusions at FAR 28.307, Insurance Under Cost Reimbursement Contracts, FAR 31.205-19, Insurance and Indemnification, DEAR 952.231-71 Insurance-Litigation and Claims, and DEAR 970.5228-1, Insurance-Litigation and Claims.
- (d) Demonstrate that the insurance program is being conducted in the Government's best interest and at reasonable cost.
- (e) The contractor shall submit copies of all insurance policies or insurance arrangements to the Contracting Officer no later than 30 days after the purchase date.
- (f) When purchasing commercial insurance, the contractor shall use a competitive process to ensure costs are reasonable.
- (g) Ensure self-insurance programs include the following elements:
 - (1) Compliance with criteria set forth in FAR 28.308, Self-Insurance. Approval of self-insurance is predicated upon submission of verifiable proof that the self-insurance charge does not exceed the cost of purchased insurance. This includes hybrid plans (i.e., commercially purchased insurance with self-insured retention (SIR) such as large deductible, matching deductible, retrospective rating cash flow plans, and other plans where insurance reserves are under the control of the insured). The SIR components of such plans are self-insurance and are subject to the approval and submission requirements of FAR 28.308, as applicable.
 - (2) Demonstration of full compliance with applicable state and federal regulations and related professional administration necessary for participation in alternative insurance programs.
 - (3) Safeguards to ensure third party claims and claims settlements are processed in accordance with approved procedures.
 - (4) Accounting of self-insurance charges.
 - (5) Accrual of self-insurance reserve. The Contracting Officer's approval is required and predicated upon the following:
 - (a) The claims reserve shall be held in a special fund or interest bearing account.
 - (b) Submission of a formal written statement to the Contracting Officer stating that use of the reserve is exclusively for the payment of insurance claims and losses, and that DOE shall receive its equitable share of any excess funds or reserve.
 - (c) Annual accounting and justification as to the reasonableness of the claims reserve submitted for Contracting Officer's review.
 - (d) Claim reserves, not payable within the year the loss occurred, are discounted to present value based on the prevailing Treasury rate.

- (h) Separately identify and account for interest cost on a Letter of Credit used to guarantee self-insured retention, as an unallowable cost and omitted from charges to the DOE contract.
- (i) Comply with the Contracting Officer's written direction for ensuring the continuation of insurance coverage and settlement of incurred and/or open claims and payments of premiums owed or owing to the insurer for prior DOE contractors.

(2) PLAN EXPERIENCE REPORTING.

The Contractor shall:

- (a) provide the Contracting Officer with annual experience reports for each type of insurance (e.g., automobile and general liability), listing the following for each category:
 - (1) The amount paid for each claim.
 - (2) The amount reserved for each claim.
 - (3) The direct expenses related to each claim.
 - (4) A summary for the year showing total number of claims.
 - (5) A total amount for claims paid.
 - (6) A total amount reserved for claims.
 - (7) The total amount of direct expenses.
- (b) provide the Contracting Officer with an annual report of insurance costs and/or self-insurance charges. When applicable, separately identify total policy expenses (e.g., commissions, premiums, and costs for claims servicing) and major claims during the year, including those expected to become major claims (e.g., those claims valued at \$100,000 or greater).
- (c) provide additional claim financial experience data as may be requested on a case-by-case basis.

(3) TERMINATING OPERATIONS.

The Contractor shall:

- (a) ensure protection of the Government's interest through proper recording of cancellation credits due to policy terminations and/or experience rating.
- (b) identify and provide continuing insurance policy administration and management requirements to a successor, other DOE contractor, or as specified by the Contracting Officer.
- (c) reach agreement with DOE on the handling and settlement of self-insurance claims incurred but not reported at the time of contract termination; otherwise, the contractor shall retain this liability.

(4) SUCCESSOR CONTRACTOR OR INSURANCE POLICY CANCELLATION.

The Contractor shall:

- (a) obtain the written approval of the Contracting Officer for any change in program direction; and

- (b) ensure insurance coverage replacement is maintained as required and/or approved by the Contracting Officer.

H.61 DOE-H-2075 PROHIBITION ON FUNDING FOR CERTAIN NONDISCLOSURE AGREEMENTS (OCT 2014)

The Contractor agrees that:

- (a) No cost associated with implementation or enforcement of nondisclosure policies, forms or agreements shall be allowable under this contract if such policies, forms or agreements do not contain the following provisions: "These provisions are consistent with and do not supersede, conflict with, or otherwise alter the employee obligations, rights, or liabilities created by existing statute or Executive order relating to (1) classified information, (2) communications to Congress, (3) the reporting to an Inspector General of a violation of any law, rule, or regulation, or mismanagement, a gross waste of funds, an abuse of authority, or a substantial and specific danger to public health or safety, or (4) any other whistleblower protection. The definitions, requirements, obligations, rights, sanctions, and liabilities created by controlling Executive orders and statutory provisions are incorporated into this agreement and are controlling."
- (b) The limitation above shall not contravene requirements applicable to Standard Form 312, Form 4414, or any other form issued by a Federal department or agency governing the nondisclosure of classified information.
- (c) Notwithstanding the provisions of paragraph (a), a nondisclosure or confidentiality policy form or agreement that is to be executed by a person connected with the conduct of an intelligence or intelligence-related activity, other than an employee or officer of the United States Government, may contain provisions appropriate to the particular activity for which such document is to be used. Such form or agreement shall, at a minimum, require that the person will not disclose any classified information received in the course of such activity unless specifically authorized to do so by the United States Government. Such nondisclosure or confidentiality forms shall also make it clear that they do not bar disclosures to Congress, or to an authorized official of an executive agency or the Department of Justice, that are essential to reporting a substantial violation of law.

H.62 DOE-H-2076 LOBBYING RESTRICTIONS (OCT 2014)

The Contractor agrees that none of the funds obligated on this award shall be expended, directly or indirectly, to influence congressional action on any legislation or appropriation matters pending before Congress, other than to communicate to Members of Congress as described in 18 U.S.C. § 1913. This restriction is in addition to those prescribed elsewhere in statute and regulation.

OTHER CLAUSES

H.63 SUBCONTRACTED WORK

The Contractor shall subcontract (in accordance with the definition at FAR Subpart 44.1) at least 35% of the Total Estimated Cost of the contract (exclusive of contract fee and the maximum value under the IDIQ CLIN(s)). For the purposes of this clause, Service Level or Interface Agreements with other site contractors are considered to be subcontracts. The Contractor's subcontracted work shall be in compliance with its approved Small Business Subcontracting Plan at Section J, Attachment J-19. Subcontracts included in the Section H Clause entitled DOE-H-2058, Designation and Consent of Critical Subcontracts, and all other subcontracts issued count toward the fulfillment of the subcontracting and small business goals in this Contract, as applicable. Unless otherwise approved in advance by the Contracting Officer, work to be performed by subcontractors selected after contract award shall be acquired through competitive procurements, with an emphasis on fixed-price subcontracts. The use of cost-type, time-and-materials, and labor-hour subcontracts shall be minimized.

One of the key elements of this Contract is to achieve continued optimization and improvement in overall costs for CLINs. The subcontracting approach and Small Business Subcontracting Plan should identify timely, discrete, and meaningful scopes of work that can be competed amongst small business concerns after Contract award when requirements are further defined. Meaningful work is defined as discrete and distinct technical or programmatic scopes of work within the PWS that directly contribute to the accomplishment of the mission.

H.64 PARENT ORGANIZATION SUPPORT

The Contracting Officer may, at its unilateral discretion, authorize parent organization support, and the corresponding indirect or direct costs, if a direct-benefiting relationship to DOE is demonstrated. All parent organization support shall be authorized in advance by the Contracting Officer.

If parent organization support is proposed by the Contractor or required by DOE, the Contractor shall submit for DOE review and approval, an annual Parent Organization Support Plan (POSP). The Contractor shall submit its initial POSP 60 days prior to: (1) the end of the Contract Transition Period; or (2) the commencement date of parent organization support proposed by the Contractor or required by the Government. Any subsequent POSP shall be submitted 90 days prior to the start of each year of Contract performance.

H.65 EMERGENCY CLAUSE

- (a) The U.S. Department of Energy (DOE) Office of Environmental Management Site Manager or designee shall have sole discretion to determine when an emergency situation exists at the Los Alamos EM site. In the event that either the DOE EM-LA Manager or designee determines such an emergency exists, the applicable DOE

Manager or designee will have the authority to direct any and all activities of the Contractor and subcontractors necessary to resolve the emergency situation. The applicable DOE Manager or designee may direct the activities of the Contractor and subcontractors throughout the duration of the emergency.

- (b) The Contractor shall include this Clause in all subcontracts at any tier for work performed in support of the EM-LA work.

H.66 SECURITY QUALIFICATIONS

- (a) The Contractor may be required to perform work in designated security areas or work with documents or information which may require an access authorization (clearance). Additionally, the scope of their work may require enrollment into the Human Reliability Program (HRP). The Contractor shall ensure that all personnel assigned under this Contract and working with classified information, matter, and/or materials possess a DOE "Q" or "L" access authorization (clearance) matching the classification level of the data and information the employee will be required to work on in the performance of their assigned tasks.
- (b) Individuals that do not require a "Q" or "L" clearance will possess either a Local Site Specific Only (LSSO) badge or/and HSPD-12 badge. HSPD-12 badges are to be issued to contractor personnel who are expected to be employed for more than six months. The Contractor shall not propose non U.S. citizens for positions requiring security clearances. (Clearance-Access authorizations are granted by the DOE pursuant to 10 CFR Part 710.) Security Badges must be worn properly at all times while working at any of the DOE and NNSA facilities.
- (c) Clearances will be provided and paid for by DOE. The request for clearance and renewal of clearances must be justified based on actual job performance requirements. Uncleared personnel requiring access to security areas where security clearances are needed for unescorted access shall be escorted in these areas by approved escorts. The Contractor, on a case-by-case basis, will provide its own cleared escorts as needed. The COR or Contract Technical Monitor (CTM) will approve contractor personnel for escort privileges and provide escort training.
- (d) The Contractor shall conduct pre-employment screening of prospective employees in order to ensure trustworthiness and reliability. The Contractor shall provide certification to the DCOR that this pre-employment investigative screening has been completed prior to employment. The certification shall include, as a minimum, verification of personal identity, previous employment and education, and the results of a credit and law enforcement check. There is no pre-screening required for incumbent employees that do not have a "Q" or L clearance.
- (e) Requests for access authorization shall not be submitted until the contract has been awarded, and a favorable Foreign Ownership, Control, or Influence (FOCI) determination must be rendered by DOE before an access authorization will be granted, reinstated, continued, extended, or transferred for employees or prospective employees on the contract.

- (f) The Contractor shall turn in badges for employees: (1) who are no longer working on the Contract; (2) who no longer require access; (3) when their badge expires; or (4) when the Contract expires or is terminated. Badges shall be returned to the individual handling security terminations. Notification of employment terminations supporting this Contract will be made in writing to the CO and COR/CTM.
- (g) In addition to the possible requirement of holding an access authorization, individuals, may require enrollment in the Human Reliability Program (HRP). Such individuals must be willing to comply with all regulatory requirements to be granted access into the HRP and to qualify for continued enrollment in the HRP.

H.67 QUALITY ASSURANCE (QA) FOR WORK AFFECTING NUCLEAR SAFETY

The Contractor shall implement a Department of Energy (DOE) approved Quality Assurance Program (QAP) in accordance with the current revisions of the Environmental Management (EM) QAP, EM-QA-001, prior to commencement of work affecting nuclear safety. The EM QAP provides the basis to achieve quality across the EM complex for all mission-related work while providing a consistent approach to Quality Assurance (QA).

EM requires that American Society of Mechanical Engineers (ASME) NQA-1-2008, *"Quality Assurance Requirements for Nuclear Facility Applications,"* and addenda through 2009 to be implemented as part of the Contractor's QA Program for work affecting nuclear safety. The required portions of NQA-1 to be implemented include: 1) Introduction; 2) Part I; and 3) Applicable portions of Part II. NQA-1 Parts III and IV are to be used as guidance for the Contractor's QAP and implementing procedures. Contractors have three options for complying with this contract requirement:

1. Develop and submit for DOE approval a new QAP;
2. Adopt the prior Contractor's DOE-approved QAP; or,
3. Modify the prior Contractor's DOE-approved QAP and submit it for DOE approval.

Development of a new QAP, or adoption of an existing or modified version of a QAP from a prior contractor, does not alter a contractor's legal obligation to comply with 10 CFR 830, other regulations affecting QA and DOE Order 414.1D.

The Contractor's QAP shall describe the overall implementation of the EM QA requirements and shall be applied to all work performed by the Contractor (e.g., research, design/engineering, construction, operation, budget, mission, safety, and health). Specifically, the contractor's QAP shall also describe the supply chain for electronic subcomponents, require procurement of sub-components only from original equipment manufacturers or original equipment manufacturer authorized distributors, and require electronic subcomponents be procured from vendors with a documented successful history with the supplier. The Contractor shall develop and implement a comprehensive Issues Management System for the identification, assignment of significance category, and processing of nuclear safety-related issues identified within the Contractor's organization. The significance assigned to the issues shall be the basis for all actions taken by the Contractor in correcting the issue from initial causal analysis, reviews for reporting to DOE, through completion of Effectiveness Reviews, if required based on the seriousness of the issue.

The Contractor shall, at a minimum, annually review and update as appropriate, their QAP. The review and any changes shall be submitted to DOE for approval. Changes shall be approved before implementation by the Contractor.

H.68 ENVIRONMENTAL RESPONSIBILITY

- (a) General. The Contractor is required to comply with all environmental laws, regulations, directives, orders, and procedures applicable to the work being performed under this contract. This includes, but is not limited to, compliance with applicable federal, state and local laws and regulations, permits, interagency agreements such as consent orders, consent decrees, and settlement agreements between the U. S. Department of Energy (DOE) and federal and state regulatory agencies.
- (b) Environmental Permits. This paragraph addresses three permit scenarios, where the Contractor is the sole permittee; where the Contractor and DOE are joint permittees; and where multiple contractors are permittees.
 - (1) Contractor as Sole Permittee. To the extent permitted by law and subject to other applicable provisions of the contract that impose responsibilities on DOE, and provisions of law that impose responsibilities on DOE or third parties, the Contractor shall be responsible for obtaining in its own name, shall sign, and shall be solely responsible for compliance with all permits, authorizations and approvals from federal, state, and local regulatory agencies which are necessary for the performance of the work required of the Contractor under this contract. Under this permit scenario, the Contractor shall make no commitments or set precedents that are detrimental to DOE or other contractors. The Contractor shall coordinate its permitting activities with DOE, and with other contractors which may be affected by the permit or precedent established therein, prior to taking the permit action.
 - (2) DOE as Permittee, or Contractor and DOE as Joint Permittees. Where appropriate, required by law, or required by applicable regulatory agencies, DOE will sign permits as permittee, or as owner or as owner/operator with the Contractor as operator or co-operator, respectively. DOE will co-sign hazardous waste permit applications as owner/operator where required by applicable law. In this scenario, the Contractor shall coordinate its actions with DOE. DOE is responsible for timely notification to the Contractor of any issues or changes in the regulatory environment that impact or may impact contractor implementation of any permit requirement. The Contractor shall be responsible for timely notification to DOE of any issues or changes in the regulatory environment that impact or may impact contractor implementation of any permit requirement.
 - (3) Multiple Contractors as Permittees. Where appropriate, in situations where multiple contractors are operators or co-operators of operations requiring environmental permits, DOE will sign such permits as owner or co-operator and affected contractors shall sign as operators, or co-operators. In this scenario, the

Contractor shall coordinate as appropriate with DOE and other contractors affected by the permit.

- (c) Permit Applications. The Contractor shall provide to DOE for review and comment in draft form any permit applications and other regulatory materials necessary to be submitted to regulatory agencies for the purposes of obtaining a permit. Whenever reasonably possible all such materials shall be provided to DOE initially not later than 90 days prior to the date they are to be submitted to the regulatory agency. The Contractor shall normally provide final regulatory documents to DOE at least 30 days prior to the date of submittal to the regulatory agencies for DOE's final review and signature or concurrence. Special circumstances may require permits to be submitted in a shorter time frame. As soon as the Contractor is aware of any such special circumstance, the Contractor will provide notice to DOE as to the timeframe in which the documents will be submitted to DOE. The Contractor may submit for DOE's consideration, requests for alternate review, comment, or signature, schedules for environmental permit applications or other regulatory materials covered by this Clause. Any such requests shall be submitted 30 days before such material would ordinarily be required to be provided to DOE. Any such schedule revision shall be effective only upon approval from the Contracting Officer.
- (d) Copies, Technical Information. The Contractor shall provide DOE copies of all environmental permits, authorizations, and regulatory approvals issued to the Contractor by the regulatory agencies. DOE will, upon request, make available to the Contractor access to copies of all environmental permits, authorizations, and approvals issued by the regulatory agencies to DOE that the Contractor may need to comply with under applicable law. The Contractor and DOE will provide to each other copies of all documentation, such as, letters, reports, or other such materials transmitted either to or from regulatory agencies relating to the contract work. The Contractor and DOE shall maintain all necessary technical information required to support applications for revision of DOE or other Site contractor environmental permits when such applications or revisions are related to the Contractor's operations. Upon request, the Contractor or DOE shall provide to the other access to all necessary and available technical information required to support applications for or revisions to permits or permit applications. The Contractor shall provide to DOE a certification statement relating to such technical information in the form required by the following paragraph.
- (e) Certifications. The Contractor shall provide a written certification statement attesting that information DOE is requested to sign was prepared in accordance with applicable requirements. The Contractor shall include the following certification statement in the submittal of such materials to DOE:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

The certification statement shall be signed by the individual authorized to sign such certification statements submitted to federal or state regulatory agencies under the applicable regulatory program.

H.69 REGIONAL PURCHASING

The Contractor shall perform the activities described in the Contract's Section J, Attachment J-9 entitled "Regional Purchasing Program," which sets forth EM's commitments to support the community. Costs (direct or indirect) incurred by the Contractor in performing these activities are allowable and reimbursable, to the extent authorized under this Contract.

H.70 INFORMATION

(a) Management of Information Resources.

The Contractor shall design and implement Information Resources Management (IRM) capabilities as required to execute this Contract in accordance with the Office of Management and Budget (OMB) Circular A-130, Management of Federal Information Resources.

(b) Release of Information.

The Contractor shall provide timely, accurate, and complete responses to information requested by DOE to comply with Freedom of Information Act and Privacy Act requirements. The Contractor shall develop, plan and coordinate proactive approaches to dissemination of timely information regarding DOE unclassified activities. This will be accomplished through coordination with DOE. Proactive communications or public affairs programs will include or make use of a variety of tools including, open houses, newsletters, press releases and/or conferences, audio/visual presentations, speeches, forums, and tours. The Contractor shall implement this responsibility through coordination with DOE in such a manner that the public, whether it is the media, citizen's groups, private citizens or local, state or Federal Government officials, has a clear understanding of DOE activities at the Los Alamos.

(c) Unclassified Controlled Nuclear Information (UCNI).

Documents originated by the Contractor or furnished by the Government to the Contractor, in connection with this contract, may contain Unclassified Controlled Nuclear Information as determined pursuant to Section 148 of the Atomic Energy Act of 1954, as amended. The Contractor shall be responsible for protecting such information from unauthorized dissemination in accordance with DOE regulations and directives and Section I Clauses entitled, DEAR 952.204-2, Security Requirements and DEAR 952.204-70, Classification/Declassification.

(d) The Contractor shall obtain the written agreement, in a form satisfactory to the Contracting Officer, of each employee permitted access to such information, whereby the employee agrees that he/she will not discuss, divulge or disclose any

such information or data to any person or entity except those persons within the Contractor's organization directly concerned with the performance of the contract.

- (e) The Contractor agrees, if requested by the Government, to sign an agreement identical, in all material respects, to the provisions of this subparagraph (d), with each company supplying information to the Contractor under this contract, and to supply a copy of such agreement to the Contracting Officer. Upon request from the Contracting Officer, the Contractor shall supply the Government with reports itemizing information received as confidential or proprietary and setting forth the company or companies from which the Contractor received such information.
- (f) The Contractor agrees that upon request by DOE, it will execute a DOE-approved agreement with any party whose facilities or proprietary data it is given access to or is furnished, restricting use and disclosure of the data or the information obtained from the facilities. Upon request by DOE, such an agreement shall also be signed by Contractor personnel.
- (g) The Government reserves the right to require the Contractor to include this Clause or a modified version of this Clause in any subcontract as directed in writing by the Contracting Officer.

H.71 PARTNERING

In order to most effectively accomplish this Contract, the Government proposes to form a cohesive partnership with the Contractor. It is a way of doing business based upon trust, dedication to common goals, and an understanding and respect of each other's expectations and values. The process creates a teambuilding environment which fosters better communication and problem solving, and a mutual trust between the participants. These key elements create a climate in which issues can be raised, openly discussed, and jointly settled, without getting into an adversarial relationship. In this way, partnering is a mindset, and a way of doing business. It is an attitude toward working as a team, and achieving successful project execution. This endeavor seeks an environment that nurtures team building cooperation, and trust between the Government and the Contractor. The partnership strives to draw on the strengths of each organization in an effort to achieve a quality project done right the first time, within budget, and on schedule.

Participation in the partnership will be totally voluntary by the parties. Any cost associated with effectuating this partnership will be accounted for in accordance with the terms of the Contract.

H.72 NNSA/EM STRATEGIC SOURCING PARTNERSHIP

The contractor shall participate in the National Nuclear Security Administration (NNSA)/Environmental Management (EM) Strategic Sourcing Partnership. Under this partnership, EM contractors shall work with the NNSA/EM Supply Chain Management Center (SCMC) to yield an enterprise-wide, synergistic strategic sourcing solution that

leverages NNSA and EM purchasing power to gain pricing, processing, and report efficiencies to reduce costs overall for the Government.

H.73 INTEGRATED WORK CONTROL SYSTEMS AND REPORTING REQUIREMENTS (APR 2016)

(A) Management of Work

The Contractor shall manage the planning, execution and reporting of the work described in Section C - Performance Work Statement using the Contract Performance Baseline (CPB). In the past, the Department of Energy (DOE) has used a separate approach to manage capital asset projects and operations activities. The operations activities were managed using Fiscal Year Work Plans. However, this has caused confusion and blurred the necessary focus on the CPB as the management tool for the planning, execution and reporting for the work in the contract. The focus on the CPB is also essential to ensure continued alignment is maintained between the contract and the performance of work.

The Initial Contract Performance Baseline shall reflect the Work Breakdown Structure (WBS), schedule and costs contained in the Contractor's proposal. The WBS reflects the format of the work established in the PWS. All of the work activities are expected to be managed with a consistent approach. The Government will designate capital asset projects, which shall have additional planning, execution and reporting requirements as outlined in DOE Order 413.3B, *Program and Project Management for the Acquisition of Capital Assets*, dated November 29, 2010, and its associated Guides.

(B) Preparation of Work Activities

As part of the planning and execution of the work described in Section C – Performance Work Statement, the Contractor shall incorporate the principles in Office of Management and Budget (OMB) A-131, Value Engineering, December 26, 2013; GAO Cost Estimating and Assessment Guide, GAO-09-3SP, March 2009; GAO Schedule Assessment Guide, GAO-16-89G, December 2015; GAO Report on DOE AND NNSA Project Management, Analysis of Alternatives Could Be Improved by Incorporating Best Practices, GAO-15-37, December 2014; and NDIA Planning and Scheduling Excellence Guide (PASEG) Release v2.0 June 2012.

OMB Circular A-131 provides guidance to support the sustained use of value engineering to reduce program and acquisition costs, improve performance, enhance quality, and foster the use of innovation. Value engineering is a structured technique commonly used in program management to optimize the overall value of the program. Often, creative strategies will be employed in an attempt to achieve the lowest life-cycle cost available for the program activities. The value engineering effort is a planned, detailed review/evaluation of program activities to identify alternative approaches to providing the needed assets.

The GAO Cost Estimating and Assessment Guide provides the purpose, scope, and schedule of a cost estimate; a technical baseline description; a WBS; ground rules

and assumptions; how to collect data; estimation methodologies; software cost estimating; sensitivity and risk analysis; validating a cost estimate; documenting and briefing results; updating estimates with actual costs; Earned Value Management System (EVMS); and the composition of a competent cost estimating team.

The GAO Schedule Assessment Guide develops the scheduling concepts introduced in the *Cost Estimating and Assessment Guide* and presents them as ten best practices associated with developing and maintaining a reliable, high-quality schedule. Rolling Wave or Block Planning is another recognized best practice in both the GAO Schedule Guide and NDIA Planning and Scheduling Excellence Guide (PASEG).

The GAO report on Analysis of Alternatives identifies 24 best practices for analysis of alternatives – a process that is a key first step in the development of work activities, whether waste processing, soil and water remediation, facility demolition, facility operations or infrastructure improvements. The process entails identifying, analyzing, and selecting a preferred alternative to best meet the mission need by comparing the operational effectiveness, costs, and risks of potential alternatives. These best practices include, among other things, defining functional requirements based on mission need, conducting the Analysis of Alternatives without a predetermined solution, including the status-quo alternative, and conducting an independent review of the entire Analysis of Alternatives process.

(C) Project Control System

The Contractor shall establish, maintain and use an EVMS that accurately records and reports the contract performance against the requirements of the Contract and accurately reflects the total estimated cost of the Contract exclusive of fee for the work scope and period of performance being authorized. The EVMS shall be consistent with DOE and EM policies and guidance for work activities. The work control system shall employ either a standardized or a tailored Earned Value Management method and shall be consistent with applicable DOE and EM policies and guidance.

The EVMS Description and its implementation shall comply with the Electronic Industries Alliance (EIA)-748 (current) EVMS Standard.

The requirements of this clause are in addition to the applicable requirements of DOE Order 413.3B, *Program and Project Management for the Acquisition of Capital Assets*. The CPB shall include and reflect the DOE 413.3B requirements for capital asset projects.

(D) Baseline Development and Performance Reporting

The Contractor's planning and performance reporting processes should provide DOE with the supporting data for an independent assessment of the Contractor's work execution plan, basis of cost and schedule estimates for work packages and planning packages, measurement basis of progress reporting and change control process. For the Contract, the estimated cost plus the estimated fee equals the estimated price. The CPB represents the cost, schedule, and scope as it relates to

the total estimated cost of the Contract exclusive of fee for the work scope and performance period being authorized.

The CPB cost and schedule allocations must be documented at a WBS level where work activities, their costs and schedule, are planned and controlled by the Contractor to demonstrate that the Contractor understands the complexity of work, and has put in place the planning and management processes and qualified personnel to execute the work in a safe and efficient manner.

The CPB will be reviewed by DOE and must be approved by the Contracting Officer (CO). Once the CPB is approved, the Contractor shall follow the approved change control process.

(1) Initial Contract Performance Baseline Submittal

- (a) Within the Contract Transition Period, the Contractor shall develop and submit for CO approval:
 - (i) The Initial CPB for the Contract performance period that reflects the Contractor's scope, cost and schedule as contained in the Contractor's proposal.
 - (ii) The Contractor shall submit a Project Controls System Description (PCSD) that documents the existence of the project controls system specified by the Contract.
 - (iii) During the Transition Period, the DOE and the Contractor will strive to true-up the Contract based on the conditions at the time of award to include the following:
 - (1) Reconcile contract scope and conditions with changes since the final RFP was issued, such as: labor rate revisions, environmental regulatory milestone changes, adjusted pension payments, funding profile, etc.
 - (2) Reconcile the cleanup progress the previous contractor actually made by the end of the contract period compared with what was assumed in the final RFP
 - (3) Definitize "DOE-provided" costs
 - (4) Reconcile "material differences" proposed by the Contractor
 - (5) Consider DOE proposed changes which may have been developed since the final RFP was issued
 - (iv) The Initial CPB covers approximately the first 15 months of performance starting from the Notice to Proceed (including the 90-day Transition period).
 - (v) The Contracting Officer will notify the Contractor of the exact timeframe to be used for the Initial CPB and may desire to align the Initial CPB with the fiscal year.
- (b) If Contract modifications are negotiated within the Contract Transition Period, the Contractor shall incorporate these approved modifications into the Initial CPB. Subsequent modifications negotiated after the Contract Transition Period shall be incorporated in the Initial CPB through contract modification and baseline change approvals.

- (c) The Contractor shall immediately begin performance reporting against the Initial CPB as submitted to the Contracting Officer. If the Contractor is required to have a certified EVMS compliant with EIA 748 (current version), the Initial CPB must have the necessary data elements to support EVMS certification requirements.

(2) Final Contract Performance Baseline (CPB) Submittal

- (a) During the first six months after the Contract Transition Period, in addition to performing and reporting progress against the Initial CPB, the Contractor shall develop and submit for approval by the Contracting Officer the Final CPB which details plans for the entire contract scope through the end of the period of performance.
- (b) The Final CPB shall incorporate the Contractor's WBS for the entire contract scope. The WBS represents the lower level of detail from the PWS (Section C).
- (c) The Final CPB represents the scope, cost and schedule through the end of the period of performance as it relates to the total estimated cost of the Contract exclusive of fee.
- (d) The Contractor shall provide monthly status reports regarding the CPB document preparation progress to the CO.
- (e) The Final CPB submittal shall include both a hard copy and electronic files.

(3) CPB and Contract Alignment

It is critically important that the CPB remain aligned with the Contract, including any modifications, throughout the Contract period of performance. The Government will withhold all fee payments until the Contractor has obtained the CO's approval of the Final CPB. Similarly, if at any time during the contract performance there is a significant mis-alignment of the CPB with the Contract, all fee payments will be withheld until alignment is re-established.

(4) Contract Baseline Management

- (a) The approved CPB is the source document for reporting scope, cost and schedule performance. The CPB and changes to the CPB (initial and final CPB) at all levels shall be managed using formal documented procedures as approved by the CO. The CPB does not replace or modify the Contract terms and conditions and does not create DOE obligations.
- (b) The CPB must remain aligned with the Contract. For the cost element, alignment means that the total cost of all the CPB scope must equal total estimated cost of the Contract exclusive of fee; for the schedule element, alignment means that the end date of final CPB schedule is the same as the contract end date; and for the scope alignment means that the WBS supporting the final CPB includes all scope elements in the contract.
- (c) If a change to the Contract scope is required and is in accordance with the Changes clause, the Contractor shall submit the CPB change proposal concurrently with a request for Contract change proposal to the CO within 60 days. If the CO issues a unilateral or bilateral Contract modification, the

Contractor shall submit a revised CPB in accordance with direction accompanying the Contract modification.

(5) Reviews

- (a) After receipt of the Contractor's Final CPB, DOE will complete its review to determine whether the Final CPB meets the terms and conditions of the Contract. In cases where it doesn't meet the requirements, the Contractor shall submit a corrective action plan to the CO for DOE approval within 15 days of receipt of DOE's comments. All corrective actions shall be completed in the time-frames established in the approved corrective action plan.
- (b) Certification Review of Contractor's EVMS:
 - (i) Due to the requirement for a certified EVMS, the Contractor shall begin earned value reporting no later than the end of the Contract Transition Period. The Contractor shall initiate discussions with the CO within 15 days after NTP to schedule an EVMS certification review and, when three months of earned value data is available (and no later than six months after the Contract Transition Period), the Contractor shall have in place all documentation necessary to obtain EVMS certification in conformance with EIA-748 standards.
 - (ii) The Contractor shall provide the CO, or designated representative(s), access to any and all information and documents supporting the Contractor's project control and reporting system.
 - (iii) If the Contractor chooses to use a tailored EVMS, the system must be reviewed for conformance with EIA-748 standards commensurate to the EVMS principles employed by the Contractor.
 - (iv) If this Contract contains Capital Asset Projects, the EVMS shall be evaluated for compliance with the EIA-748 standard and certified in accordance with DOE Order 413.3B, *Program and Project Management for the Acquisition of Capital Assets*.

(6) Performance Reporting

The Contractor shall submit the Contractor's Monthly Performance Report to the CO with a copy to the Office of Project Assessment in the Office of Environmental Management at ContractorsMPR@hq.doe.gov not later than the fifth business day prior to the end of each calendar month. (The CO can set an earlier due date at the discretion of the site if needed.) The report shall provide the prior month's performance for each WBS activity and an update of the performance to date. Format, timing, and manner of reporting will vary based on the type of work in the CPB segment. For the monthly reporting requirements for the various types of projects, contracts, or operating activities, see the pertinent contract section(s) in addition to the requirements below.

For contractors using standardized EVMS, the Monthly Performance Report will include the following sections:

The Monthly Performance Report for each CPB segment will include Contract Performance Reports (CPR) formats 1, 3, 5, and 6 and a Contract Funds Status Report (CFSR) unless the contract specifies otherwise. The CPRs shall be provided in the format forms referenced in Integrated Program Management Report (IPMR) Data Item Description (DID) DI-MGMT-81861 unless the contract specifies otherwise. The CFSR shall be provided in accordance with Data Item Description, DI-MGMT-81468, Contract Funds Status Report (CFSR) or equivalent.

The Monthly Performance Report shall also include an executive summary comprising the following sections:

1. A concise narrative of the project status including scope accomplished during the reporting period, near term activities to be performed, and whether project is on target to meet objectives and whether any new risks have been identified
2. An update of the schedule with details of deviations from the critical path or near critical path, their root cause, and potential impacts to the project
3. Explanation of near term milestones and deliverables at risk of being missed
4. Discussion of corrective actions currently in place to address performance issues including initiation date of corrective actions
5. A short narrative explaining any funding issues
6. Information on any safety or quality matters that emerged or persisted during the reporting month

For contractors using a tailored EVMS method or an alternate performance management method, the Monthly Performance Report will include the following sections:

1. A concise narrative of the performance status including scope accomplished during the reporting period, near term activities to be performed, and whether performance is on target to meet objectives and whether any new risks have been identified
2. Progress on contract specific performance metrics
3. Status of contract milestones and contract deliverables
4. A short narrative on performance issues and concerns, including an explanation of any variances from the Contractor's work plan
5. Discussion of corrective actions currently in place to address performance issues including initiation date of corrective actions
6. Any updates/revisions of the schedule
7. Information on any safety or quality matters that emerged or persisted during the reporting month

If the CPB consists primarily of Level of Effort (LOE) activities, the status report will tabulate planned versus actual cost by major functions as agreed to between the Contractor and the CO.

[Note: Integrated Planning, Accountability and Budgeting System (IPABS) is the central repository for EM planning and performance data. Contractor Monthly Performance Report is used by the site or field office to enter the monthly performance data into IPABS.]

H.74 ENVIRONMENTAL OBJECTIVES AND REQUIREMENTS

In support of Executive Order 13693, *Planning for Federal Sustainability in the Next Decade*; Executive Order 13653, *Preparing the United States for the Impacts of Climate Change*; and other applicable statutes, regulations and Executive Orders, and in recognition that harm to the environment, including from greenhouse gas (GHG) pollution and electronic equipment manufacturing and disposal, has quantifiable costs and negative impacts on the economy and federal agency operations, it is the Government's intent to encourage contractors to adopt corporate sustainable practices.

The Contractor shall submit a copy of its corporate sustainable practices including specific practices for reducing GHG to the Contracting Officer and shall post that information on the entity's website. If the Contractor is a Joint Venture or Limited Liability Company, the majority entity will provide the corporate sustainable practices.

H.75 LEGAL MANAGEMENT

- (a) The Contractor shall utilize necessary legal support to perform contractual requirements and comply with Code of Federal Regulations Title 10 Subpart 719, Contractor Legal Management Requirements.
- (b) As required by the CO, the Contractor shall provide legal and related support to the Government on regulatory matters, third-party claims, and threatened or actual litigation. Support includes, but is not limited to: case preparation, document retrieval, review and reproduction, witness preparation, expert witness testimony, and assistance with discovery or other information requests responsive to any legal proceeding."
- (c) When evaluating requests for reimbursement or allowability of Contractor costs associated with defense and/or settlement of legal claims brought against the Contractor by a third party:
 - (1) DOE will not reimburse Contractor legal defense costs or damages incurred where a judgement is issued finding that the Contractor engaged in discriminatory conduct prohibited by the terms of the contract, such as those covered by FAR 52.222-26 (Equal Opportunity), FAR 52.222-35 (Equal Opportunity for Veterans), and FAR 52.222-36 (Affirmative Action for Workers With Disabilities).
 - (2) DOE will not reimburse the Contractor legal costs associated with a settlement agreement (including legal defense costs, settlement awards, or both), associated with legal claims brought against the Contractor by a third party relating to discriminatory conduct prohibited by the terms of the contract, such as those covered by FAR 52.222-26 (Equal Opportunity), FAR 52.222-35 (Equal Opportunity for Veterans), and FAR 52.222-36 (Affirmative Action for Workers With Disabilities), where the Contracting Officer determines that the plaintiff's claim(s) had more than very little likelihood of success on the merits. Where the plaintiff's claim had very

little likelihood of success on the merits, the defense and settlement costs related to the claim are allowable if the costs are otherwise allowable under the contract (e.g., reasonable, allocable, etc.).

PART II – CONTRACT CLAUSES

SECTION I

CONTRACT CLAUSES

I.1 FAR 52.252-2, CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This Contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at these addresses:

<https://www.acquisition.gov/?q=browsefar>

<http://energy.gov/management/downloads/searchable-electronic-department-energy-acquisition-regulation>

Clause No.	FAR/DEAR Reference	Title	Fill-In Information See FAR 52.104(d)
I.2	52.202-1	Definitions (Nov 2013)	
I.3	52.203-3	Gratuities (Apr 1984)	
I.4	52.203-5	Covenant Against Contingent Fees (May 2014)	
I.5	52.203-6	Restrictions on Subcontractor Sales to the Government (Sep 2006)	
I.6	52.203-7	Anti-Kickback Procedures (May 2014)	
I.7	52.203-8	Cancellation, Rescission, and Recovery of Funds for Illegal or Improper Activity (May 2014)	
I.8	52.203-10	Price or Fee Adjustment for Illegal or Improper Activity (May 2014)	
I.9	52.203-12	Limitation on Payments to Influence Certain Federal Transactions (Oct 2010)	
I.10	52.203-13	Contractor Code of Business Ethics and Conduct (Oct 2015)	
I.11	52.203-14	Display of Hotline Poster(s) (Oct 2015)	(b)(3) DOE IG Hotline Poster: http://energy.gov/sites/prod/files/igprod/documents/Hotline_poster.pdf
I.12	52.203-17	Contractor Employee Whistleblower Rights and Requirement to Inform Employees of Whistleblower Rights (Apr 2014)	
I.13	52.204-4	Printed or Copied Double-Sided on Postconsumer Fiber Content Paper (May 2011)	
I.14	52.204-9	Personal Identity Verification of Contractor Personnel	

		(Jan 2011)	
I.15	52.204-10	Reporting Executive Compensation and First-Tier Subcontract Awards (Oct 2015)	
I.16	52.204-13	System for Award Management Maintenance (Jul 2013)	
I.17	52.204-14	Service Contract Reporting Requirements (Jan 2014)	
I.18	52.204-15	Service Contract Reporting Requirements for Indefinite-Delivery Contracts.	
I.19	52.204-18	Commercial and Government Entity Code Maintenance (Jul 2015)	
I.20	52.204-19	Incorporation by Reference of Representations and Certifications (Dec 2014)	
I.21	52.209-6	Protecting the Government's Interest When Subcontracting with Contractors Debarred, Suspended, Or Proposed for Debarment (Oct 2015)	
I.22	52.209-9	Updates of Publicly Available Information Regarding Responsibility Matters (Jul 2013)	
I.23	52.209-10	Prohibition on Contracting With Inverted Domestic Corporations (Nov 2015)	
I.24	52.210-1	Market Research (Apr 2011)	
I.25	52.215-2	Audit and Records – Negotiation (Oct 2010)	
I.26	52.215-8	Order of Precedence – Uniform Contract Format (Oct 1997)	
I.27	52.215-11	Price Reduction for Defective Certified Cost or Pricing Data – Modifications (Aug 2011)	
I.28	52.215-13	Subcontractor Certified Cost or Pricing Data – Modifications (Oct 2010)	
I.29	52.215-14	Integrity of Unit Prices (Oct 2010)	
I.30	52.215-15	Pension Adjustments and Asset Reversions (Oct 2010)	
I.31	52.215-17	Waiver of Facilities Capital Cost of Money (Oct 1997) NOTE: This clause will not be included in the contract if awardee proposes Facilities Capital Cost of Money in its proposal.	
I.32	52.215-18	Reversion or Adjustment of Plans for Post-Retirement Benefits (PRB) Other Than Pensions (Jul 2005)	
I.33	52.215-19 Full Text	Notification of Ownership Changes (Oct 1997) – <i>see full text version in Section I below</i>	
I.34	52.215-21	Requirements for Certified Cost or Pricing Data and Data Other Than Certified Cost or Pricing Data – Modifications (Oct 2010) (Alt. III (Oct 1997))	(c) CD-ROM, as requested by the Contracting Officer.
I.35	52.215-23	Limitations on Pass-Through Charges (Oct 2009)	
I.36	52.216-7	Allowable Cost and Payment (Jun 2013)	(a)(3)30 th (cost invoices) and 30 th (fee invoices)
I.37	52.216-7	Allowable Cost and Payment (Feb 1997) – ALT I	(a)(3)30 th (cost

			invoices) and 30 th (fee invoices)
I.38	52.216-11	Cost Contract-No Fee (Apr 1984) <i>Applies to Contract Transition CLIN only</i>	
The following three (3) clauses (FAR 52.216-18, FAR 52.216-19, and FAR 52.216-22) apply to the IDIQ CLINs only			
I.39	52.216-18 Full Text (this only applies to IDIQ CLINs)	Ordering (Oct 1995)	(a) the date of contract award through the end of contract performance as specified in Section F
I.40	52.216-19 Full Text (this only applies to IDIQ CLINs)	Order Limitations (Oct 1995)	(a) \$0 (b)(1) \$56,000,000 (b)(2) \$112,000,000 (b)(3) 365 (d) 5
I.41	52.216-22 Full Text (this only applies to IDIQ CLINs)	Indefinite Quantity (Oct 1995)	(d) one year beyond the expiration date of the contract period
I.42	52.217-8	Option to Extend Services (Nov 1999)	30 days of the contract expiration date
I.43	52.217-9 Full Text	Option to Extend the Term of the Contract (Mar 2000) - <i>see full text version in Section I below</i>	(a) 30 days of the contract expiration date; 60 days (c) 10 years and 3 months
I.44	52.219-4	Notice of Price Evaluation Preference for HUBZone Small Business Concerns (Oct 2014)	N/A
I.45	52.219-8	Utilization of Small Business Concerns (Oct 2014)	
I.46	52.219-9	Small Business Subcontracting Plan (Oct 2015) – Alt II (Oct 2001)	
I.47	52.219-16	Liquidated Damages – Subcontracting Plan (Jan 1999)	
I.48	52.219-28	Post-Award Small Business Program Rerepresentation (Jul 2013)	
I.49	52.222-1	Notice to the Government of Labor Disputes (Feb 1997)	
I.50	52.222-2	Payment for Overtime Premiums (Jul 1990)	a) zero (0)

I.51	52.222-3	Convict Labor (Jun 2003)	
I.52	52.222-4	Contract Work Hours and Safety Standards – Overtime Compensation (May 2014)	
I.53	52.222-6	Construction Wage Rate Requirements (May 2014)	
I.54	52.222-7	Withholding of Funds (May 2014)	
I.55	52.222-8	Payrolls and Basic Records (May 2014)	
I.56	52.222-9	Apprentices and Trainees (Jul 2005)	
I.57	52.222-10	Compliance with Copeland Act Requirements (Feb 1988)	
I.58	52.222-11	Subcontracts (Labor Standards) (May 2014)	
I.59	52.222-12	Contract Termination – Debarment (May 2014)	
I.60	52.222-13	Compliance with Construction Wage Rate Requirements and Related Regulations (May 2014)	
I.61	52.222-14	Disputes Concerning Labor Standards (Feb 1988)	
I.62	52.222-15	Certification of Eligibility (May 2014)	
I.63	52.222-16	Approval of Wage Rates (May 2014)	
I.64	52.222-17	Nondisplacement of Qualified Workers (May 2014)	
I.65	52.222-21	Prohibition of Segregated Facilities (Apr 2015)	
I.66	52.222-26	Equal Opportunity (Apr 2015)	
I.67	52.222-27	Affirmative Action Compliance Requirements for Construction (Apr 2015)	
I.68	52.222-30	Construction Wage Rate Requirements– Price Adjustment (None or Separately Specified Method) (May 2014)	
I.69	52.222-35	Equal Opportunity for Veterans (Oct 2015)	
I.70	52.222-36	Equal Opportunity for Workers With Disabilities (Jul 2014)	
I.71	52.222-37	Employment Reports on Veterans (Feb 2016)	
I.72	52.222-40	Notification of Employee Rights Under the National Labor Relations Act (Dec 2010)	
I.73	52.222-41	Service Contract Labor Standards (May 2014)	
I.74	52.222-42 Full Text	Statement of Equivalent Rates for Federal Hires (May 2014) <i>see full text version in Section I below</i>	See full text below
I.75	52.222-43	Fair Labor Standards Act and Service Contract Labor Standards -- Price Adjustment (Multiple Year and Option Contracts) (May 2014) <i>Applies to fixed-price task orders only</i>	
I.76	52.222-50	Combating Trafficking in Persons (Mar 2015)	
I.77	52.222-54	Employment Eligibility Verification (Oct 2015)	
I.78	52.222-55	Minimum Wages Under Executive Order 13658 (Dec 2015)	
I.79	52.223-2	Affirmative Procurement of Biobased Products Under Service and Construction Contracts (Sep 2013)	
I.80	52.223-3	Hazardous Material Identification and Material Safety Data (Jan 1997) – Alt I (Jul 1995)	(b) None
I.81	52.223-5	Pollution Prevention and Right-to-Know Information (May 2011)	
I.82	52.223-6	Drug-Free Workplace (May 2001)	
I.83	52.223-7 Full Text	Notice of Radioactive Materials (Jan 1997) <i>see full text version in Section I below</i>	(a) 60

I.84	52.223-9 Full Text	Estimate of Percentage of Recovered Material Content for EPA-Designated Items (May 2008) <i>see full text version in Section I below</i>	(b)(2) the Contracting Officer
I.85	52.223-10	Waste Reduction Program (May 2011)	
I.86	52.223-12	Maintenance, Service, Repair, or Disposal of Refrigeration Equipment and Air Conditioners (Jun 2016)	
I.87	52.223-13	Acquisition of EPEAT® – Registered Imaging Equipment (Jun 2014)	
I.88	52.223-14	Acquisition of EPEAT® – Registered Televisions (Jun 2014)	
I.89	52.223-15	Energy Efficiency in Energy-Consuming Products (Dec 2007)	
I.90	52.223-16	Acquisition of EPEAT®-Registered Personal Computer Products (Oct 2015)	
I.91	52.223-17	Affirmative Procurement of EPA-designated Items in Service and Construction Contracts (May 2008)	
I.92	52.223-18	Encouraging Contractors Policies to Ban Text Messaging While Driving (Aug 2011)	
I.93	52.223-19	Compliance with Environmental Management Systems (May 2011)	
I.94	52.224-1	Privacy Act Notification (Apr 1984)	
I.95	52.224-2	Privacy Act (Apr 1984)	
I.96	52.225-1	Buy American – Supplies (May 2014)	
I.97	52.225-11 Full Text	Buy American – Construction Materials Under Trade Agreements (Feb 2016) <i>see full text version in Section I below</i>	(b), (3) None
I.98	52.225-13	Restrictions on Certain Foreign Purchases (Jun 2008)	
I.99	52.226-1	Utilization of Indian Organizations and Indian-Owned Economic Enterprises (Jun 2000)	
I.100	52.227-1	Authorization and Consent (Dec 2007)	
I.101	52.227-2	Notice and Assistance Regarding Patent and Copyright Infringement (Dec 2007)	
I.102	52.227-3	Patent Indemnity (Apr 1984)	
I.103	52.227-4	Patent Indemnity – Construction Contracts (Dec 2007)	
I.104	52.227-14	Rights in Data – General (May 2014) –Alt II (Dec 2007)	(g)(3) Purposes as set forth in 27.404-2(c)(1), and for Government business purposes (except for manufacture)
I.105	52.227-17	Rights in Data – Special Works (Dec 2007)	
I.106	52.227-23	Rights to Proposal Data (Technical) (Jun 1987)	No restriction with contract

			award
I.107	52.228-5	Insurance -- Work on a Government Installation (Jan 1997) <i>Applies to fixed-price task orders only</i>	
I.108	52.229-3	Federal, State, and Local Taxes (Feb 2013) <i>Applies to fixed-price task orders only</i>	
I.109	52.229-10 Full Text	State of New Mexico Gross Receipts and Compensating Tax (April 2003) <i>see full text version in Section I below</i>	Department of Energy
I.110	52.230-2	Cost Accounting Standards (Oct 2015)	
I.111	52.230-6	Administration of Cost Accounting Standards (Jun 2010)	
I.112	52.232-8	Discounts for Prompt Payment (Feb 2002) <i>Applies to fixed-price task orders only</i>	
I.113	52.232-9	Limitation of Withholding of Payments (Apr 1984)	
I.114	52.232-11	Extras (Apr 1984) <i>Applies to fixed-price task orders only</i>	
I.115	52.232-17	Interest (May 2014)	
I.116	52.232-18	Availability of Funds (Apr 1984)	
I.117	52.232-22	Limitation of Funds (Apr 1984)	
I.118	52.232-23	Assignment of Claims (May 2014)	
I.119	52.232-25	Prompt Payment (Jul 2013) – Alt I (Feb 2002)	
I.120	52.232-27	Prompt Payment for Construction Contracts (May 2014)	
I.121	52.232-33	Payment by Electronic Funds Transfer – System for Award Management (Jul 2013)	
I.122	52.232-39	Unenforceability of Unauthorized Obligations (Jun 2013)	
I.123	52.232-40	Providing Accelerated Payments to Small Business Subcontractors (Dec 2013)	
I.124	52.233-1	Disputes (May 2014) – Alt I (Dec 1991)	
I.125	52.233-3	Protest after Award (Aug 1996) – Alt I (Jun 1985)	
I.126	52.233-4	Applicable Law for Breach of Contract Claim (Oct 2004)	
I.127	52.236-5	Material and Workmanship (Apr 1984)	
I.128	52.236-7	Permits and Responsibilities (Nov 1991)	
I.129	52.236-8	Other Contracts (APR 1984)	
I.130	52.236-9	Protection of Existing Vegetation Structures, Equipment, Utilities, and Improvements (APR 1984)	
I.131	52.236-10	Operations and Storage Areas (APR 1984)	
I.132	52.236-11	Use and Possession Prior to Completion (APR 1984)	
I.133	52.236-12	Cleaning Up (APR 1984)	
I.134	52.236-13	Accident Prevention (NOV 1991)	
I.135	52.236-13	Accident Prevention (NOV 1991) - ALT I	
I.136	52.236-14	Availability and Use of Utility Services (APR 1984)	
I.137	52.236-18	Work Oversight in Cost-Reimbursement Construction Contracts (Apr 1984)	
I.138	52.236-19	Organization and Direction of the Work (Apr 1984)	
I.139	52.237-2	Protection of Government Buildings, Equipment, and Vegetation (Apr 1984)	
I.140	52.237-3	Continuity of Services (Jan 1991)	
I.141	52.242-1	Notice of Intent to Disallow Costs (Apr 1984)	
I.142	52.242-3	Penalties for Unallowable Costs (May 2014)	

I.143	52.242-4	Certification of Final Indirect Costs (Jan 1997)	
I.144	52.242-13	Bankruptcy (Jul 1995)	
I.145	52.243-1	Changes - Fixed Price (Aug 1987) – Alt II (Apr 1984) <i>Applies to fixed-price task orders only</i>	
I.146	52.243-2	Changes – Cost Reimbursement (Aug 1987) – Alt II (Apr 1984) and III (Apr 1984). <i>(Application of the specific alternate will be dependent upon the circumstances of the change, as determined by the Contracting Officer)</i>	
I.147	52.243-6	Change Order Accounting (Apr 1984)	
I.148	52.244-2	Subcontracts (Oct 2010) – Alt I (Jun 2007)	(d) Longenecker & Associates, Inc. Tech2 Solutions
	52.244-5	Competition in Subcontracting (Dec 1996)	
I.149	52.244-6	Subcontracts for Commercial Items (Feb Jun 2016)	
I.150	52.245-1	Government Property (Apr 2012) As modified by DEAR 952.245-5	
I.151	52.245-9	Use and Charges (Apr 2012)	
I.152	52.246-25	Limitation of Liability – Services (Feb 1997)	
I.153	52.247-1	Commercial Bill of Lading Notations (Feb 2006)	(a) Department of Energy (b) Department of Energy Solicitation No. DE-SOL- 0008109 the Contract Administration Office specified in Section G
I.154	52.247-63	Preference for U.S.-Flag Air Carriers (June 2003)	
I.155	52.247-67 Full Text	Submission of Transportation Documents for Audit (Feb 2006) <i>see full text version below in Section I</i>	

I.156	52.247-68	Report of Shipment (REPSHIP) (Feb 2006)	
I.157	52.248-1	Value Engineering (Oct 2010)	(m) 89303318CEM 000007
I.158	52.248-3	Value Engineering – Construction (Oct 2015)	(i) 89303318CEM 000007
I.159	52.249-2	Termination for Convenience of the Government (Fixed-Price) (Apr 2012) <i>Applies to fixed-price task orders only</i>	
I.160	52.249-6	Termination (Cost-Reimbursement) (May 2004)	
I.161	52.249-6	Termination (Cost-Reimbursement) (Sept 1996) - ALT I	
I.162	52.249-8	Default (Fixed-Price Supply and Service) (Apr 1984) <i>Applies to fixed-price task orders only</i>	
I.163	52.249-14	Excusable Delays (Apr 1984)	
I.164	52.251-1	Government Supply Sources (Apr 2012)	
I.165	52.251-2	Interagency Fleet Management System Vehicles and Related Services (Jan 1991)	
I.166	52.253-1	Computer Generated Forms (Jan 1991)	
I.167	952.202-1 Full Text	Definitions (Feb 2011)	
I.168	952.203-70 Full Text	Whistleblower Protection for Contractor Employees (Dec 2000)	
I.169	952.204-2 Full Text	Security (Mar 2011)	
I.170	952.204-70 Full Text	Classification/Declassification (Sep 1997)	
I.171	952.204-75 Full Text	Public Affairs (Dec 2000)	
I.172	952.204-77 Full Text	Computer Security (Aug 2006)	
I.173	952.208-7 Full Text	Tagging of Leased Vehicles (Apr 1984)	
I.174	952.208-70 Full Text	Printing (Apr 1984)	
I.175	952.209-72 Full Text	Organizational Conflicts of Interest (Aug 2009) Alternate I (Feb 2011)	(b)(1)(i) zero (0)
I.176	952.215-70 Full Text	Key Personnel (Dec 2000)	
I.177	952.216-7 Full Text	Allowable Cost and Payment (Feb 2011)	
I.178	952.217-70 Full Text	Acquisition of Real Property (Mar 2011)	
I.179	952.219-70 Full Text	DOE Mentor-Protégé Program (May 2000)	
I.180	952.223-71 Full Text	Integration of Environment, Safety, and Health into Work Planning and Execution (July 2009)	
I.181	952.223-72	Radiation Protection and Nuclear Criticality (Apr 1984)	

	Full Text		
I.182	952.223-75 Full Text	Preservation of Individual Occupational Radiation Exposure Records (Apr 1984)	
I.183	952.223-76 Full Text	Conditional Payment of Fee or Profit – Safeguarding Restricted Data and Other Classified Information and Protection of Worker Safety and Health (Dec 2010)	(b)(2)(i) 12 months
I.184	952.223-78 Full Text	Sustainable Acquisition Program (Oct 2010)	
I.185	952.225-71 Full Text	Compliance with Export Control Laws and Regulations (Nov 2015)	
I.186	952.226-74 Full Text	Displaced Employee Hiring Preference (Jun 1997)	
I.187	952.227-82 Full Text	Rights to Proposal Data (Apr 1984)	None
I.188	952.231-71 Full Text	Insurance--Litigation and Claims (Jul 2013)	
I.189	952.242-70 Full Text	Technical Direction (Dec 2000) <i>see full text version in Section I below</i>	
I.190	952.247-70 Full Text	Foreign Travel (Jun 2010)	
I.191	952.250-70 Full Text	Nuclear Hazards Indemnity Agreement (Jun 1996)	
I.192	952.251-70 Full Text	Contractor Employee Travel Discounts (Aug 2009)	
I.193	970.5204-1 Full Text	Counterintelligence (Dec 2010)	
I.194	970.5204-2 Full Text	Laws, Regulations, and DOE Directives (Dec 2000) See Section J, Attachment A, Lists A and B	
I.195	970.5204-3 Full Text	Access To and Ownership of Records (Oct 2014) <i>see full text version in Section I below</i> (b)(1) through (b)(5) are Contractor-owned records	
I.196	970.5223-4 Full Text	Workplace Substance Abuse Programs at DOE Sites (Dec 2010)	
I.197	970.5223-6 Full Text	Executive Order 13423, Strengthening Federal Environmental, Energy, and Transportation Management (Oct 2010)	
I.198	970.5226-3 Full Text	Community Commitment	
I.199	970.5227-1 Full Text	Rights in Data-Facilities	

This Contract incorporates one or more clauses by reference as indicated in the matrix above.

Any clauses that are included in full text are listed below and include the same Section I identifier in parentheses as was used above.

(I.33) FAR 52.215-19, NOTIFICATION OF OWNERSHIP CHANGES (OCT 1997)

- (a) The Contractor shall make the following notifications in writing:
 - (1) When the Contractor becomes aware that a change in its ownership has occurred, or is certain to occur, that could result in changes in the valuation of its capitalized assets in the accounting records, the Contractor shall notify the Administrative Contracting Officer (ACO) within 30 days.
 - (2) The Contractor shall also notify the ACO within 30 days whenever changes to asset valuations or any other cost changes have occurred or are certain to occur as a result of a change in ownership.
- (b) The Contractor shall -
 - (1) Maintain current, accurate, and complete inventory records of assets and their costs;
 - (2) Provide the ACO or designated representative ready access to the records upon request;
 - (3) Ensure that all individual and grouped assets, their capitalized values, accumulated depreciation or amortization, and remaining useful lives are identified accurately before and after each of the Contractor's ownership changes; and
 - (4) Retain and continue to maintain depreciation and amortization schedules based on the asset records maintained before each Contractor ownership change.
- (c) The Contractor shall include the substance of this clause in all subcontracts under this contract that meet the applicability requirement of FAR 15.408(k).

(I.39) FAR 52.216-18 ORDERING (OCT 1995) – Applies to IDIQ CLINs only

- (a) Any supplies and services to be furnished under this contract shall be ordered by issuance of delivery orders or task orders by the individuals or activities designated in the Schedule. Such orders may be issued from the date of contract award through the end of contract performance as specified in Section F.
- (b) All delivery orders or task orders are subject to the terms and conditions of this contract. In the event of conflict between a delivery order or task order and this contract, the contract shall control.
- (c) If mailed, a delivery order or task order is considered “issued” when the Government deposits the order in the mail. Orders may be issued orally, by facsimile, or by electronic commerce methods only if authorized in the Schedule.

(I.40) FAR 52.216-19 ORDER LIMITATIONS (OCT 1995) – Applies to IDIQ CLINs only

- (a) Minimum order. When the Government requires supplies or services covered by this contract in an amount of less than \$0, the Government is not obligated to purchase, nor is the Contractor obligated to furnish, those supplies or services under the contract.
- (b) Maximum order. The Contractor is not obligated to honor --
 - (1) Any order for a single item in excess of \$56,000,000.00;
 - (2) Any order for a combination of items in excess of \$112,000,000.00; or
 - (3) A series of orders from the same ordering office within 365 days that together call for quantities exceeding the limitation in subparagraph (b)(1) or (2) of this section.
- (c) If this is a requirements contract (i.e., includes the Requirements clause at subsection 52.216-21 of the Federal Acquisition Regulation (FAR)), the Government is not required to order a part of any one requirement from the Contractor if that requirement exceeds the maximum-order limitations in paragraph (b) of this section.
- (d) Notwithstanding paragraphs (b) and (c) of this section, the Contractor shall honor any order exceeding the maximum order limitations in paragraph (b), unless that order (or orders) is returned to the ordering office within 5 days after issuance, with written notice stating the Contractor's intent not to ship the item (or items) called for and the reasons. Upon receiving this notice, the Government may acquire the supplies or services from another source.

(I.41) FAR 52.216-22, INDEFINITE QUANTITY (OCT 1995) – Applies to IDIQ CLINs only

- (a) This is an indefinite-quantity contract for the supplies or services specified, and effective for the period stated, in the Schedule. The quantities of supplies and services specified in the Schedule are estimates only and are not purchased by this contract.
- (b) Delivery or performance shall be made only as authorized by orders issued in accordance with the Ordering clause. The Contractor shall furnish to the Government, when and if ordered, the supplies or services specified in the Schedule up to and including the quantity designated in the Schedule as the "maximum." The Government shall order at least the quantity of supplies or services designated in the Schedule as the "minimum."
- (c) Except for any limitations on quantities in the Order Limitations clause or in the Schedule, there is no limit on the number of orders that may be issued. The Government may issue orders requiring delivery to multiple destinations or performance at multiple locations.

- (d) Any order issued during the effective period of this contract and not completed within that period shall be completed by the Contractor within the time specified in the order. The contract shall govern the Contractor's and Government's rights and obligations with respect to that order to the same extent as if the order were completed during the contract's effective period; provided, that the Contractor shall not be required to make any deliveries under this contract one year beyond the expiration date of the contract period.

(I.43) FAR 52.217-9, OPTION TO EXTEND THE TERM OF THE CONTRACT (MAR 2000)

- (a) The Government may extend the term of this contract by written notice to the Contractor within 30 days of the contract expiration date; provided that the Government gives the Contractor a preliminary written notice of its intent to extend at least 60 days before the contract expires. The preliminary notice does not commit the Government to an extension.
- (b) If the Government exercises this option, the extended contract shall be considered to include this option clause.
- (c) The total duration of this contract, including the exercise of any options under this clause, shall not exceed 10 years and 3 months.

(I.74) FAR 52.222-42, STATEMENT OF EQUIVALENT RATES FOR FEDERAL HIRES (MAY 2014)

In compliance with the Service Contract Labor Standards statute and the regulations of the Secretary of Labor (29 CFR part 4), this clause identifies the classes of service employees expected to be employed under the contract and states the wages and fringe benefits payable to each if they were employed by the contracting agency subject to the provisions of 5 U.S.C. 5341 or 5332.

*This Statement is for Information Only:
It is not a Wage Determination*

Classifications	Grade	Equivalent Pay
Administrative Assistant	GS-7	19.25
Carpenter	WG-9	23.21
Computer Operator	GS-6	17.32
Electrician	WG-10	25.04
Engineering Technician	GS-9	23.54
Environmental Technician	GS-7	19.25
Forklift Operator	WG-5	15.89
Guard	GS-5	15.54
Heavy Equipment Operator	WG-10	25.04

HVAC	WG-10	25.04
Instrument Mechanic	WG-10	25.04
Janitor	WG-2	10.50
Laborer	WG-2	10.50
Machinist	WG-10	25.04
Motor Vehicle Operator	WG-7	19.56
Painter	WG-9	23.21
Pipefitter	WG-10	25.04
Receiving Clerk	WG-4	14.06
Secretary	GS-6	17.32
Technical Instructor	GS-7	19.25
Technical Writer	GS-9	23.54
Truck Driver	WG-8	21.38
Warehouse Specialist	WG-5	15.89
Water Treatment Operator	WG-9	23.21
Welder	WG-10	25.04

The fringe benefit rate is \$4.27/hour which is in addition to the above hourly rates.

(I.83) FAR 52.223-7, NOTICE OF RADIOACTIVE MATERIALS (JAN 1997)

- (a) The Contractor shall notify the Contracting Officer or designee, in writing, 60* days prior to the delivery of, or prior to completion of any servicing required by this contract of, items containing either
- (1) radioactive material requiring specific licensing under the regulations issued pursuant to the Atomic Energy Act of 1954, as amended, as set forth in Title 10 of the Code of Federal Regulations, in effect on the date of this contract, or
 - (2) other radioactive material not requiring specific licensing in which the specific activity is greater than 0.002 microcuries per gram or the activity per item equals or exceeds 0.01 microcuries.

Such notice shall specify the part or parts of the items which contain radioactive materials, a description of the materials, the name and activity of the isotope, the manufacturer of the materials, and any other information known to the Contractor which will put users of the items on notice as to the hazards involved (OMB No. 9000-0107).

* The Contracting Officer shall insert the number of days required in advance of delivery of the item or completion of the servicing to assure that required licenses are obtained and appropriate personnel are notified to institute any necessary safety and health precautions. See FAR 23.601(d).

- (b) If there has been no change affecting the quantity of activity, or the characteristics and composition of the radioactive material from deliveries under this contract or prior contracts, the Contractor may request that the Contracting Officer or designee

- waive the notice requirement in paragraph (a) of this clause. Any such request shall -
- (1) be submitted in writing;
 - (2) state that the quantity of activity, characteristics, and composition of the radioactive material have not changed; and
 - (3) cite the contract number on which the prior notification was submitted and the contracting office to which it was submitted.
- (c) All items, parts, or subassemblies which contain radioactive materials in which the specific activity is greater than 0.002 microcuries per gram or activity per item equals or exceeds 0.01 microcuries, and all containers in which such items, parts or subassemblies are delivered to the Government shall be clearly marked and labeled as required by the latest revision of MIL-STD 129 in effect on the date of the contract.
- (d) This clause, including this paragraph (d), shall be inserted in all subcontracts for radioactive materials meeting the criteria in paragraph (a) of this clause.

(I.84) FAR 52.223-9, ESTIMATE OF PERCENTAGE OF RECOVERED MATERIAL CONTENT FOR EPA-DESIGNATED PRODUCTS (MAY 2008)

- (a) *Definitions.* As used in this clause—

“Postconsumer material” means a material or finished product that has served its intended use and has been discarded for disposal or recovery, having completed its life as a consumer item. Postconsumer material is a part of the broader category of “recovered material.”

“Recovered material” means waste materials and by-products recovered or diverted from solid waste, but the term does not include those materials and by-products generated from, and commonly reused within, an original manufacturing process.

- (b) The Contractor, on completion of this contract, shall—
- (1) Estimate the percentage of the total recovered material content for EPA designated item(s) delivered and/or used in contract performance, including, if applicable, the percentage of post-consumer material content; and
 - (2) Submit this estimate to the Contracting Officer.

(I.97) FAR 52.225-11, BUY AMERICAN-CONSTRUCTION MATERIALS UNDER TRADE AGREEMENTS (FEB 2016)

(a) *Definitions.* As used in this clause-

“Caribbean Basin country construction material” means a construction material that-

- (1) Is wholly the growth, product, or manufacture of a Caribbean Basin country; or
- (2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a Caribbean Basin country into a new and different construction material distinct from the materials from which it was transformed.

“Commercially available off-the-shelf (COTS) item”-

(1) Means any item of supply (including construction material) that is-

- (i) A commercial item (as defined in paragraph (1) of the definition at FAR [2.101](#));
 - (ii) Sold in substantial quantities in the commercial marketplace; and
 - (iii) Offered to the Government, under a contract or subcontract at any tier, without modification, in the same form in which it is sold in the commercial marketplace; and
- (2) Does not include bulk cargo, as defined in [46 U.S.C. 40102\(4\)](#), such as agricultural products and petroleum products.

“Component” means an article, material, or supply incorporated directly into a construction material.

“Construction material” means an article, material, or supply brought to the construction site by the Contractor or subcontractor for incorporation into the building or work. The term also includes an item brought to the site preassembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single and distinct construction material regardless of when or how the individual parts or components of those systems are delivered to the construction site. Materials purchased directly by the Government are supplies, not construction material.

“Cost of components” means-

- (1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the construction material (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or
- (2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the construction material.

“Designated country” means any of the following countries:

- (1) A World Trade Organization Government Procurement Agreement (WTO GPA) country (Armenia, Aruba, Austria, Belgium, Bulgaria, Canada, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hong Kong, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea (Republic of), Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Montenegro, Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Singapore, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Taiwan, or United Kingdom);
- (2) A Free Trade Agreement (FTA) country (Australia, Bahrain, Canada, Chile, Colombia, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Korea (Republic of), Mexico, Morocco, Nicaragua, Oman, Panama, Peru, or Singapore);
- (3) A least developed country (Afghanistan, Angola, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, Central African Republic, Chad, Comoros, Democratic Republic of Congo, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, Kiribati, Laos, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Nepal, Niger, Rwanda, Samoa, Sao Tome and Principe, Senegal, Sierra Leone, Solomon Islands, Somalia, South Sudan, Tanzania, Timor-Leste, Togo, Tuvalu, Uganda, Vanuatu, Yemen, or Zambia); or
- (4) A Caribbean Basin country (Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, Bonaire, British Virgin Islands, Curacao, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, Saba, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Sint Eustatius, Sint Maarten, or Trinidad and Tobago).

“Designated country construction material” means a construction material that is a WTO GPA country construction material, an FTA country construction material, a least developed country construction material, or a Caribbean Basin country construction material.

“Domestic construction material” means-

- (1) An unmanufactured construction material mined or produced in the United States;
- (2) A construction material manufactured in the United States, if-
 - (i) The cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind for which nonavailability determinations have been made are treated as domestic; or
 - (ii) The construction material is a COTS item.

“Free Trade Agreement country construction material” means a construction material that-

- (1) Is wholly the growth, product, or manufacture of a Free Trade Agreement (FTA) country; or
- (2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a FTA country into a new and different construction material distinct from the materials from which it was transformed.

“Foreign construction material” means a construction material other than a domestic construction material.

“Least developed country construction material” means a construction material that-

- (1) Is wholly the growth, product, or manufacture of a least developed country; or
- (2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a least developed country into a new and different construction material distinct from the materials from which it was transformed.

“United States” means the 50 States, the District of Columbia, and outlying areas.

“WTO GPA country construction material” means a construction material that-

- (1) Is wholly the growth, product, or manufacture of a WTO GPA country; or
- (2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a WTO GPA country into a new and different construction material distinct from the materials from which it was transformed.

(b) Construction materials.

- (1) This clause implements [41 U.S.C. chapter 83](#), Buy American, by providing a preference for domestic construction material. In accordance with [41 U.S.C. 1907](#), the component test of the Buy American statute is waived for construction material that is a COTS item. (See FAR [12.505\(a\)\(2\)](#)). In addition, the Contracting Officer has determined that the WTO GPA and Free Trade Agreements (FTAs) apply to this acquisition. Therefore, the Buy American restrictions are waived for designated country construction materials.
- (2) The Contractor shall use only domestic or designated country construction material in performing this contract, except as provided in paragraphs (b)(3) and (b)(4) of this clause.
- (3) The requirement in paragraph (b)(2) of this clause does not apply to information technology that is a commercial item or to the construction materials or components listed by the Government as follows: None
- (4) The Contracting Officer may add other foreign construction material to the list in paragraph (b)(3) of this clause if the Government determines that-
 - (i) The cost of domestic construction material would be unreasonable. The cost of a particular domestic construction material subject to the restrictions of the Buy American statute is unreasonable when the cost of such material exceeds the cost of foreign material by more than 6 percent;
 - (ii) The application of the restriction of the Buy American statute to a particular construction material would be impracticable or inconsistent with the public interest; or
 - (iii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality.

(c) Request for determination of inapplicability of the Buy American statute.

- (1)
 - (i) Any Contractor request to use foreign construction material in accordance with paragraph (b)(4) of this clause shall include adequate information for Government evaluation of the request, including-
 - (A) A description of the foreign and domestic construction materials;
 - (B) Unit of measure;
 - (C) Quantity;

- (D) Price;
 - (E) Time of delivery or availability;
 - (F) Location of the construction project;
 - (G) Name and address of the proposed supplier; and
 - (H) A detailed justification of the reason for use of foreign construction materials cited in accordance with paragraph (b)(3) of this clause.
- (ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed price comparison table in the format in paragraph (d) of this clause.
 - (iii) The price of construction material shall include all delivery costs to the construction site and any applicable duty (whether or not a duty-free certificate may be issued).
 - (iv) Any Contractor request for a determination submitted after contract award shall explain why the Contractor could not reasonably foresee the need for such determination and could not have requested the determination before contract award. If the Contractor does not submit a satisfactory explanation, the Contracting Officer need not make a determination.
- (2) If the Government determines after contract award that an exception to the Buy American statute applies and the Contracting Officer and the Contractor negotiate adequate consideration, the Contracting Officer will modify the contract to allow use of the foreign construction material. However, when the basis for the exception is the unreasonable price of a domestic construction material, adequate consideration is not less than the differential established in paragraph (b)(4)(i) of this clause.
- (3) Unless the Government determines that an exception to the Buy American statute applies, use of foreign construction material is noncompliant with the Buy American statute.
- (d) *Data.* To permit evaluation of requests under paragraph (c) of this clause based on unreasonable cost, the Contractor shall include the following information and any applicable supporting data based on the survey of suppliers:

Foreign and Domestic Construction Materials Price Comparison

Construction Material Description	Unit of Measure	Quantity	Price (Dollars)*

Item 1:

Foreign construction material	_____	_____	_____
Domestic construction material	_____	_____	_____

Item 2:

Foreign construction material _____
Domestic construction material _____

*[List name, address, telephone number, and contact for suppliers surveyed.
Attach copy of response; if oral, attach summary.]*

[Include other applicable supporting information.]

[Include all delivery costs to the construction site and any applicable duty
(whether or not a duty-free entry certificate is issued).]*

(I.109) FAR 52.229-10, STATE OF NEW MEXICO GROSS RECEIPTS AND COMPENSATING TAX (APRIL 2003)

- (a) Within thirty (30) days after award of this contract, the Contractor shall advise the State of New Mexico of this contract by registering with the State of New Mexico, Taxation and Revenue Department, Revenue Division, pursuant to the Tax Administration Act of the State of New Mexico and shall identify the contract number.
- (b) The Contractor shall pay the New Mexico gross receipts taxes, pursuant to the Gross Receipts and Compensating Tax Act of New Mexico, assessed against the contract fee and costs paid for performance of this contract, or of any part or portion thereof, within the State of New Mexico. The allowability of any gross receipts taxes or local option taxes lawfully paid to the State of New Mexico by the Contractor or its subcontractors will be determined in accordance with the Allowable Cost and Payment clause of this contract except as provided in paragraph (d) of this clause.
- (c) The Contractor shall submit applications for Nontaxable Transaction Certificates, Form CSR-3C, to the:

State of New Mexico Taxation and Revenue Dept.
Revenue Division
PO Box 630
Santa Fe, New Mexico 87509

When the Type 15 Nontaxable Transaction Certificate is issued by the Revenue Division, the Contractor shall use these certificates strictly in accordance with this contract, and the agreement between The Department of Energy and the New Mexico Taxation and Revenue Department.

- (d) The Contractor shall provide Type 15 Nontaxable Transaction Certificates to each vendor in New Mexico selling tangible personal property to the Contractor for use in the performance of this contract. Failure to provide a Type 15 Nontaxable Transaction Certificate to vendors will result in the vendor's liability for the gross

receipt taxes and those taxes, which are then passed on to the Contractor, shall not be reimbursable as an allowable cost by the Government.

- (e) The Contractor shall pay the New Mexico compensating user tax for any tangible personal property which is purchased pursuant to a Nontaxable Transaction Certificate if such property is not used for Federal purposes.
- (f) Out-of-state purchase of tangible personal property by the Contractor which would be otherwise subject to compensation tax shall be governed by the principles of this clause. Accordingly, compensating tax shall be due from the contractor only if such property is not used for Federal purposes.
- (g) The Department of Energy may receive information regarding the Contractor from the Revenue Division of the New Mexico Taxation and Revenue Department and, at the discretion of The Department of Energy, may participate in any matters or proceedings pertaining to this clause or the above-mentioned Agreement. This shall not preclude the Contractor from having its own representative nor does it obligate The Department of Energy to represent its Contractor.
- (h) The Contractor agrees to insert the substance of this clause, including this paragraph (h), in each subcontract which meets the criteria in 29.401-4(b)(1) through (3) of the Federal Acquisition Regulation, 48 CFR Part 29.
- (i) Paragraphs (a) through (h) of this clause shall be null and void should the Agreement referred to in paragraph (c) of this clause be terminated; provided, however, that such termination shall not nullify obligations already incurred prior to the date of termination.

**(I.155) FAR 52.247-67, SUBMISSION OF TRANSPORTATION DOCUMENTS FOR AUDIT
(FEB 2006)**

- (a) The Contractor shall submit to the address identified below, for prepayment audit, transportation documents on which the United States will assume freight charges that were paid –
 - (1) By the Contractor under a cost-reimbursement contract; and
 - (2) By a first-tier subcontractor under a cost-reimbursement subcontract thereunder.
- (b) Cost-reimbursement Contractors shall only submit for audit those bills of lading with freight shipment charges exceeding \$100. Bills under \$100 shall be retained on-site by the Contractor and made available for on-site audits. This exception only applies to freight shipment bills and is not intended to apply to bills and invoices for any other transportation services.
- (c) Contractors shall submit the above referenced transportation documents to—

Contracting Officer at EM-LA

(I.167) DEAR 952.202-1, DEFINITIONS (FEB 2011)

As prescribed in 902.201, insert the clause at 48 CFR 52.202-1, Definitions, in all contracts. The following shall be added to the clause as paragraph (c):

- (c) When a solicitation provision or contract clause uses a word or term that is defined in the Department of Energy Acquisition Regulation (DEAR) (48 CFR chapter 9), the word or term has the same meaning as the definition in 48 CFR 902.101 or the definition in the part, subpart, or section of 48 CFR chapter 9 where the provision or clause is prescribed in effect at the time the solicitation was issued, unless an exception in (a) applies.

(I.168) DEAR 952.203-70, WHISTLEBLOWER PROTECTION FOR CONTRACTOR EMPLOYEES (DEC 2000)

- (a) The Contractor shall comply with the requirements of "DOE Contractor Employee Protection Program" at 10 CFR part 708 for work performed on behalf of DOE directly related to activities at DOE-owned or -leased sites.
- (b) The Contractor shall insert or have inserted the substance of this clause, including this paragraph (b), in subcontracts at all tiers, for subcontracts involving work performed on behalf of DOE directly related to activities at DOE-owned or leased sites.

(I.169) DEAR 952.204-2, SECURITY (MAR 2011)

- (a) *Responsibility.* It is the Contractor's duty to protect all classified information, special nuclear material, and other DOE property. The Contractor shall, in accordance with DOE security regulations and requirements, be responsible for protecting all classified information and all classified matter (including documents, material and special nuclear material) which are in the Contractor's possession in connection with the performance of work under this contract against sabotage, espionage, loss or theft. Except as otherwise expressly provided in this contract, the Contractor shall, upon completion or termination of this contract, transmit to DOE any classified matter or special nuclear material in the possession of the Contractor or any person under the Contractor's control in connection with performance of this contract. If retention by the Contractor of any classified matter is required after the completion or termination of the contract, the Contractor shall identify the items and classification levels and categories of matter proposed for retention, the reasons for the retention, and the proposed period of retention. If the retention is approved by the Contracting Officer, the security provisions of the contract shall continue to be applicable to the classified matter retained. Special nuclear material shall not be retained after the completion or termination of the contract.

- (b) *Regulations.* The Contractor agrees to comply with all security regulations and contract requirements of DOE as incorporated into the contract.
- (c) *Definition of classified information.* The term *Classified Information* means information that is classified as Restricted Data or Formerly Restricted Data under the Atomic Energy Act of 1954, or information determined to require protection against unauthorized disclosure under Executive Order 12958, *Classified National Security Information*, as amended, or prior executive orders, which is identified as *National Security Information*.
- (d) *Definition of restricted data.* The term *Restricted Data* means all data concerning design, manufacture, or utilization of atomic weapons; production of special nuclear material; or use of special nuclear material in the production of energy, but excluding data declassified or removed from the Restricted Data category pursuant to 42 U.S.C. 2162 [Section 142, as amended, of the Atomic Energy Act of 1954].
- (e) *Definition of formerly restricted data.* The term "*Formerly Restricted Data*" means information removed from the Restricted Data category based on a joint determination by DOE or its predecessor agencies and the Department of Defense that the information—(1) Relates primarily to the military utilization of atomic weapons; and (2) can be adequately protected as National Security Information. However, such information is subject to the same restrictions on transmission to other countries or regional defense organizations that apply to Restricted Data.
- (f) *Definition of national security information.* The term "*National Security Information*" means information that has been determined, pursuant to Executive Order 12958, *Classified National Security Information*, as amended, or any predecessor order, to require protection against unauthorized disclosure, and that is marked to indicate its classified status when in documentary form.
- (g) *Definition of special nuclear material.* The term "special nuclear material" means—(1) Plutonium, uranium enriched in the isotope 233 or in the isotope 235, and any other material which, pursuant to 42 U.S.C. 2071 [section 51 as amended, of the Atomic Energy Act of 1954] has been determined to be special nuclear material, but does not include source material; or (2) any material artificially enriched by any of the foregoing, but does not include source material.
- (h) *Access authorizations of personnel.* (1) The Contractor shall not permit any individual to have access to any classified information or special nuclear material, except in accordance with the Atomic Energy Act of 1954, and the DOE's regulations and contract requirements applicable to the particular level and category of classified information or particular category of special nuclear material to which access is required.

(2) The Contractor must conduct a thorough review, as defined at 48 CFR 904.401, of an uncleared applicant or uncleared employee, and must test the individual for illegal drugs, prior to selecting the individual for a position requiring a DOE access authorization.

- (i) A review must—Verify an uncleared applicant's or uncleared employee's educational background, including any high school diploma obtained within the past five years, and degrees or diplomas granted by an institution of higher learning; contact listed employers for the last three years and listed personal references; conduct local law enforcement checks when such checks are not prohibited by state or local law or regulation and when the uncleared applicant or uncleared employee resides in the jurisdiction where the Contractor is located; and conduct a credit check and other checks as appropriate.
- (ii) Contractor reviews are not required for an applicant for DOE access authorization who possesses a current access authorization from DOE or another Federal agency, or whose access authorization may be reapproved without a federal background investigation pursuant to Executive Order 12968, Access to Classified Information (August 4, 1995), Sections 3.3(c) and (d).
- (iii) In collecting and using this information to make a determination as to whether it is appropriate to select an uncleared applicant or uncleared employee to a position requiring an access authorization, the Contractor must comply with all applicable laws, regulations, and Executive Orders, including those—(A) Governing the processing and privacy of an individual's information, such as the Fair Credit Reporting Act, Americans with Disabilities Act (ADA), and Health Insurance Portability and Accountability Act; and (B) prohibiting discrimination in employment, such as under the ADA, Title VII and the Age Discrimination in Employment Act, including with respect to pre- and post-offer of employment disability related questioning.
- (iv) In addition to a review, each candidate for a DOE access authorization must be tested to demonstrate the absence of any illegal drug, as defined in 10 CFR 707.4. All positions requiring access authorizations are deemed *testing designated positions* in accordance with 10 CFR part 707. All employees possessing access authorizations are subject to applicant, random or for cause testing for use of illegal drugs. DOE will not process candidates for a DOE access authorization unless their tests confirm the absence from their system of any illegal drug.
- (v) When an uncleared applicant or uncleared employee receives an offer of employment for a position that requires a DOE access authorization, the Contractor shall not place that individual in such a position prior to the individual's receipt of a DOE access authorization, unless an approval has been obtained from the head of the cognizant local security office. If the individual is hired and placed in the position prior to receiving an access authorization, the uncleared employee may not be afforded access to classified information or matter or special nuclear material (in categories requiring access authorization) until an access authorization has been granted.

- (vi) The Contractor must furnish to the head of the cognizant local DOE Security Office, in writing, the following information concerning each uncleared applicant or uncleared employee who is selected for a position requiring an access authorization—
 - (A) The date(s) each Review was conducted;
 - (B) Each entity that provided information concerning the individual;
 - (C) A certification that the review was conducted in accordance with all applicable laws, regulations, and Executive Orders, including those governing the processing and privacy of an individual's information collected during the review;
 - (D) A certification that all information collected during the review was reviewed and evaluated in accordance with the Contractor's personnel policies; and
 - (E) The results of the test for illegal drugs.
- (i) *Criminal liability.* It is understood that disclosure of any classified information relating to the work or services ordered hereunder to any person not entitled to receive it, or failure to protect any classified information, special nuclear material, or other Government property that may come to the Contractor or any person under the Contractor's control in connection with work under this contract, may subject the Contractor, its agents, employees, or Subcontractors to criminal liability under the laws of the United States (see the Atomic Energy Act of 1954, 42 U.S.C. 2011 *et seq.*; 18 U.S.C. 793 and 794).
- (j) *Foreign ownership, control, or influence.* (1) The Contractor shall immediately provide the cognizant security office written notice of any change in the extent and nature of foreign ownership, control or influence over the Contractor which would affect any answer to the questions presented in the Standard Form (SF) 328, *Certificate Pertaining to Foreign Interests*, executed prior to award of this contract. Contractors are encouraged to submit this information through the use of the online tool at <https://foci.td.anl.gov>. When completed the Contractor must print and sign one copy of the SF 328 and submit it to the Contracting Officer. In addition, any notice of changes in ownership or control which are required to be reported to the Securities and Exchange Commission, the Federal Trade Commission, or the Department of Justice, shall also be furnished concurrently to the Contracting Officer.
- (2) If a Contractor has changes involving foreign ownership, control, or influence, DOE must determine whether the changes will pose an undue risk to the common defense and security. In making this determination, DOE will consider proposals made by the Contractor to avoid or mitigate foreign influences.
- (3) If the cognizant security office at any time determines that the Contractor is, or is potentially, subject to foreign ownership, control, or influence, the Contractor

shall comply with such instructions as the Contracting Officer shall provide in writing to protect any classified information or special nuclear material.

- (4) The Contracting Officer may terminate this contract for default either if the Contractor fails to meet obligations imposed by this clause or if the Contractor creates a foreign ownership, control, or influence situation in order to avoid performance or a termination for default. The Contracting Officer may terminate this contract for convenience if the Contractor becomes subject to foreign ownership, control, or influence and for reasons other than avoidance of performance of the contract, cannot, or chooses not to, avoid or mitigate the foreign ownership, control, or influence problem.
- (k) *Employment announcements.* When placing announcements seeking applicants for positions requiring access authorizations, the Contractor shall include in the written vacancy announcement, a notification to prospective applicants that reviews, and tests for the absence of any illegal drug as defined in 10 CFR 707.4, will be conducted by the employer and a background investigation by the Federal government may be required to obtain an access authorization prior to employment, and that subsequent reinvestigations may be required. If the position is covered by the Counterintelligence Evaluation Program regulations at 10 CFR part 709, the announcement should also alert applicants that successful completion of a counterintelligence evaluation may include a counterintelligence-scope polygraph examination.
- (l) *Flow down to subcontracts.* The Contractor agrees to insert terms that conform substantially to the language of this clause, including this paragraph, in all subcontracts under its contract that will require subcontractor employees to possess access authorizations. Additionally, the Contractor must require such subcontractors to have an existing DOD or DOE facility clearance or submit a completed SF 328, *Certificate Pertaining to Foreign Interests*, as required in 48 CFR 952.204-73, Facility Clearance, and obtain a foreign ownership, control and influence determination and facility clearance prior to award of a subcontract. Information to be provided by a subcontractor pursuant to this clause may be submitted directly to the Contracting Officer. For purposes of this clause, subcontractor means any subcontractor at any tier and the term "Contracting Officer" means the DOE Contracting Officer. When this clause is included in a subcontract, the term "Contractor" shall mean subcontractor and the term "contract" shall mean subcontract.

(I.170) DEAR 952.204-70, CLASSIFICATION/DECLASSIFICATION (SEP 1997)

In the performance of work under this contract, the Contractor or subcontractor shall comply with all provisions of the Department of Energy's regulations and mandatory DOE directives which apply to work involving the classification and declassification of information, documents, or material. In this section, "information" means facts, data, or knowledge itself; "document" means the physical medium on or in which information is recorded; and "material" means a product or substance which contains or reveals information, regardless of its physical form or characteristics. Classified information is "Restricted Data" and "Formerly Restricted Data" (classified under the Atomic Energy

Act of 1954, as amended) and "National Security Information" (classified under Executive Order 12958 or prior Executive Orders).

The original decision to classify or declassify information is considered an inherently Governmental function. For this reason, only Government personnel may serve as original classifiers, i.e., Federal Government Original Classifiers. Other personnel (Government or Contractor) may serve as derivative classifiers which involves making classification decisions based upon classification guidance which reflect decisions made by Federal Government Original Classifiers.

The Contractor or subcontractor shall ensure that any document or material that may contain classified information is reviewed by either a Federal Government or a Contractor Derivative Classifier in accordance with classification regulations including mandatory DOE directives and classification/declassification guidance furnished to the Contractor by the Department of Energy to determine whether it contains classified information prior to dissemination. For information which is not addressed in classification/declassification guidance, but whose sensitivity appears to warrant classification, the Contractor or subcontractor shall ensure that such information is reviewed by a Federal Government Original Classifier.

In addition, the Contractor or subcontractor shall ensure that existing classified documents (containing either Restricted Data or Formerly Restricted Data or National Security Information) which are in its possession or under its control are periodically reviewed by a Federal Government or Contractor Derivative Classifier in accordance with classification regulations, mandatory DOE directives and classification/declassification guidance furnished to the Contractor by the Department of Energy to determine if the documents are no longer appropriately classified. Priorities for declassification review of classified documents shall be based on the degree of public and researcher interest and the likelihood of declassification upon review. Documents which no longer contain classified information are to be declassified. Declassified documents then shall be reviewed to determine if they are publicly releasable. Documents which are declassified and determined to be publicly releasable are to be made available to the public in order to maximize the public's access to as much Government information as possible while minimizing security costs. The Contractor or subcontractor shall insert this clause in any subcontract which involves or may involve access to classified information.

(I.171) DEAR 952.204-75, PUBLIC AFFAIRS (DEC 2000)

- (a) The Contractor must cooperate with the Department in releasing unclassified information to the public and news media regarding DOE policies, programs, and activities relating to its effort under the contract. The responsibilities under this clause must be accomplished through coordination with the Contracting Officer and appropriate DOE public affairs personnel in accordance with procedures defined by the Contracting Officer.
- (b) The Contractor is responsible for the development, planning, and coordination of proactive approaches for the timely dissemination of unclassified information

regarding DOE activities onsite and offsite, including, but not limited to, operations and programs. Proactive public affairs programs may utilize a variety of communication media, including public workshops, meetings or hearings, open houses, newsletters, press releases, conferences, audio/visual presentations, speeches, forums, tours, and other appropriate stakeholder interactions.

- (c) The Contractor's internal procedures must ensure that all releases of information to the public and news media are coordinated through, and approved by, a management official at an appropriate level within the Contractor's organization.
- (d) The Contractor must comply with DOE procedures for obtaining advance clearances on oral, written, and audio/visual informational material prepared for public dissemination or use.
- (e) Unless prohibited by law, and in accordance with procedures defined by the Contracting Officer, the Contractor must notify the Contracting Officer and appropriate DOE public affairs personnel of communications or contacts with Members of Congress relating to the effort performed under the contract.
- (f) In accordance with procedures defined by the Contracting Officer, the Contractor must notify the Contracting Officer and appropriate DOE public affairs personnel of activities or situations that may attract regional or national news media attention and of non-routine inquiries from national news media relating to the effort performed under the contract.
- (g) In releases of information to the public and news media, the Contractor must fully and accurately identify the Contractor's relationship to the Department and fully and accurately credit the Department for its role in funding programs and projects resulting in scientific, technical, and other achievements.

(I.172) DEAR 952.204-77, COMPUTER SECURITY (AUG 2006)

- (a) *Definitions.* (1) *Computer* means desktop computers, portable computers, computer networks (including the DOE Network and local area networks at or controlled by DOE organizations), network devices, automated information systems, and or other related computer equipment owned by, leased, or operated on behalf of the DOE.
- (2) *Individual* means a DOE Contractor or subcontractor employee, or any other person who has been granted access to a DOE computer or to information on a DOE computer, and does not include a member of the public who sends an e-mail message to a DOE computer or who obtains information available to the public on DOE Web sites.
- (b) *Access to DOE computers.* A Contractor shall not allow an individual to have access to information on a DOE computer unless—

- (1) The individual has acknowledged in writing that the individual has no expectation of privacy in the use of a DOE computer; and
- (2) The individual has consented in writing to permit access by an authorized investigative agency to any DOE computer used during the period of that individual's access to information on a DOE computer, and for a period of three years thereafter.
- (c) *No expectation of privacy.* Notwithstanding any other provision of law (including any provision of law enacted by the Electronic Communications Privacy Act of 1986), no individual using a DOE computer shall have any expectation of privacy in the use of that computer.
- (d) *Written records.* The Contractor is responsible for maintaining written records for itself and subcontractors demonstrating compliance with the provisions of paragraph (b) of this section. The Contractor agrees to provide access to these records to the DOE, or its authorized agents, upon request.
- (e) *Subcontracts.* The Contractor shall insert this clause, including this paragraph (e), in subcontracts under this contract that may provide access to computers owned, leased or operated on behalf of the DOE.

(I.173) DEAR 952.208-7, TAGGING OF LEASED VEHICLES (APR 1984)

- (a) DOE intends to use U.S. Government license tags.
- (b) While it is the intention that vehicles leased hereunder shall operate on Federal tags, the DOE reserves the right to utilize State tags if necessary to accomplish its mission. Should State tags be required, the Contractor shall furnish the DOE the documentation required by the State to acquire such tags.

(I.174) DEAR 952.208-70, PRINTING (APR 1984)

The Contractor shall not engage in, nor subcontract for, any printing (as that term is defined in Title I of the U.S. Government Printing and Binding Regulations in effect on the effective date of this contract) in connection with the performance of work under this contract. Provided, however, that performance of a requirement under this contract involving the duplication of less than 5,000 copies of a single unit, or no more than 25,000 units in the aggregate of multiple units, will not be deemed to be printing. A unit is defined as one sheet, size 8½ by 11 inches one side only, one color. A requirement is defined as a single publication document.

- (1) The term *printing* includes the following processes: composition, plate making, presswork, binding, microform publishing, or the end items produced by such processes.

- (2) If fulfillment of the contract will necessitate reproduction in excess of the limits set forth above, the Contractor shall notify the Contracting Officer in writing and obtain the Contracting Officer's approval prior to acquiring on DOE's behalf production, acquisition, and dissemination of printed matter. Such printing must be obtained from the Government Printing Office (GPO), a contract source designated by GPO or a Joint Committee on Printing authorized federal printing plant.
- (3) Printing services not obtained in compliance with this guidance will result in the cost of such printing being disallowed.
- (4) The Contractor will include in each of his subcontracts hereunder a provision substantially the same as this clause including this paragraph (4).

**(I.175) DEAR 952.209-72, ORGANIZATIONAL CONFLICTS OF INTEREST (AUG 2009)
ALTERNATE I (FEB 2011)**

- (a) *Purpose.* The purpose of this clause is to ensure that the Contractor (1) is not biased because of its financial, contractual, organizational, or other interests which relate to the work under this contract, and (2) does not obtain any unfair competitive advantage over other parties by virtue of its performance of this contract.
- (b) *Scope.* The restrictions described herein shall apply to performance or participation by the Contractor and any of its affiliates or their successors in interest (hereinafter collectively referred to as "Contractor") in the activities covered by this clause as a prime Contractor, subcontractor, cosponsor, joint venturer, consultant, or in any similar capacity. For the purpose of this clause, affiliation occurs when a business concern is controlled by or has the power to control another or when a third party has the power to control both.
 - (1) *Use of contractor's work product.* (i) The Contractor shall be ineligible to participate in any capacity in Department contracts, subcontracts, or proposals therefore (solicited and unsolicited) which stem directly from the Contractor's performance of work under this contract for a period of 0 years after the completion of this contract. Furthermore, unless so directed in writing by the Contracting Officer, the Contractor shall not perform any advisory and assistance services work under this contract on any of its products or services or the products or services of another firm if the Contractor is or has been substantially involved in their development or marketing. Nothing in this subparagraph shall preclude the Contractor from competing for follow-on contracts for advisory and assistance services.
 - (ii) If, under this contract, the Contractor prepares a complete or essentially complete statement of work or specifications to be used in competitive acquisitions, the Contractor shall be ineligible to perform or participate in any capacity in any contractual effort which is based on such statement of work or specifications. The Contractor shall not incorporate its products or services in such statement of work or specifications unless so directed in writing by the

Contracting Officer, in which case the restriction in this subparagraph shall not apply.

(iii) Nothing in this paragraph shall preclude the Contractor from offering or selling its standard and commercial items to the Government.

(2) *Access to and use of information.* (i) If the Contractor, in the performance of this contract, obtains access to information, such as Department plans, policies, reports, studies, financial plans, internal data protected by the Privacy Act of 1974 (5 U.S.C. 552a), or data which has not been released or otherwise made available to the public, the Contractor agrees that without prior written approval of the Contracting Officer it shall not—

(A) use such information for any private purpose unless the information has been released or otherwise made available to the public;

(B) compete for work for the Department based on such information for a period of six (6) months after either the completion of this contract or until such information is released or otherwise made available to the public, whichever is first;

(C) submit an unsolicited proposal to the Government which is based on such information until one year after such information is released or otherwise made available to the public; and

(D) release such information unless such information has previously been released or otherwise made available to the public by the Department.

(ii) In addition, the Contractor agrees that to the extent it receives or is given access to proprietary data, data protected by the Privacy Act of 1974 (5 U.S.C. 552a), or other confidential or privileged technical, business, or financial information under this contract, it shall treat such information in accordance with any restrictions imposed on such information.

(iii) The Contractor may use technical data it first produces under this contract for its private purposes consistent with paragraphs (b)(2)(i) (A) and (D) of this clause and the patent, rights in data, and security provisions of this contract.

(c) *Disclosure after award.* (1) The Contractor agrees that, if changes, including additions, to the facts disclosed by it prior to award of this contract, occur during the performance of this contract, it shall make an immediate and full disclosure of such changes in writing to the Contracting Officer. Such disclosure may include a description of any action which the Contractor has taken or proposes to take to avoid, neutralize, or mitigate any resulting conflict of interest. The Department may, however, terminate the contract for convenience if it deems such termination to be in the best interest of the Government.

- (2) In the event that the Contractor was aware of facts required to be disclosed or the existence of an actual or potential organizational conflict of interest and did not disclose such facts or such conflict of interest to the Contracting Officer, DOE may terminate this contract for default.
- (d) *Remedies.* For breach of any of the above restrictions or for nondisclosure or misrepresentation of any facts required to be disclosed concerning this contract, including the existence of an actual or potential organizational conflict of interest at the time of or after award, the Government may terminate the contract for default, disqualify the Contractor from subsequent related contractual efforts, and pursue such other remedies as may be permitted by law or this contract.
- (e) *Waiver.* Requests for waiver under this clause shall be directed in writing to the Contracting Officer and shall include a full description of the requested waiver and the reasons in support thereof. If it is determined to be in the best interests of the Government, the Contracting Officer may grant such a waiver in writing.
- (f) *Subcontracts.* (1) The Contractor shall include a clause, substantially similar to this clause, including this paragraph (f), in subcontracts expected to exceed the simplified acquisition threshold determined in accordance with 48 CFR part 13 and involving the performance of advisory and assistance services as that term is defined at 48 CFR 2.101. The terms "contract," "Contractor," and "contracting officer" shall be appropriately modified to preserve the Government's rights.
- (2) Prior to the award under this contract of any such subcontracts for advisory and assistance services, the Contractor shall obtain from the proposed subcontractor or consultant the disclosure required by 48 CFR 909.507-1, and shall determine in writing whether the interests disclosed present an actual or significant potential for an organizational conflict of interest. Where an actual or significant potential organizational conflict of interest is identified, the Contractor shall take actions to avoid, neutralize, or mitigate the organizational conflict to the satisfaction of the Contractor. If the conflict cannot be avoided or neutralized, the Contractor must obtain the approval of the DOE Contracting Officer prior to entering into the subcontract.

(I.176) DEAR 952.215-70, KEY PERSONNEL (DEC 2000)

- (a) The personnel listed below or elsewhere in this contract [Insert cross-reference, if applicable] are considered essential to the work being performed under this contract. Before removing, replacing, or diverting any of the listed or specified personnel, the Contractor must: (1) Notify the Contracting Officer reasonably in advance; (2) submit justification (including proposed substitutions) in sufficient detail to permit evaluation of the impact on this contract; and (3) obtain the Contracting Officer's written approval. Notwithstanding the foregoing, if the Contractor deems immediate removal or suspension of any member of its management team is necessary to fulfill its obligation to maintain satisfactory standards of employee competency, conduct, and integrity under the clause at 48 CFR 970.5203-3, Contractor's Organization, the

Contractor may remove or suspend such person at once, although the Contractor must notify Contracting Officer prior to or concurrently with such action.

- (b) The list of personnel may, with the consent of the contracting parties, be amended from time to time during the course of the contract to add or delete personnel.

(I.177) DEAR 952.216-7, ALLOWABLE COST AND PAYMENT (FEB 2011)

As prescribed in 916.307(a), when contracting with a commercial organization modify paragraph (a) of the clause at 48 CFR 52.216-7 by adding the phrase “as supplemented by subpart 931.2 of the Department of Energy Acquisition Regulations (DEAR),” after 48 CFR subpart 31.2.

(I.178) DEAR 952.217-70, ACQUISITION OF REAL PROPERTY (MAR 2011)

- (a) Notwithstanding any other provision of the contract, the prior approval of the Contracting Officer shall be obtained when, in performance of this contract, the Contractor acquires or proposes to acquire use of real property by:
 - (1) Purchase, on the Government's behalf or in the Contractor's own name, with title eventually vesting in the Government.
 - (2) Lease for which the Department of Energy will reimburse the incurred costs as a reimbursable contract cost.
 - (3) Acquisition of temporary interest through easement, license or permit, and the Government funds the entire cost of the temporary interest.
- (b) Justification of and execution of any real property acquisitions shall be in accordance and compliance with directions provided by the Contracting Officer.
- (c) The substance of this clause, including this paragraph (c), shall be included in any subcontract occasioned by this contract under which property described in paragraph (a) of this clause shall be acquired.

(I.179) DEAR 952.219-70, DOE MENTOR-PROTÉGÉ PROGRAM (MAY 2000)

The Department of Energy has established a Mentor-Protege Program to encourage its prime contractors to assist firms certified under section 8(a) of the Small Business Act by SBA, other small disadvantaged businesses, women-owned small businesses, Historically Black Colleges and Universities and Minority Institutions, other minority institutions of higher learning and small business concerns owned and controlled by service disabled veterans in enhancing their business abilities. If the contract resulting from this solicitation is awarded on a cost-plus-award fee basis, the Contractor's performance as a Mentor may be evaluated as part of the award fee plan. Mentor and Protege firms will develop and submit “lessons learned” evaluations to DOE at the conclusion of the contract. Any DOE contractor that is interested in becoming a Mentor

should refer to the applicable regulations at 48 CFR 919.70 and should contact the Department of Energy's Office of Small and Disadvantaged Business Utilization.

(I.180) DEAR 952.223-71, INTEGRATION OF ENVIRONMENT, SAFETY, AND HEALTH INTO WORK PLANNING AND EXECUTION (JULY 2009)

As prescribed in 923.7003 the clause set forth at 970.5223-1 shall be included in all contracts and subcontracts for, and be made applicable to, work to be performed at a government-owned or leased facility where DOE has elected to assert its statutory authority to establish and enforce occupational safety and health standards applicable to the work conditions of contractor and subcontractor employees, and to the protection of the public health and safety.

(I.181) DEAR 952.223-72, RADIATION PROTECTION AND NUCLEAR CRITICALITY (APR 1984)

The Contractor shall take all reasonable precautions in the performance of work under this contract to protect the safety and health of employees and of members of the public against the hazards of ionizing radiation and radioactive materials and shall comply with all applicable radiation protection and nuclear criticality safety standards and requirements (including reporting requirements) of DOE. The Contractor shall submit a management program and implementation plan to the Contracting Officer for review and approval within 30 days after the effective date of this contract or modification. In the event that the Contractor fails to comply with said standards and requirements of DOE, the Contracting Officer may, without prejudice to any other legal or contractual rights of DOE, issue an order stopping all or any part of the work. Thereafter, a start order for resumption of the work may be issued at the discretion of the Contracting Officer. The Contractor shall make no claim for an extension of time or for compensation or damages by reason of or in connection with such work stoppage.

(I.182) DEAR 952.223-75, PRESERVATION OF INDIVIDUAL OCCUPATIONAL RADIATION EXPOSURE RECORDS (APR 1984)

Individual occupational radiation exposure records generated in the performance of work under this contract shall be generated and maintained by the contractor in accordance with 36 CFR Chapter XII, Subchapter B, "Records Management," the National Archives and Records Administration (NARA)-approved DOE Records Disposition Schedules, and shall be operated as a DOE Privacy Act system of records, in accordance with the Privacy Act.

(I.183) DEAR 952.223-76, CONDITIONAL PAYMENT OF FEE OR PROFIT – SAFEGUARDING RESTRICTED DATA AND OTHER CLASSIFIED INFORMATION AND PROTECTION OF WORKER SAFETY AND HEALTH (DEC 2010)

(a) *General.* (1) The payment of fee or profit (i.e., award fee, fixed fee, and incentive fee or profit) under this contract is dependent upon the Contractor's compliance with the terms and conditions of this contract relating to the safeguarding of Restricted Data

and other classified information (i.e., Formerly Restricted Data and National Security Information) and relating to the protection of worker safety and health, including compliance with applicable law, regulation, and DOE directives. The term “contractor” as used in this clause to address failure to comply shall mean “contractor or contractor employee.”

(2) In addition to other remedies available to the Federal Government, if the Contractor fails to comply with the terms and conditions of this contract relating to the safeguarding of Restricted Data and other classified information or relating to the protection of worker safety and health, the Contracting Officer may unilaterally reduce the amount of fee or profit that is otherwise payable to the Contractor in accordance with the terms and conditions of this clause.

(3) Any reduction in the amount of fee or profit earned by the Contractor will be determined by the severity of the Contractor's failure to comply with contract terms and conditions relating to the safeguarding of Restricted Data or other classified information or relating to worker safety and health pursuant to the degrees specified in paragraphs (c) and (d) of this clause.

(b) *Reduction amount.* (1) If in any period (see paragraph (b)(2) of this clause) it is found that the Contractor has failed to comply with contract terms and conditions relating to the safeguarding of Restricted Data or other classified information or relating to the protection of worker safety and health, the Contractor's fee or profit of the period may be reduced. Such reduction shall not be less than 26 percent nor greater than 100 percent of the total fee or profit earned for a first degree performance failure, not less than 11 percent nor greater than 25 percent for a second degree performance failure, and up to 10 percent for a third degree performance failure. The Contracting Officer must consider mitigating factors that may warrant a reduction below the specified range (see 48 CFR 904.402(c) and 48 CFR 923.7002(a)(2)). The mitigating factors include, but are not limited to, the following ((v), (vi), (vii), and (viii) apply to worker safety and health (WS&H) only :

- (i) Degree of control the Contractor had over the event or incident.
- (ii) Efforts the Contractor had made to anticipate and mitigate the possibility of the event in advance.
- (iii) Contractor self-identification and response to the event to mitigate impacts and recurrence.
- (iv) General status (trend and absolute performance) of: Safeguarding Restricted Data and other classified information and compliance in related security areas; or of protecting WS&H and compliance in related areas.
- (v) Contractor demonstration to the Contracting Officer's satisfaction that the principles of industrial WS&H standards are routinely practiced (e.g., Voluntary Protection Program Star Status).

(vi) Event caused by "Good Samaritan" act by the Contractor (e.g., offsite emergency response).

(vii) Contractor demonstration that a performance measurement system is routinely used to improve and maintain WS&H performance (including effective resource allocation) and to support DOE corporate decision-making (e.g., policy, WS&H programs).

(viii) Contractor demonstration that an Operating Experience and Feedback Program is functioning that demonstrably affects continuous improvement in WS&H by use of lessons-learned and best practices inter- and intra-DOE sites.

(2)(i) Except in the case of performance-based, firm-fixed-price contracts (see paragraph (b)(3) of this clause), the Contracting Officer, for purposes of this clause, will at the time of contract award, or as soon as practicable thereafter, allocate the total amount of fee or profit that is available under this contract to equal periods of 12 months to run sequentially for the entire term of the contract (i.e., from the effective date of the contract to the expiration date of the contract, including all options). The amount of fee or profit to be allocated to each period shall be equal to the average monthly fee or profit that is available or otherwise payable during the entire term of the contract, multiplied by the number of months established above for each period.

(ii) Under this clause, the total amount of fee or profit that is subject to reduction in a period in which a performance failure occurs, in combination with any reduction made under any other clause in the contract that provides for a reduction to the fee or profit, shall not exceed the amount of fee or profit that is earned by the Contractor in the period established pursuant to paragraph (b)(2)(i) of this clause.

(3) For performance-based firm-fixed-price contracts, the Contracting Officer will at the time of contract award include negative monetary incentives in the contract for Contractor violations relating to the safeguarding of Restricted Data and other classified information and relating to protection of worker safety and health.

(c) *Safeguarding restricted data and other classified information.* Performance failures occur if the Contractor does not comply with the terms and conditions of this contract relating to the safeguarding of Restricted Data and other classified information. The degrees of performance failures relating to the Contractor's obligations under this contract for safeguarding of Restricted Data and other classified information are as follows:

(1) *First Degree:* Performance failures that have been determined, in accordance with applicable law, regulation, or DOE directive, to have resulted in, or that can reasonably be expected to result in, exceptionally grave damage to the national security. The following are examples of performance failures or performance failures of similar import that will be considered first degree:

- (i) Non-compliance with applicable laws, regulations, and DOE directives actually resulting in, or creating a risk of, loss, compromise, or unauthorized disclosure of Top Secret Restricted Data or other information classified as Top Secret, any classification level of information in a Special Access Program (SAP), information identified as sensitive compartmented information (SCI), or high risk nuclear weapons-related data.
 - (ii) Contractor actions that result in a breakdown of the safeguards and security management system that can reasonably be expected to result in the loss, compromise, or unauthorized disclosure of Top Secret Restricted Data, or other information classified as Top Secret, any classification level of information in a SAP, information identified as SCI, or high risk nuclear weapons-related data.
 - (iii) Failure to promptly report the loss, compromise, or unauthorized disclosure of Top Secret Restricted Data or other information classified as Top Secret, any classification level of information in a SAP, information identified as SCI, or high risk nuclear weapons-related data.
 - (iv) Failure to timely implement corrective actions stemming from the loss, compromise, or unauthorized disclosure of Top Secret Restricted Data or other classified information classified as Top Secret, any classification level of information in a SAP, information identified as SCI, or high risk nuclear weapons-related data.
- (2) *Second Degree*: Performance failures that have been determined, in accordance with applicable law, regulation, or DOE directive, to have actually resulted in, or that can reasonably be expected to result in, serious damage to the national security. The following are examples of performance failures or performance failures of similar import that will be considered second degree:
- (i) Non-compliance with applicable laws, regulations, and DOE directives actually resulting in, or creating risk of, loss, compromise, or unauthorized disclosure of Secret Restricted Data or other information classified as Secret.
 - (ii) Contractor actions that result in a breakdown of the safeguards and security management system that can reasonably be expected to result in the loss, compromise, or unauthorized disclosure of Secret Restricted Data, or other information classified as Secret.
 - (iii) Failure to promptly report the loss, compromise, or unauthorized disclosure of Restricted Data or other classified information regardless of classification (except for information covered by paragraph (c)(1)(iii) of this clause).
 - (iv) Failure to timely implement corrective actions stemming from the loss, compromise, or unauthorized disclosure of Secret Restricted Data or other information classified as Secret.

- (3) *Third Degree*: Performance failures that have been determined, in accordance with applicable law, regulation, or DOE directive, to have actually resulted in, or that can reasonably be expected to result in, undue risk to the common defense and security. In addition, this category includes performance failures that result from a lack of contractor management and/or employee attention to the proper safeguarding of Restricted Data and other classified information. These performance failures may be indicators of future, more severe performance failures and/or conditions, and if identified and corrected early would prevent serious incidents. The following are examples of performance failures or performance failures of similar import will be considered third degree:
- (i) Non-compliance with applicable laws, regulations, and DOE directives actually resulting in, or creating risk of, loss, compromise, or unauthorized disclosure of Restricted Data or other information classified as Confidential.
 - (ii) Failure to promptly report alleged or suspected violations of laws, regulations, or directives pertaining to the safeguarding of Restricted Data or other classified information.
 - (iii) Failure to identify or timely execute corrective actions to mitigate or eliminate identified vulnerabilities and reduce residual risk relating to the protection of Restricted Data or other classified information in accordance with the Contractor's Safeguards and Security Plan or other security plan, as applicable.
 - (iv) Contractor actions that result in performance failures which unto themselves pose minor risk, but when viewed in the aggregate indicate degradation in the integrity of the Contractor's safeguards and security management system relating to the protection of Restricted Data and other classified information.
- (d) *Protection of worker safety and health*. Performance failures occur if the contractor does not comply with the contract's WS&H terms and conditions, which may be included in the DOE approved contractor Integrated Safety Management System (ISMS). The degrees of performance failure under which reductions of fee or profit will be determined are:
- (1) *First Degree*: Performance failures that are most adverse to WS&H or could threaten the successful completion of a program or project. For contracts including ISMS requirements, failure to develop and obtain required DOE approval of WS&H aspects of an ISMS is considered first degree. The Government will perform necessary review of the ISMS in a timely manner and will not unreasonably withhold approval of the WS&H aspects of the Contractor's ISMS. The following performance failures or performance failures of similar import will be deemed first degree:
 - (i) Type A accident (defined in DOE Order 225.1A, Accident Investigations, or its successor).
 - (ii) Two Second Degree performance failures during an evaluation period.

- (2) *Second Degree*: Performance failures that are significantly adverse to WS&H. They include failures to comply with approved WS&H aspects of an ISMS that result in an actual injury, exposure, or exceedence that occurred or nearly occurred but had minor practical long-term health consequences. The following performance failures or performance failures of similar import will be considered second degree:
- (i) Type B accident (defined in DOE Order 225.1A, Accident Investigations, or its successor).
 - (ii) Non-compliance with approved WS&H aspects of an ISMS that results in a near miss of a Type A or B accident. A near miss is a situation in which an inappropriate action occurs, or a necessary action is omitted, but does not result in an adverse effect.
 - (iii) Failure to mitigate or notify DOE of an imminent danger situation after discovery, where such notification is a requirement of the contract.
- (3) *Third Degree*: Performance failures that reflect a lack of focus on improving WS&H. They include failures to comply with approved WS&H aspects of an ISMS that result in potential breakdown of the Contractor's WS&H system. The following performance failures or performance failures of similar import will be considered third degree:
- (i) Failure to implement effective corrective actions to address deficiencies/non-compliance documented through external (e.g., Federal) oversight and/or reported per DOE Manual 231.1-2, Occurrence Reporting and Processing of Operations Information, or its successor, requirements, or internal oversight of DOE Order 470.2B, Independent Oversight and Performance Assurance Program, or its successor, requirements.
 - (ii) Multiple similar non-compliances identified by external (e.g., Federal) oversight that in aggregate indicate a significant WS&H system breakdown.
 - (iii) Non-compliances that either have, or may have, significant negative impacts to workers that indicate a significant WS&H system breakdown.
 - (iv) Failure to notify DOE upon discovery of events or conditions where notification is required by the terms and conditions of the contract.

(I.184) DEAR 952.223-78, SUSTAINABLE ACQUISITION PROGRAM (OCT 2010)

- (a) Pursuant to Executive Order 13423, Strengthening Federal Environmental, Energy and Transportation Management, and Executive Order 13514, Federal Leadership in Environmental, Energy, and Economic Performance, the Department of Energy (DOE) is committed to managing its facilities in an environmentally preferable and sustainable manner that will promote the natural environment and protect the health

and well being of its Federal employees and contractor service providers. In the performance of work under this contract, the Contractor shall provide its services in a manner that promotes the natural environment, reduces greenhouse gas emissions and protects the health and well being of Federal employees, contract service providers and visitors using the facility.

- (b) Green purchasing or sustainable acquisition has several interacting initiatives. The Contractor must comply with initiatives that are current as of the contract award date. DOE may require compliance with revised initiatives from time to time. The Contractor may request an equitable adjustment to the terms of its contract using the procedures in the Changes clause of the contract. The initiatives important to these Orders are explained on the following Government or Industry Internet Sites:

- (1) Recycled Content Products are described at <http://epa.gov/cpg>.
 - (2) Biobased Products are described at <http://www.biopreferred.gov/>.
 - (3) Energy efficient products are at <http://energystar.gov/products> for Energy Star products.
 - (4) Energy efficient products are at <http://www.femp.energy.gov/procurement> for FEMP designated products.
 - (5) Environmentally preferable and energy efficient electronics including desktop computers, laptops and monitors are at <http://www.epeat.net> the Electronic Products Environmental Assessment Tool (EPEAT) the Green Electronics Council site.
 - (6) Green house gas emission inventories are required, including Scope 3 emissions which include contractor emissions. These are discussed at Section 13 of Executive Order 13514 which can be found at <http://www.archives.gov/federal-register/executive-orders/disposition.html>.
 - (7) Non-Ozone Depleting Alternative Products are at <http://www.epa.gov/ozone/strathome.html>.
 - (8) Water efficient plumbing products are at <http://epa.gov/watersense>.
- (c) The clauses at FAR 52.223-2, Affirmative Procurement of Biobased Products under Service and Construction Contracts, 52.223-15, Energy Efficiency in Energy Consuming Products, and 52.223-17 Affirmative Procurement of EPA-Designated Items in Service and Construction Contracts, require the use of products that have biobased content, are energy efficient, or have recycled content. To the extent that the services provided by the Contractor require provision of any of the above types of products, the Contractor must provide the energy efficient and environmentally sustainable type of product unless that type of product—

- (1) Is not available;

- (2) Is not life cycle cost effective or does not exceed 110% of the price of alternative items if life cycle cost data is unavailable (EPEAT is an example of lifecycle costs that have been analyzed by DOE and found to be acceptable at the silver and gold level);
 - (3) Does not meet performance needs; or,
 - (4) Cannot be delivered in time to meet a critical need.
- (d) In the performance of this contract, the Contractor shall comply with the requirements of Executive Order 13423, Strengthening Federal Environmental, Energy and Transportation Management, (<http://www.epa.gov/greeningepa/practices/eo13423.htm>) and Executive Order 13514, Federal Leadership in Environmental, Energy, and Economic Performance (<http://www.archives.gov/federal-register/executive-orders/disposition.html>). The Contractor shall also consider the best practices within the DOE Acquisition Guide, Chapter 23, *Acquisition Considerations Regarding Federal Leadership in Environmental, Energy, and Economic Performance*. This guide includes information concerning recycled content products, biobased products, energy efficient products, water efficient products, alternative fuels and vehicles, non-ozone depleting substances and other environmentally preferable products and services. This guide is available on the Internet at: <http://management.energy.gov/documents/AcqGuide23pt0Rev1.pdf>.
- (e) Contractors must establish and maintain a documented energy management program which includes requirements for energy and water efficient equipment, EnergyStar or WaterSense, as applicable and procedures for verification of purchases, following the criteria in DOE Order 430.2B, Departmental Energy, Renewable Energy, and Transportation Management, Attachment 1, or its successor to the extent required elsewhere in the contract. This requirement should not be flowed down to subcontractors.
- (f) In complying with the requirements of paragraph (c) of this clause, the Contractor(s) shall coordinate its activities with and submit required reports through the Environmental Sustainability Coordinator or equivalent position. Reporting under this paragraph and paragraphs (g) and (h) of this clause is only required if the contract or subcontract offers subcontracting opportunities for energy efficient and environmentally sustainable products or services exceeding \$100,000 in any contract year.
- (g) The Contractor shall prepare and submit performance reports, if required, using prescribed DOE formats, at the end of the Federal fiscal year, on matters related to the acquisition of environmentally preferable and sustainable products and services. This is a material delivery under the contract. Failure to perform this requirement may be considered a failure that endangers performance of this contract and may result in termination for default.

- (h) These provisions shall be flowed down only to first tier subcontracts exceeding the simplified acquisition threshold that support operation of the DOE facility and offer significant subcontracting opportunities for energy efficient or environmentally sustainable products or services. The Subcontractor, if subcontracting opportunities for sustainable and environmentally preferable products or services exceed the threshold in paragraph (f) of this clause, will comply with the procedures in paragraphs (c) through (f) of this clause regarding the collection of all data necessary to generate the reports required under paragraphs (c) through (f) of this clause, and submit the reports directly to the Prime Contractor's Environmental Sustainability Coordinator at the supported facility. The Subcontractor will advise the Contractor if it is unable to procure energy efficient and environmentally sustainable items and cite which of the reasons in paragraph (c) of this clause apply. The reports may be submitted at the conclusion of the subcontract term provided that the subcontract delivery term is not multi-year in nature. If the delivery term is multi-year, the Subcontractor shall report its accomplishments for each Federal fiscal year in a manner and at a time or times acceptable to both parties. Failure to comply with these reporting requirements may be considered a breach of contract with attendant consequences.
- (i) When this clause is used in a subcontract, the word "Contractor" will be understood to mean "Subcontractor."

(I.185) DEAR 952.225-71, COMPLIANCE WITH EXPORT CONTROL LAWS AND REGULATIONS (NOV 2015)

- (a) The Contractor shall comply with all applicable export control laws and regulations.
- (b) The Contractor's responsibility to comply with all applicable export control laws and regulations exists independent of, and is not established or limited by, the information provided by this clause.
- (c) Nothing in the terms of this contract adds to, changes, supersedes, or waives any of the requirements of applicable Federal laws, Executive Orders, and regulations, including but not limited to—
 - (1) The Atomic Energy Act of 1954 (42 U.S.C. 2011 *et seq.*), as amended;
 - (2) The Arms Export Control Act (22 U.S.C. 2751 *et seq.*);
 - (3) The Export Administration Act of 1979 (50 U.S.C. app. 2401 *et seq.*), as continued under the International Emergency Economic Powers Act (Title II of Pub. L. 95-223, 91 Stat. 1626, October 28, 1977; 50 U.S.C. 1701 *et seq.*);
 - (4) Trading with the Enemy Act (50 U.S.C. App. 5(b), as amended by the Foreign Assistance Act of 1961);
 - (5) Assistance to Foreign Atomic Energy Activities (10 CFR part 810);

- (6) Export and Import of Nuclear Equipment and Material (10 CFR part 110);
 - (7) International Traffic in Arms Regulations (ITAR) (22 CFR parts 120 through 130);
 - (8) Export Administration Regulations (EAR) (15 CFR Parts 730 through 774); and
 - (9) The regulations administered by the Office of Foreign Assets Control of the Department of the Treasury (31 CFR parts 500 through 598).
- (d) In addition to the Federal laws and regulations cited above, National Security Decision Directive (NSDD) 189, National Policy on the Transfer of Scientific, Technical, and Engineering Information, establishes a national policy that, to the maximum extent possible, the products of fundamental research shall remain unrestricted. NSDD 189 provides that no restrictions may be placed upon the conduct or reporting of federally funded fundamental research that has not received national security classification, except as provided in applicable U.S. statutes. As a result, contracts confined to the performance of unclassified fundamental research generally do not involve any export-controlled activities.
- NSDD 189 does not take precedence over statutes. NSDD 189 does not exempt any research from statutes that apply to export controls such as the Atomic Energy Act, as amended; the Arms Export Control Act; the Export Administration Act of 1979, as amended; or the U.S. International Emergency Economic Powers Act, or regulations that implement parts of those statutes (e.g., the ITAR, the EAR, 10 CFR part 110 and 10 CFR part 810). Thus, if items (e.g., commodities, software or technologies) that are controlled by U.S. export control laws or regulations are used to conduct research or are generated as part of the research efforts, export control laws and regulations apply to the controlled items.
- (e) The Contractor shall include the substance of this clause, including this paragraph (e), in all solicitations and subcontracts.

(I.186) DEAR 952.226-74, DISPLACED EMPLOYEE HIRING PREFERENCE (JUN 1997)

- (a) *Definition. Eligible employee* means a current or former employee of a contractor or subcontractor employed at a Department of Energy Defense Nuclear Facility (1) whose position of employment has been, or will be, involuntarily terminated (except if terminated for cause), (2) who has also met the eligibility criteria contained in the Department of Energy guidance for contractor work force restructuring, as may be amended or supplemented from time to time, and (3) who is qualified for a particular job vacancy with the Department or one of its contractors with respect to work under its contract with the Department at the time the particular position is available.
- (b) Consistent with Department of Energy guidance for contractor work force restructuring, as may be amended or supplemented from time to time, the Contractor agrees that it will provide a preference in hiring to an eligible employee to the extent practicable for work performed under this contract.

- (c) The requirements of this clause shall be included in subcontracts at any tier (except for subcontracts for commercial items pursuant to 41 U.S.C. 403) expected to exceed \$500,000.

(I.187) DEAR 952.227-82, RIGHTS TO PROPOSAL DATA (APR 1984)

Except for technical data contained on pages ___ of the contractor's proposal dated ___ which are asserted by the contractor as being proprietary data, it is agreed that, as a condition of the award of this contract, and notwithstanding the provisions of any notice appearing on the proposal, the Government shall have the right to use, duplicate, disclose and have others do so for any purpose whatsoever, the technical data contained in the proposal upon which this contract is based.

(I.188) DEAR 952.231-71, INSURANCE--LITIGATION AND CLAIMS (JUL 2013)

- (a) The contractor must comply with 10 CFR part 719, contractor Legal Management Requirements, if applicable.
- (b)(1) Except as provided in paragraph (b)(2) of this clause, the contractor shall procure and maintain such bonds and insurance as required by law or approved in writing by the Contracting Officer.
- (2) The contractor may, with the approval of the Contracting Officer, maintain a self-insurance program in accordance with FAR 28.308; provided that, with respect to workers' compensation, the contractor is qualified pursuant to statutory authority.
- (3) All bonds and insurance required by this clause shall be in a form and amount and for those periods as the Contracting Officer may require or approve and with sureties and insurers approved by the Contracting Officer.
- (c) The contractor agrees to submit for the Contracting Officer's approval, to the extent and in the manner required by the Contracting Officer, any other bonds and insurance that are maintained by the contractor in connection with the performance of this contract and for which the contractor seeks reimbursement. If an insurance cost (whether a premium for commercial insurance or related to self-insurance) includes a portion covering costs made unallowable elsewhere in the contract, and the share of the cost for coverage for the unallowable cost is determinable, the portion of the cost that is otherwise an allowable cost under this contract is reimbursable to the extent determined by the Contracting Officer.
- (d) Except as provided in paragraph (f) of this clause, or specifically disallowed elsewhere in this contract, the contractor shall be reimbursed—
 - (1) For that portion of the reasonable cost of bonds and insurance allocable to this contract required in accordance with contract terms or approved under this clause, and

- (2) For liabilities (and reasonable expenses incidental to such liabilities, including litigation costs) to third persons not compensated by insurance without regard to the limitation of cost or limitation of funds clause of this contract.
- (e) The Government's liability under paragraph (d) of this clause is subject to the availability of appropriated funds. Nothing in this contract shall be construed as implying that the Congress will, at a later date, appropriate funds sufficient to meet deficiencies.
- (f)(1) Notwithstanding any other provision of this contract, the contractor shall not be reimbursed for liabilities to third parties, including contractor employees, and directly associated costs which may include but are not limited to litigation costs, counsel fees, judgment and settlements—
 - (i) Which are otherwise unallowable by law or the provisions of this contract, including the cost reimbursement limitations contained in 48 CFR part 970.31, as supplemented by 48 CFR part 931;
 - (ii) For which the contractor has failed to insure or to maintain insurance as required by law, this contract, or by the written direction of the Contracting Officer; or
 - (iii) Which were caused by contractor managerial personnel's—
 - (A) Willful misconduct;
 - (B) Lack of good faith; or
 - (C) Failure to exercise prudent business judgment, which means failure to act in the same manner as a prudent person in the conduct of competitive business; or, in the case of a non-profit educational institution, failure to act in the manner that a prudent person would under the circumstances prevailing at the time the decision to incur the cost is made.
- (2) The term "contractor's managerial personnel" is defined in the Property clause in this contract.
- (g)(1) All litigation costs, including counsel fees, judgments and settlements shall be segregated and accounted for by the contractor separately. If the Contracting Officer provisionally disallows such costs, then the contractor may not use funds advanced by DOE under the contract to finance the litigation.
- (2) Punitive damages are not allowable unless the act or failure to act which gave rise to the liability resulted from compliance with specific terms and conditions of the contract or written instructions from the Contracting Officer.
- (3) The portion of the cost of insurance obtained by the contractor that is allocable to coverage of liabilities referred to in paragraph (f) of this clause is not allowable.

- (h) The contractor may at its own expense and not as an allowable cost procure for its own protection insurance to compensate the contractor for any unallowable or non-reimbursable costs incurred in connection with contract performance.

(I.189) DEAR 952.242-70, TECHNICAL DIRECTION (DEC 2000)

- (a) Performance of the work under this contract shall be subject to the technical direction of the DOE Contracting Officer's Representative (COR). The term "technical direction" is defined to include, without limitation:
 - (1) Providing direction to the Contractor that redirects contract effort, shifts work emphasis between work areas or tasks, requires pursuit of certain lines of inquiry, fills in details, or otherwise serves to accomplish the contractual SOW.
 - (2) Providing written information to the Contractor that assists in interpreting drawings, specifications, or technical portions of the work description.
 - (3) Reviewing and, where required by the contract, approving, technical reports, drawings, specifications, and technical information to be delivered by the Contractor to the DOE.
- (b) The Contractor will receive a copy of the written COR designation from the CO. It will specify the extent of the COR's authority to act on behalf of the CO.
- (c) Technical direction must be within the scope of work stated in the contract. The COR does not have the authority to, and may not, issue any technical direction that:
 - (1) Constitutes an assignment of additional work outside the SOW;
 - (2) Constitutes a change as defined in the contract clause entitled "Changes;"
 - (3) Changes contract cost, the fee (if any), or the time required for contract performance;
 - (4) Changes any of the expressed terms, conditions or specifications of the contract;
or
 - (5) Interferes with the Contractor's right to perform to the terms and conditions of the contract.
- (d) All technical direction shall be issued in writing by the COR.
- (e) The Contractor must proceed promptly with the performance of technical direction duly issued by the COR in the manner prescribed by this clause and within its authority under the provisions of this clause. If, in the opinion of the Contractor, any instruction or direction by the COR falls within one of the categories defined in (c)(1) through (c)(5) of this clause, the Contractor must not proceed and must notify the CO in writing within five working days after receipt of any such instruction or direction

and must request the CO to modify the contract accordingly. Upon receiving the notification from the Contractor, the CO must:

- (1) Advise the Contractor in writing within 30 days after receipt of the Contractor's letter that the technical direction is within the scope of the contract effort and does not constitute a change under the Changes clause of the contract;
 - (2) Advise the Contractor in writing within a reasonable time that the DOE will issue a written change order; or
 - (3) Advise the Contractor in writing within a reasonable time not to proceed with the instruction or direction of the COR.
- (f) A failure of the Contractor and CO either to agree that the technical direction is within the scope of the contract or to agree upon the contract action to be taken with respect the technical direction will be subject to the provisions of the clause in Section I, 52.233-1 "Disputes."

(I.190) DEAR 952.247-70, FOREIGN TRAVEL (JUN 2010)

Contractor foreign travel shall be conducted pursuant to the requirements contained in Department of Energy (DOE) Order 551.1C, Official Foreign Travel, or its successor in effect at the time of award.

(I.191) DEAR 952.250-70, NUCLEAR HAZARDS INDEMNITY AGREEMENT (JUN 1996)

- (a) *Authority.* This clause is incorporated into this contract pursuant to the authority contained in subsection 170d. of the Atomic Energy Act of 1954, as amended (hereinafter called the Act.)
- (b) *Definitions.* The definitions set out in the Act shall apply to this clause.
- (c) *Financial protection.* Except as hereafter permitted or required in writing by DOE, the Contractor will not be required to provide or maintain, and will not provide or maintain at Government expense, any form of financial protection to cover public liability, as described in paragraph (d)(2) below. DOE may, however, at any time require in writing that the Contractor provide and maintain financial protection of such a type and in such amount as DOE shall determine to be appropriate to cover such public liability, provided that the costs of such financial protection are reimbursed to the Contractor by DOE.
- (d)(1) *Indemnification.* To the extent that the Contractor and other persons indemnified are not compensated by any financial protection permitted or required by DOE, DOE will indemnify the Contractor and other persons indemnified against (i) claims for public liability as described in subparagraph (d)(2) of this clause; and (ii) such legal costs of the Contractor and other persons indemnified as are approved by DOE, provided that DOE's liability, including such legal costs, shall not exceed the amount

set forth in section 170e.(1)(B) of the Act in the aggregate for each nuclear incident or precautionary evacuation occurring within the United States or \$100 million in the aggregate for each nuclear incident occurring outside the United States, irrespective of the number of persons indemnified in connection with this contract.

(2) The public liability referred to in subparagraph (d)(1) of this clause is public liability as defined in the Act which (i) arises out of or in connection with the activities under this contract, including transportation; and (ii) arises out of or results from a nuclear incident or precautionary evacuation, as those terms are defined in the Act.

(e)(1) *Waiver of defenses.* In the event of a nuclear incident, as defined in the Act, arising out of nuclear waste activities, as defined in the Act, the Contractor, on behalf of itself and other persons indemnified, agrees to waive any issue or defense as to charitable or governmental immunity.

(2) In the event of an extraordinary nuclear occurrence which—

(i) Arises out of, results from, or occurs in the course of the construction, possession, or operation of a production or utilization facility; or

(ii) Arises out of, results from, or occurs in the course of transportation of source material, by-product material, or special nuclear material to or from a production or utilization facility; or

(iii) Arises out of or results from the possession, operation, or use by the Contractor or a subcontractor of a device utilizing special nuclear material or by-product material, during the course of the contract activity; or

(iv) Arises out of, results from, or occurs in the course of nuclear waste activities, the Contractor, on behalf of itself and other persons indemnified, agrees to waive—

(A) Any issue or defense as to the conduct of the claimant (including the conduct of persons through whom the claimant derives its cause of action) or fault of persons indemnified, including, but not limited to—

(1) Negligence;

(2) Contributory negligence;

(3) Assumption of risk; or

(4) Unforeseeable intervening causes, whether involving the conduct of a third person or an act of God;

(B) Any issue or defense as to charitable or governmental immunity; and

- (C) Any issue or defense based on any statute of limitations, if suit is instituted within 3 years from the date on which the claimant first knew, or reasonably could have known, of his injury or change and the cause thereof. The waiver of any such issue or defense shall be effective regardless of whether such issue or defense may otherwise be deemed jurisdictional or relating to an element in the cause of action. The waiver shall be judicially enforceable in accordance with its terms by the claimant against the person indemnified.
- (v) The term *extraordinary nuclear occurrence* means an event which DOE has determined to be an extraordinary nuclear occurrence as defined in the Act. A determination of whether or not there has been an extraordinary nuclear occurrence will be made in accordance with the procedures in 10 CFR part 840.
- (vi) For the purposes of that determination, *offsite* as that term is used in 10 CFR part 840 means away from "the contract location" which phrase means any DOE facility, installation, or site at which contractual activity under this contract is being carried on, and any contractor-owned or controlled facility, installation, or site at which the Contractor is engaged in the performance of contractual activity under this contract.
- (3) The waivers set forth above—
- (i) Shall be effective regardless of whether such issue or defense may otherwise be deemed jurisdictional or relating to an element in the cause of action;
 - (ii) Shall be judicially enforceable in accordance with its terms by the claimant against the person indemnified;
 - (iii) Shall not preclude a defense based upon a failure to take reasonable steps to mitigate damages;
 - (iv) Shall not apply to injury or damage to a claimant or to a claimant's property which is intentionally sustained by the claimant or which results from a nuclear incident intentionally and wrongfully caused by the claimant;
 - (v) Shall not apply to injury to a claimant who is employed at the site of and in connection with the activity where the extraordinary nuclear occurrence takes place, if benefits therefor are either payable or required to be provided under any workmen's compensation or occupational disease law;
 - (vi) Shall not apply to any claim resulting from a nuclear incident occurring outside the United States;
 - (vii) Shall be effective only with respect to those obligations set forth in this clause and in insurance policies, contracts or other proof of financial protection; and

- (viii) Shall not apply to, or prejudice the prosecution or defense of, any claim or portion of claim which is not within the protection afforded under (A) the limit of liability provisions under subsection 170e. of the Act, and (B) the terms of this agreement and the terms of insurance policies, contracts, or other proof of financial protection.
- (f) *Notification and litigation of claims.* The Contractor shall give immediate written notice to DOE of any known action or claim filed or made against the Contractor or other person indemnified for public liability as defined in paragraph (d)(2). Except as otherwise directed by DOE, the Contractor shall furnish promptly to DOE, copies of all pertinent papers received by the Contractor or filed with respect to such actions or claims. DOE shall have the right to, and may collaborate with, the Contractor and any other person indemnified in the settlement or defense of any action or claim and shall have the right to (1) require the prior approval of DOE for the payment of any claim that DOE may be required to indemnify hereunder; and (2) appear through the Attorney General on behalf of the Contractor or other person indemnified in any action brought upon any claim that DOE may be required to indemnify hereunder, take charge of such action, and settle or defend any such action. If the settlement or defense of any such action or claim is undertaken by DOE, the Contractor or other person indemnified shall furnish all reasonable assistance in effecting a settlement or asserting a defense.
- (g) *Continuity of DOE obligations.* The obligations of DOE under this clause shall not be affected by any failure on the part of the Contractor to fulfill its obligation under this contract and shall be unaffected by the death, disability, or termination of existence of the Contractor, or by the completion, termination or expiration of this contract.
- (h) *Effect of other clauses.* The provisions of this clause shall not be limited in any way by, and shall be interpreted without reference to, any other clause of this contract, including the clause entitled Contract Disputes, provided, however, that this clause shall be subject to the clauses entitled Covenant Against Contingent Fees, and Accounts, records, and inspection, and any provisions that are later added to this contract as required by applicable Federal law, including statutes, executive orders and regulations, to be included in Nuclear Hazards Indemnity Agreements.
- (i) *Civil penalties.* The Contractor and its subcontractors and suppliers who are indemnified under the provisions of this clause are subject to civil penalties, pursuant to 234A of the Act, for violations of applicable DOE nuclear-safety related rules, regulations, or orders.
- (j) *Criminal penalties.* Any individual director, officer, or employee of the Contractor or of its subcontractors and suppliers who are indemnified under the provisions of this clause are subject to criminal penalties, pursuant to 223(c) of the Act, for knowing and willful violation of the Atomic Energy Act of 1954, as amended, and applicable DOE nuclear safety-related rules, regulations or orders which violation results in, or, if undetected, would have resulted in a nuclear incident.

- (k) *Inclusion in subcontracts.* The Contractor shall insert this clause in any subcontract which may involve the risk of public liability, as that term is defined in the Act and further described in paragraph (d)(2) above. However, this clause shall not be included in subcontracts in which the subcontractor is subject to Nuclear Regulatory Commission (NRC) financial protection requirements under section 170b. of the Act or NRC agreements of indemnification under section 170c. or k. of the Act for the activities under the subcontract.

Effective date

- () See note II below for instructions related to this section on Effective Date.

Relationship to general indemnity

- () See note III below for instructions related to this section on Relationship to General Indemnity.

(I.192) DEAR 952.251-70, CONTRACTOR EMPLOYEE TRAVEL DISCOUNTS (AUG 2009)

- (a) The Contractor shall take advantage of travel discounts offered to Federal Contractor employee travelers by AMTRAK, hotels, motels, or car rental companies, when use of such discounts would result in lower overall trip costs and the discounted services are reasonably available. Vendors providing these services may require the Contractor employee to furnish them a letter of identification signed by the authorized Contracting Officer.
- (b) *Contracted airlines.* Contractors are not eligible for GSA contract city pair fares.
- (c) *Discount rail service.* AMTRAK voluntarily offers discounts to Federal travelers on official business and sometimes extends those discounts to Federal contractor employees.
- (d) *Hotels/motels.* Many lodging providers extend their discount rates for Federal employees to Federal contractor employees.
- (e) *Car rentals.* The Surface Deployment and Distribution Command (SDDC) of the Department of Defense negotiates rate agreements with car rental companies that are available to Federal travelers on official business. Some car rental companies extend those discounts to Federal contractor employees.
- (f) *Obtaining travel discounts.* (1) To determine which vendors offer discounts to Government contractors, the Contractor may review commercial publications such as the Official Airline guides Official Traveler, Innovata, or National Telecommunications. The Contractor may also obtain this information from GSA contract Travel Management Centers or the Department of Defense's Commercial Travel Offices.

- (2) The vendor providing the service may require the Government contractor to furnish a letter signed by the Contracting Officer. The following illustrates a standard letter of identification.

(I.193) DEAR 970.5204-1, COUNTERINTELLIGENCE (DEC 2010)

- (a) The Contractor shall take all reasonable precautions in the work under this contract to protect DOE programs, facilities, technology, personnel, unclassified sensitive information and classified matter from foreign intelligence threats and activities conducted for governmental or industrial purposes, in accordance with DOE Order 475.1, Counterintelligence Program, or its successor; Executive Order 12333, U.S. Intelligence Activities; and other pertinent national and Departmental Counterintelligence requirements.
- (b) The Contractor shall appoint a qualified employee(s) to function as the Contractor Counterintelligence Officer. The Contractor Counterintelligence Officer will be responsible for conducting defensive Counterintelligence briefings and debriefings of employees traveling to foreign countries or interacting with foreign nationals; providing thoroughly documented written reports relative to targeting, suspicious activity and other matters of Counterintelligence interest; immediately reporting targeting, suspicious activity and other Counterintelligence concerns to the DOE Headquarters Counterintelligence Division; and providing assistance to other elements of the U.S. Intelligence Community as stated in the aforementioned Executive Order, the DOE Counterintelligence Order, and other pertinent national and Departmental Counterintelligence requirements.

(I.194) DEAR 970.5204-2, LAWS, REGULATIONS, AND DOE DIRECTIVES (DEC 2000)

- (a) In performing work under this contract, the Contractor shall comply with the requirements of applicable Federal, State, and local laws and regulations (including DOE regulations), unless relief has been granted in writing by the appropriate regulatory agency. A List of Applicable Laws and regulations (List A) may be appended to this contract for information purposes. Omission of any applicable law or regulation from List A does not affect the obligation of the Contractor to comply with such law or regulation pursuant to this paragraph.
- (b) In performing work under this contract, the Contractor shall comply with the requirements of those Department of Energy directives, or parts thereof, identified in the List of Applicable Directives (List B) appended to this contract. Except as otherwise provided for in paragraph (d) of this clause, the Contracting Officer may, from time to time and at any time, revise List B by unilateral modification to the contract to add, modify, or delete specific requirements. Prior to revising List B, the Contracting Officer shall notify the Contractor in writing of the Department's intent to revise List B and provide the Contractor with the opportunity to assess the effect of the Contractor's compliance with the revised list on contract cost and funding, technical performance, and schedule; and identify any potential inconsistencies between the revised list and the other terms and conditions of the contract. Within 30

days after receipt of the Contracting Officer's notice, the Contractor shall advise the Contracting Officer in writing of the potential impact of the Contractor's compliance with the revised list. Based on the information provided by the Contractor and any other information available, the Contracting Officer shall decide whether to revise List B and so advise the Contractor not later than 30 days prior to the effective date of the revision of List B. The Contractor and the Contracting Officer shall identify and, if appropriate, agree to any changes to other contract terms and conditions, including cost and schedule, associated with the revision of List B pursuant to the clause of this contract entitled, "Changes."

- (c) Environmental, safety, and health (ES&H) requirements appropriate for work conducted under this contract may be determined by a DOE approved process to evaluate the work and the associated hazards and identify an appropriately tailored set of standards, practices, and controls, such as a tailoring process included in a DOE approved Safety Management System implemented under the clause entitled "Integration of Environment, Safety, and Health into Work Planning and Execution." When such a process is used, the set of tailored (ES&H) requirements, as approved by DOE pursuant to the process, shall be incorporated into List B as contract requirements with full force and effect. These requirements shall supersede, in whole or in part, the contractual environmental, safety, and health requirements previously made applicable to the contract by List B. If the tailored set of requirements identifies an alternative requirement varying from an ES&H requirement of an applicable law or regulation, the Contractor shall request an exemption or other appropriate regulatory relief specified in the regulation.
- (d) Except as otherwise directed by the Contracting Officer, the Contractor shall procure all necessary permits or licenses required for the performance of work under this contract.
- (e) Regardless of the performer of the work, the Contractor is responsible for compliance with the requirements of this clause. The Contractor is responsible for flowing down the requirements of this clause to subcontracts at any tier to the extent necessary to ensure the Contractor's compliance with the requirements.

(I.195) DEAR 970.5204-3, ACCESS TO AND OWNERSHIP OF RECORDS (OCT 2014)

- (a) *Government-owned records.* Except as provided in paragraph (b) of this clause, all records acquired or generated by the contractor in its performance of this contract, including records series described within the contract as Privacy Act systems of records, shall be the property of the Government and shall be maintained in accordance with 36 CFR, Chapter XII, Subchapter B, "Records Management." The contractor shall ensure records classified as Privacy Act system of records are maintained in accordance with FAR 52.224.2 "Privacy Act."
- (b) *Contractor-owned records.* The following records are considered the property of the contractor and are not within the scope of paragraph (a) of this clause.

- (1) Employment-related records (such as worker's compensation files; employee relations records, records on salary and employee benefits; drug testing records, labor negotiation records; records on ethics, employee concerns; records generated during the course of responding to allegations of research misconduct; records generated during other employee related investigations conducted under an expectation of confidentiality; employee assistance program records; and personnel and medical/health-related records and similar files), and nonemployee patient medical/health-related records, excluding records operated and maintained by the Contractor in Privacy Act system of records. Employee-related systems of record may include, but are not limited to: Employee Relations Records (DOE-3), Personnel Records of Former Contractor Employees (DOE-5), Payroll and Leave Records (DOE-13), Report of Compensation (DOE-14), Personnel Medical Records (DOE-33), Employee Assistance Program (EAP) Records (DOE-34) and Personnel Radiation Exposure Records (DOE-35).
 - (2) Confidential contractor financial information, internal corporate governance records and correspondence between the contractor and other segments of the contractor located away from the DOE facility (i.e., the contractor's corporate headquarters);
 - (3) Records relating to any procurement action by the contractor, except for records that under 48 CFR 970.5232-3 are described as the property of the Government; and
 - (4) Legal records, including legal opinions, litigation files, and documents covered by the attorney-client and attorney work product privileges; and
 - (5) The following categories of records maintained pursuant to the technology transfer clause of this contract:
 - (i) Executed license agreements, including exhibits or appendices containing information on royalties, royalty rates, other financial information, or commercialization plans, and all related documents, notes and correspondence.
 - (ii) The contractor's protected Cooperative Research and Development Agreement (CRADA) information and appendices to a CRADA that contain licensing terms and conditions, or royalty or royalty rate information.
 - (iii) Patent, copyright, mask work, and trademark application files and related contractor invention disclosures, documents and correspondence, where the contractor has elected rights or has permission to assert rights and has not relinquished such rights or turned such rights over to the Government.
- (c) *Contract completion or termination.* Upon contract completion or termination, the contractor shall ensure final disposition of all Government-owned records to a Federal Record Center, the National Archives and Records Administration, to a successor contractor, its designee, or other destinations, as directed by the Contracting Officer. Upon the request of the Government, the contractor shall

provide either the original contractor-owned records or copies of the records identified in paragraph (b) of this clause, to DOE or its designees, including successor contractors. Upon delivery, title to such records shall vest in DOE or its designees, and such records shall be protected in accordance with applicable federal laws (including the Privacy Act) as appropriate. If the contractor chooses to provide its original contractor-owned records to the Government or its designee, the contractor shall retain future rights to access and copy such records as needed.

- (e) *Applicability.* This clause applies to all records created, received and maintained by the contractor without regard to the date or origination of such records including all records acquired from a predecessor contractor.
- (f) *Records maintenance and retention.* Contractor shall create, maintain, safeguard, and disposition records in accordance with 36 CFR Chapter XII, Subchapter B, "Records Management" and the National Archives and Records Administration (NARA)-approved Records Disposition Schedules. Records retention standards are applicable for all classes of records, whether or not the records are owned by the Government or the contractor. The Government may waive application of the NARA-approved Records Disposition Schedules, if, upon termination or completion of the contract, the Government exercises its right under paragraph (c) of this clause to obtain copies of records described in paragraph (b) and delivery of records described in paragraph (a) of this clause.
- (g) *Subcontracts.* The contractor shall include the requirements of this clause in all subcontracts that contain the *Integration of Environment, Safety and Health into Work Planning and Execution* clause at 952.223–71 or, the *Radiation Protection and Nuclear Criticality* clause at 952.223–72.

(I.196) DEAR 970.5223-4, WORKPLACE SUBSTANCE ABUSE PROGRAMS AT DOE SITES (DEC 2010)

- (a) *Program implementation.* The Contractor shall, consistent with 10 CFR part 707, Workplace Substance Abuse Programs at DOE Sites, incorporated herein by reference with full force and effect, develop, implement, and maintain a workplace substance abuse program.
- (b) *Remedies.* In addition to any other remedies available to the Government, the Contractor's failure to comply with the requirements of 10 CFR part 707 or to perform in a manner consistent with its approved program may render the Contractor subject to: the suspension of contract payments, or, where applicable, a reduction in award fee; termination for default; and suspension or debarment.
- (c) *Subcontracts.* (1) The Contractor agrees to notify the Contracting Officer reasonably in advance of, but not later than 30 days prior to, the award of any subcontract the Contractor believes may be subject to the requirements of 10 CFR part 707, unless the Contracting Officer agrees to a different date.

- (2) The DOE Prime Contractor shall require all subcontracts subject to the provisions of 10 CFR part 707 to agree to develop and implement a workplace substance abuse program that complies with the requirements of 10 CFR part 707, Workplace Substance Abuse Programs at DOE Sites, as a condition for award of the subcontract. The DOE Prime Contractor shall review and approve each subcontractor's program, and shall periodically monitor each subcontractor's implementation of the program for effectiveness and compliance with 10 CFR part 707.
- (3) The Contractor agrees to include, and require the inclusion of, the requirements of this clause in all subcontracts, at any tier, that are subject to the provisions of 10 CFR part 707.

(I.197) DEAR 970.5223-6, EXECUTIVE ORDER 13423, STRENGTHENING FEDERAL ENVIRONMENTAL, ENERGY, AND TRANSPORTATION MANAGEMENT (OCT 2010)

Since this contract involves Contractor operation of Government-owned facilities and/or motor vehicles, the provisions of Executive Order 13423 are applicable to the Contractor to the same extent they would be applicable if the Government were operating the facilities or motor vehicles. Information on the requirements of the Executive Order may be found at <http://www.archives.gov/federal-register/executive-orders/>.

(I.198) DEAR 970.5226-3, COMMUNITY COMMITMENT (DEC 2000)

It is the policy of the DOE to be a constructive partner in the geographic region in which DOE conducts its business. The basic elements of this policy include: (1) Recognizing the diverse interests of the region and its stakeholders, (2) engaging regional stakeholders in issues and concerns of mutual interest, and (3) recognizing that giving back to the community is a worthwhile business practice. Accordingly, the Contractor agrees that its business operations and performance under the Contract will be consistent with the intent of the policy and elements set forth above.

(I.199) DEAR 970.5227-1, RIGHTS IN DATA-FACILITIES

- (a) *Definitions.* (1) *Computer data bases*, as used in this clause, means a collection of data in a form capable of, and for the purpose of, being stored in, processed, and operated on by a computer. The term does not include computer software.
- (2) *Computer software*, as used in this clause, means (i) computer programs which are data comprising a series of instructions, rules, routines, or statements, regardless of the media in which recorded, that allow or cause a computer to perform a specific operation or series of operations and (ii) data comprising source code listings, design details, algorithms, processes, flow charts, formulae,

and related material that would enable the computer program to be produced, created, or compiled. The term does not include computer data bases.

- (3) *Data*, as used in this clause, means recorded information, regardless of form or the media on which it may be recorded. The term includes technical data and computer software. The term "data" does not include data incidental to the administration of this contract, such as financial, administrative, cost and pricing, or management information.
- (4) *Limited rights data*, as used in this clause, means data, other than computer software, developed at private expense that embody trade secrets or are commercial or financial and confidential or privileged. The Government's rights to use, duplicate, or disclose limited rights data are as set forth in the Limited Rights Notice of subparagraph (e) of this clause.
- (5) *Restricted computer software*, as used in this clause, means computer software developed at private expense and that is a trade secret; is commercial or financial and is confidential or privileged; or is published copyrighted computer software, including minor modifications of any such computer software. The Government's rights to use, duplicate, or disclose restricted computer software are as set forth in the Restricted Rights Notice of paragraph (f) of this clause.
- (6) *Technical data*, as used in this clause, means recorded data, regardless of form or characteristic, that are of a scientific or technical nature. Technical data does not include computer software, but does include manuals and instructional materials and technical data formatted as a computer data base.
- (7) *Unlimited rights*, as used in this clause, means the right of the Government to use, disclose, reproduce, prepare derivative works, distribute copies to the public, including by electronic means, and perform publicly and display publicly, in any manner, including by electronic means, and for any purpose whatsoever, and to have or permit others to do so.

(b) *Allocation of Rights.* (1) The Government shall have:

- (i) Ownership of all technical data and computer software first produced in the performance of this Contract;
- (ii) Unlimited rights in technical data and computer software specifically used in the performance of this Contract, except as provided herein regarding copyright, limited rights data, or restricted computer software, or except for other data specifically protected by statute for a period of time or, where, approved by DOE, appropriate instances of the DOE Strategic Partnership Projects Program;
- (iii) The right to inspect technical data and computer software first produced or specifically used in the performance of this Contract at all reasonable times.

The Contractor shall make available all necessary facilities to allow DOE personnel to perform such inspection;

- (iv) The right to have all technical data and computer software first produced or specifically used in the performance of this Contract delivered to the Government or otherwise disposed of by the Contractor, either as the contracting officer may from time to time direct during the progress of the work or in any event as the contracting officer shall direct upon completion or termination of this Contract. The Contractor agrees to leave a copy of such data at the facility or plant to which such data relate, and to make available for access or to deliver to the Government such data upon request by the contracting officer. If such data are limited rights data or restricted computer software, the rights of the Government in such data shall be governed solely by the provisions of paragraph (e) of this clause ("Rights in Limited Rights Data") or paragraph (f) of this clause ("Rights in Restricted Computer Software"); and
- (v) The right to remove, cancel, correct, or ignore any markings not authorized by the terms of this Contract on any data furnished hereunder if, in response to a written inquiry by DOE concerning the propriety of the markings, the Contractor fails to respond thereto within 60 days or fails to substantiate the propriety of the markings. In either case DOE will notify the Contractor of the action taken.

(2) The Contractor shall have:

- (i) The right to withhold limited rights data and restricted computer software unless otherwise provided in accordance with the provisions of this clause; and
- (ii) The right to use for its private purposes, subject to patent, security or other provisions of this Contract, data it first produces in the performance of this Contract, except for data in DOE's Uranium Enrichment Technology, including diffusion, centrifuge, and atomic vapor laser isotope separation, provided the data requirements of this Contract have been met as of the date of the private use of such data.

(3) The Contractor agrees that for limited rights data or restricted computer software or other technical, business or financial data in the form of recorded information which it receives from, or is given access to by, DOE or a third party, including a DOE Contractor or subcontractor, and for technical data or computer software it first produces under this Contract which is authorized to be marked by DOE, the Contractor shall treat such data in accordance with any restrictive legend contained thereon.

(c) *Copyrighted Material.* (1) The Contractor shall not, without prior written authorization of the Patent Counsel, assert copyright in any technical data or computer software first produced in the performance of this contract. To the extent such authorization is

granted, the Government reserves for itself and others acting on its behalf, a nonexclusive, paid-up, irrevocable, world-wide license for Governmental purposes to publish, distribute, translate, duplicate, exhibit, and perform any such data copyrighted by the Contractor.

- (2) The Contractor agrees not to include in the technical data or computer software delivered under the contract any material copyrighted by the Contractor and not to knowingly include any material copyrighted by others without first granting or obtaining at no cost a license therein for the benefit of the Government of the same scope as set forth in paragraph (c)(1) of this clause. If the Contractor believes that such copyrighted material for which the license cannot be obtained must be included in the technical data or computer software to be delivered, rather than merely incorporated therein by reference, the Contractor shall obtain the written authorization of the contracting officer to include such material in the technical data or computer software prior to its delivery.
- (d) *Subcontracting.* (1) Unless otherwise directed by the contracting officer, the Contractor agrees to use in subcontracts in which technical data or computer software is expected to be produced or in subcontracts for supplies that contain a requirement for production or delivery of data in accordance with the policy and procedures of 48 CFR Subpart 27.4 as supplemented by 48 CFR 927.401 through 927.409, the clause entitled, "Rights in Data-General" at 48 CFR 52.227-14 modified in accordance with 927.409(a) and including Alternate V. Alternates II through IV of that clause may be included as appropriate with the prior approval of DOE Patent Counsel, and the Contractor shall not acquire rights in a subcontractor's limited rights data or restricted computer software, except through the use of Alternates II or III, respectively, without the prior approval of DOE Patent Counsel. The clause at 48 CFR 52.227-16, Additional Data Requirements, shall be included in subcontracts in accordance with DEAR 927.409(h). The contractor shall use instead the Rights in Data-Facilities clause at 48 CFR 970.5227-1 in subcontracts, including subcontracts for related support services, involving the design or operation of any plants or facilities or specially designed equipment for such plants or facilities that are managed or operated under its contract with DOE.
- (2) It is the responsibility of the Contractor to obtain from its subcontractors technical data and computer software and rights therein, on behalf of the Government, necessary to fulfill the Contractor's obligations to the Government with respect to such data. In the event of refusal by a subcontractor to accept a clause affording the Government such rights, the Contractor shall:
- (i) Promptly submit written notice to the contracting officer setting forth reasons or the subcontractor's refusal and other pertinent information which may expedite disposition of the matter, and
 - (ii) Not proceed with the subcontract without the written authorization of the contracting officer.

- (3) Neither the Contractor nor higher-tier subcontractors shall use their power to award subcontracts as economic leverage to acquire rights in a subcontractor's limited rights data or restricted computer software for their private use.
- (e) *Rights in Limited Rights Data.* Except as may be otherwise specified in this Contract as data which are not subject to this paragraph, the Contractor agrees to and does hereby grant to the Government an irrevocable, nonexclusive, paid-up license by or for the Government, in any limited rights data of the Contractor specifically used in the performance of this Contract, provided, however, that to the extent that any limited rights data when furnished or delivered is specifically identified by the Contractor at the time of initial delivery to the Government or a representative of the Government, such data shall not be used within or outside the Government except as provided in the "Limited Rights Notice" set forth. All such limited rights data shall be marked with the following "Limited Rights Notice":

Limited Rights Notice

These data contain "limited rights data," furnished under Contract No. _____ with the United States Department of Energy which may be duplicated and used by the Government with the express limitations that the "limited rights data" may not be disclosed outside the Government or be used for purposes of manufacture without prior permission of the Contractor, except that further disclosure or use may be made solely for the following purposes:

- (a) Use (except for manufacture) by support services contractors within the scope of their contracts;
- (b) This "limited rights data" may be disclosed for evaluation purposes under the restriction that the "limited rights data" be retained in confidence and not be further disclosed;
- (c) This "limited rights data" may be disclosed to other contractors participating in the Government's program of which this Contract is a part for information or use (except for manufacture) in connection with the work performed under their contracts and under the restriction that the "limited rights data" be retained in confidence and not be further disclosed;
- (d) This "limited rights data" may be used by the Government or others on its behalf for emergency repair or overhaul work under the restriction that the "limited rights data" be retained in confidence and not be further disclosed; and
- (e) Release to a foreign government, or instrumentality thereof, as the interests of the United States Government may require, for information or evaluation, or for emergency repair or overhaul work by such government. This Notice shall be marked on any reproduction of this data in whole or in part.

(End of notice)

- (f) *Rights in restricted computer software.* (1) Except as may be otherwise specified in this Contract as data which are not subject to this paragraph, the Contractor agrees to and does hereby grant to the Government an irrevocable, nonexclusive, paid-up, license by or for the Government, in any restricted computer software of the Contractor specifically used in the performance of this Contract, provided, however, that to the extent that any restricted computer software when furnished or delivered is specifically identified by the Contractor at the time of initial delivery to the Government or a representative of the Government, such data shall not be used within or outside the Government except as provided in the "Restricted Rights Notice" set forth below. All such restricted computer software shall be marked with the following "Restricted Rights Notice":

Restricted Rights Notice-Long Form

- (a) This computer software is submitted with restricted rights under Department of Energy Contract No. _____. It may not be used, reproduced, or disclosed by the Government except as provided in paragraph (b) of this notice.
- (b) This computer software may be:
- (1) Used or copied for use in or with the computer or computers for which it was acquired, including use at any Government installation to which such computer or computers may be transferred;
 - (2) Used, copied for use, in a backup or replacement computer if any computer for which it was acquired is inoperative or is replaced;
 - (3) Reproduced for safekeeping (archives) or backup purposes;
 - (4) Modified, adapted, or combined with other computer software, provided that only the portions of the derivative software consisting of the restricted computer software are to be made subject to the same restricted rights; and
 - (5) Disclosed to and reproduced for use by contractors under a service contract (of the type defined in 48 CFR 37.101) in accordance with subparagraphs (b)(1) through (4) of this Notice, provided the Government makes such disclosure or reproduction subject to these restricted rights.
- (c) Notwithstanding the foregoing, if this computer software has been published under copyright, it is licensed to the Government, without disclosure prohibitions, with the rights set forth in the restricted rights notice above.
- (d) This Notice shall be marked on any reproduction of this computer software, in whole or in part.

(End of notice)

- (2) Where it is impractical to include the Restricted Rights Notice on restricted computer software, the following short-form Notice may be used.

Restricted Rights Notice—Short Form

Use, reproduction, or disclosure is subject to restrictions set forth in the Long Form Notice of DOE Contract No. _____ with (name of Contractor).

(End of notice)

- (3) If the software is embedded, or if it is commercially impractical to mark it with human readable text, then the symbol R and the clause date (mo/yr), in brackets or a box, a [R-mo/yr], may be used. This will be read to mean restricted computer software, subject to the rights of the Government as described in the Long Form Notice, in effect as of the date indicated next to the symbol. The symbol shall not be used to mark human readable material. In the event this Contract contains any variation to the rights in the Long Form Notice, then the contract number must also be cited.
- (4) If restricted computer software is delivered with the copyright notice of 17 U.S.C. 401, the software will be presumed to be published copyrighted computer software licensed to the Government without disclosure prohibitions and with unlimited rights, unless the Contractor includes the following statement with such copyright notice "Unpublished-rights reserved under the Copyright Laws of the United States."
- (g) *Relationship to patents.* Nothing contained in this clause creates or is intended to imply a license to the Government in any patent or is intended to be construed as affecting the scope of any licenses or other rights otherwise granted to the Government under any patent.

PART III - LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS

SECTION J – LIST OF ATTACHMENTS

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PART III - LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS

SECTION J – LIST OF ATTACHMENTS

ATTACHMENT J-1: REQUIREMENTS SOURCES AND IMPLEMENTING DOCUMENTS (LIST A) AND LIST OF APPLICABLE DOE DIRECTIVES (LIST B)

Pursuant to Section I clause 970.5204-2 Laws, Regulations and DOE Directives (Dec 2000), DOE may provide a list of laws and regulations (List A) applicable to work performed under this contract. The Contractor shall comply with all applicable Federal and State Laws, Statutes, Codes, Rules, Regulations, Executive Orders and agreement documents applicable to work performed under this contract. The federal laws and regulations listed in the table below contain requirements normally relevant to the Contractor scope of work. These laws and regulations, and others, apply regardless whether they are explicitly stated in the Contract. In addition, laws and regulations typically apply to all persons or organizations such as subcontractors, suppliers, and federal employees.

This list does not have to be provided in the Contract, but it may be appended to the Contract for information purposes. Omission of any such applicable law or regulation from List A does not affect the obligation of the Contractor to comply with such law or regulation pursuant to DEAR clause 970.5204-2. The Contractor must be aware of changes in the Code of Federal Regulations (CFR), Federal Acquisition Regulations (FAR), the United States Code (USC), Public Laws (PL) or other regulatory entities that have applicability to the Department of Energy and that impact the work scope. The Contractor will notify DOE of any changes, and DOE will make a determination regarding modification to the Contract.

LIST A	
Document Number	Title
10 CFR 61	Low Level Waste Policy Act Amendments
10 CFR 71	Packaging and Transportation of Radioactive Material
10 CFR 707	Workplace Substance Abuse Programs at DOE Sites
10 CFR 708	DOE Contractor Employee Protection Program
10 CFR 710	Criteria And Procedures For Determining Eligibility For Access To Classified Matter or Special Nuclear Material
10 CFR 712	Human Reliability Program
10 CFR 719	Contractor Legal Management Requirements
10 CFR 810	Assistance to Foreign Atomic Energy Activities
10 CFR 820	Procedural Rules for DOE Nuclear Activities
10 CFR 824	Procedural Rules for the Assessment of Civil Penalties for Classified Information Security Violations
10 CFR 830	Nuclear Safety Management

LIST A	
Document Number	Title
10 CFR 835	Occupational Radiation Protection, Amended
10 CFR 840	Extraordinary Nuclear Occurrences
10 CFR 850	Chronic Beryllium Disease Prevention Program
10 CFR 851	Worker Safety and Health Program
10 CFR 860	Trespassing on Department of Energy Property
10 CFR 1008	Records Maintained on Individuals (PRIVACY ACT)
10 CFR 1016	Safeguarding of Restricted Data
10 CFR 1017	Identification and Protection of Unclassified Controlled Nuclear Information
10 CFR 1021	DOE National Environmental Policy Act Implementing Procedures
10 CFR 1044	Security Requirements for Protected Disclosure Under Section 3164 of the National Defense Authorization Act for Fiscal Year 2000
10 CFR 1045	Nuclear Classification and Declassification
10 CFR 1046	Physical Protection of Security Interests; Protective Force Personnel
10 CFR 1060	Payment of Travel Expenses of Persons Who Are Not Government Employees
20 CFR 617	Trade Adjustment Assistance for Workers Under the Trade Act of 1974
20 CFR 639	Worker Readjustment and Retraining Notification
29 CFR 4	Labor Standards for Federal Service Contracts
29 CFR 24	Procedures for Handling of Retaliation Complaints Under Federal Employee Protection Statutes
29 CFR 30	Equal Employment Opportunity in Apprenticeship and Training
29 CFR 70	Production or Disclosure of Information on Materials
29 CFR 70A	Protection of Individual Privacy in Records
29 CFR 71	Protection of Individual Privacy and Access to Records under the Privacy Act of 1974
29 CFR 516	Records to be Kept by Employers
29 CFR 519	Employment of Full-Time Students at Subminimum Wages
29 CFR 520	Employment of Student-Learners
29 CFR 525	Employment of Workers with Disabilities Under Special Certificates
29 CFR 528	Annulment or Withdrawal of Certificates for the Employment of Student-Learners, Apprentices, Learners, Messengers, Handicapped Persons, Student-Workers, and Full-Time Students in Agricultural or in Retail Service Establishments at Special Minimum Wage Rate

LIST A	
Document Number	Title
29 CFR 531	Wage Payments Under the Fair Labor Standards Act of 1938
29 CFR 541	Defining and Delimiting the Exemptions for Executives, Administrative, Professional, Computer and Outside Sales employees (Fair Labor Standards Act)
29 CFR 548	Authorization of Established Basic Rates for Computing Overtime Pay
29 CFR 825	Family Medical Leave Act of 1993
29 CFR 1602	Recordkeeping and Reporting Requirements under Title VII and the ADA
29 CFR 1608	Affirmative Action Appropriation Under Title VII of the Civil Rights Act of 1964, as amended
29 CFR 1611	Privacy Act Regulations
29 CFR 1620	Equal Pay Act
29 CFR 1625	Age Discrimination in Employment Act
29 CFR 1627	Records to be Made or kept Relating to Age: Notices to be Posted: Administrative Exemptions
29 CFR 1904	Recording and Reporting Occupational Injuries and Illnesses
29 CFR 1910	Occupational Safety and Health Administration
29 CFR 1926	Safety and Health Regulations for Construction
29 CFR 2520	Reporting and Disclosure Under Employee Retirement Income Security Act of 1974
29 CFR 4041A	Termination of Multiemployer Plans
32 CFR 2001	Classified National Security Information
34 CFR 395	Vending Facility Program for the Blind on Federal and Other Property
36 CFR Chapter 12, Sub Chapter B	Records Management
40 CFR 61 et al	National Emission Standards for Hazardous Air Pollutants
40 CFR 82 et al	Protection of Stratospheric Ozone (Title VI of the CAA)
40 CFR 116	Designation of Hazardous Substances
40 CFR 117	Determination of Reportable Quantities for Hazardous Substances
40 CFR 122	EPA Administered Permit Programs: The National Pollutant Discharge Elimination System
40 CFR 136	Guidelines Establishing Test Procedures for the Analysis of Pollutants
40 CFR 247	Comprehensive Procurement Guideline for Products Containing Recovered Materials
40 CFR 239 et al.	Solid Waste

LIST A	
Document Number	Title
40 CFR 260-282	Resource Conservation and Recovery Act (RCRA)
40 CFR 300	National Oil and Hazardous Substances Pollution Contingency Plan (CERCLA—National Contingency Plan)
40 CFR 302	Designation, Reportable Quantities, and Notification
40 CFR 350-372	SARA Title III
40 CFR 355	Emergency Planning and Community Right to Know Act (EPCRA)
40 CFR 763	Asbestos
40 CFR 1500-1508	Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act
41 CFR 60-1	Obligations of Contractors and Sub Contractors
41 CFR 60-2	Affirmative Action Programs
41 CFR 60-3	Uniform Guidelines on Employee Selection Procedures
41 CFR 60-20	Sex Discrimination Guidelines
41 CFR 60-30	Rules of Practice for Administrative Proceedings to Enforce Equal Opportunity Under Executive Order 11246
41 CFR 60-50	Guidelines on Discrimination Because of Religion or National Origin
41 CFR 60-300	Affirmative Action Obligations of Contractors and Subcontractors Regarding Disabled , Recently Separated Veterans, Other Protected Veterans, and Armed Force Service Medal Veterans
41 CFR 60-741	Affirmative Action and Nondiscrimination Obligations of Contractors and Subcontractors Regarding Individuals with Disabilities
41 CFR 60-742	Procedures for Complaints/Charges of Employment Discrimination Based on Disability Filed Against Employers Holding Government Contracts or Subcontracts
41 CFR 101	Federal Property Management Regulations
41 CFR 102	Federal Management Regulation
41 CFR 109	Department of Energy Property Management Regulations
48 CFR 22	Application of Labor Laws to Government acquisitions
48 CFR 23	Environment, Energy and Water Efficiency, Renewable Energy Technologies, Occupational Safety, and Drug-Free Workplace
48 CFR 31	Contract Cost Principles and Procedures
48 CFR 45	Government Property
48 CFR Part 970.5203-2	Performance Improvement and Collaboration
48 CFR Part	Integration of Environmental, Safety, and Health into the Work Planning

LIST A	
Document Number	Title
970.5223-1	and Execution
48 CFR 9903.101	Cost Accounting Standards
49 CFR 130	Oil Spill Prevention and Response Plans
49 CFR 171	General Information, Regulations, and Definitions
49 CFR 172	Hazardous Material Table, Specials Provisions, Hazardous Materials Communications, Emergency Response Information, Training Requirements, and Security Plans
49 CFR 173	Shippers-General Requirements for Shipments and Packaging's
49 CFR 174	Carriage by Rail
49 CFR 177	Carriage by Public Highway
50 CFR 17	Natural Resource Management
50 CFR 402	Interagency Cooperation Endangered Species Act of 1973, as amended
5 USC 552 et seq.	Freedom of Information Act (FOIA)
5 USC Appendix 2	Freedom Advisory Committee Act (FACA)
15 USC 2601	Toxic Substances Control Act (TSCA)
16 USC 470	Archeological Resources Protection Act
18 USC 930	Possession of firearms and dangerous weapons in Federal Facilities
18 USC 2071	Concealment, removal, or mutilation generally
18 USC 3571	Sentence of Fine
20 USC 107	Operation of vending facilities (aka: Randolph-Sheppard Vending Stand Act, as amended)
25 USC 3001	Native American Grave Protection and Repatriation Act
29 USC 401 et seq.	Labor-Management Reporting and Disclosure Act of 1959
33 USC 1251	Clean Water Act (CWA)
40 USC 483	Federal Property Administrative Services Act
41 USC 422	Cost Accounting Standard Board
42 USC 2021 et seq.	Low-Level Radioactive Waste Policy Act, as amended
42 USC 2168 et seq.	Prohibition Against Dissemination of Certain Unclassified Information
42 USC 2278(a)	Trespass on Commission Installations
42 USC 2286 et seq.	Defense Nuclear Facilities Safety Board
42 USC 2297h-8	Employee Protections
42 USC 4321	National Environmental Policy Act (NEPA)
42 USC 6901	Resource Conservation & Recover Act (RCRA)

LIST A	
Document Number	Title
42 USC 7401	Clean Air Act (CAA)
42 USC 7256	National Defense Authorization Act
42 USC 7512	Classification and Attainment Dates
42 USC 9601	Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)
42 USC 9605	CERCLA Amendment
42 USC 9620	CERCLA Federal Facility Agreement (FFA)
42 USC 11001-11050	CERCLA Emergency Planning and Community Right to Know Act (EPCRA)
42 USC 11411	Title V, of the Steward B. McKinney Homeless Assistance Act, as amended
42 USC 13101-13109	Pollution Prevention Act (PPA)
42 USC 2011-2259 et seq.	The Atomic Energy Act (AEA) of 1954, As Amended
44 USC Chapter 21	National Archives and Records Administration
44 USC Chapter 29	Records Management by the Archivist of the United States and by the Administrator of General Studies
44 USC Chapter 31	Records Management by Federal Agencies
44 USC Chapter 33	Disposal of Records
44 USC Chapter 35	Coordination of Federal Information Policy
44 USC Chapter 36	Management and Promotion of Electronic Government Services
Executive Order 12829, (As Amended by E.O. 12885)	National Industrial Security Program
Executive Order 13221	Energy Efficient Standby Power Devices
Executive Order 13423	Strengthening Federal Environmental, Energy, and Transportation Management
Executive Order 13514	Federal Leadership in Environmental, Energy and Economic Performance
Executive Order 13526	Classified National Security Information
Executive Order 13556	Controlled Unclassified Information
Executive Order 13693	Planning for Federal Sustainability in the Next Decade

LIST A	
Document Number	Title
Homeland Security Presidential Directive (HSPD)-12	Policy for a Common Identification Standard for Federal Employees and Contractors
ISOO Notice 2011-02	Further Guidance and Clarification on Coming Atomic Energy Information and Classified National Security Information (Implements Executive Order 13526)
M-11-11	Executive Office of the President, Office of Management and Budget, Memorandum for the Heads of Executive Departments and Agencies (Continued Implementation of Homeland Security Presidential Directive (HSPD) 12 – Policy for a Common Identification Standard for Federal Employees and Contractors
M-12-18	Managing Government Records Directives, Dated August 24, 2012
National Security Decision Directive (NSDD) 298	National Operations Security Program
Public Law 100-679	Office of Federal Procurement Policy Act Amendments of 1988
Public Law 102-368	Federal Facility Compliance Act of 1992
Public Law 102-484	National Defense Authorization Act of 1993
Public Law 102-486	Energy Policy Act of 1992
Public Law 106-65, Section 3149	Supplement to Plan for Declassification of Restricted Data and Formerly Restricted Data
Public Law 106-398, Section 3193	Frequency of Reports of Inadvertent Releases of Restricted Data and Formerly Restricted Data
Public Law 107-347	The E-Government Act of 2002
TSCA-UE-FFCA, Feb 1992	Uranium Enrichment Toxic Substances Control Act Federal Facilities Compliance Agreement

The Contractor shall comply with the Contractor Requirements Documents of DOE Directives identified under LIST OF APPLICABLE DOE DIRECTIVES (LIST B). DOE directives may be found at <http://www.directives.doe.gov/>.

List B	
DOE Directives	Subject
EM-QA-001, Latest Revision	Environmental Management Quality Assurance Program
Classification Bulletin GEN-16 Revision	"No Comment" Policy on Classified Information in the Public Domain
DOE EM	Office of Environmental Management Operations Activity Protocol, Revision 0, 2/28/2012
DOE O 130.1	Budget Formulation Process
DOE M 140.1-1B	Interface with the Defense Nuclear Facilities Safety Board
DOE O 142.3A	Unclassified Foreign Visits and Assignment Program
DOE O 144.1, Admin Chg 1	Department of Energy American Indian Tribal Government Interactions and Policy
DOE O 150.1A	Continuity Program
DOE O 151.1C	Comprehensive Emergency Management System
DOE O 200.1A	Information Technology Management
DOE O 203.1	Limited Personal Use of Government Office Equipment Including Information Technology
DOE O 203.2	Mobile Technology Management
DOE P 205.1	Department of Energy Cyber Security Policy
DOE O 205.1B	Department of Energy Cyber Security Program
DOE M 205.1-3	Telecommunications Security Manual
DOE O 206.1	Department of Energy Privacy Program
DOE O 206.2	Identity, Credential, and Access Management (ICAM)
DOE O 210.2A	DOE Corporate Operating Experience Program
DOE O 221.1A	Reporting Fraud, Waste, and Abuse to the Office of the Inspector General
DOE O 221.2A	Cooperation with the Office of Inspector General
DOE O 225.1B	Accident Investigations
DOE O 226.1B	Implementation of DOE Oversight Policy
DOE O 227.1	Independent Oversight Program
DOE O 231.1B	Environment, Safety, and Health Reporting
DOE O 232.2	Occurrence Reporting and Processing of Operations Information
DOE O 243.1B	Records Management Program
DOE O 251.1C	Department Directive Program
DOE O 252.1A	Technical Standards Program
DOE O 311.1B	Equal Employment Opportunity and Diversity Program,
DOE O 350.1	Contractor Human Resource Management Programs

List B	
DOE Directives	Subject
DOE P 364.1	Health and Safety Training Reciprocity
DOE O 410.2	Management of Nuclear Materials
DOE O 412.1A	Work Authorization System
DOE O 413.1B	Internal Control Program
DOE O 413.3B	Program and Project Management for the Acquisition of Capital Assets
DOE G 413.3-7A	Risk Management Guide
DOE O 414.1D	Quality Assurance
DOE O 420.1C	Facility Safety
DOE O 422.1, Admin Chg 2	Conduct of Operations
DOE O 425.1D, Admin Chg 1	Verification of Readiness to Start Up or Restart Nuclear Facilities
DOE O 426.2	Personnel Selection, Training, Qualification, and Certification Requirements for DOE Nuclear Facilities
DOE G 431.1-1	Cost Estimating Guide
DOE O 430.1B	Real Property and Asset Management
DOE O 433.1B, Admin Chg 1	Maintenance Management Program for DOE Nuclear Facilities
DOE O 435.1, Chg 1	Radioactive Waste Management
DOE N 435.1	Contact-Handled and Remote-Handled Transuranic Waste Packaging
DOE M 435.1-1, Chg 1	Radioactive Waste Management Manual
DOE O 436.1	Departmental Sustainability
DOE M 441.1-1	Nuclear Material Packaging Manual
DOE O 442.1A	Department of Energy Employee Concerns Program
DOE O 442.2	Differing Professional Opinions for Technical Issues Involving Environment, Safety and Health
DOE O 450.2	Integrated Safety Management
DOE P 450.4A	Integrated Safety Management Policy
DOE G 450.4-1C	Integrated Safety Management System Guide.
DOE O 451.1B	National Environmental Policy Act Compliance Program
DOE O 452.3	Management of the Department of Energy Nuclear Weapons Complex
DOE O 452.7	Protection of Use Control Vulnerabilities and Designs
DOE O 452.8	Control of Nuclear Weapon Data
DOE O 458.1	Radiation Protection of the Public and the Environment
DOE O 460.1C	Packaging and Transportation Safety
DOE O 460.2A	Departmental Materials Transportation and Packaging Management
DOE M 460.2-1A	Radioactive Materials Transportation Practices Manual
DOE O 461.1B	Packaging and Transportation for Offsite Shipment of Materials of National Security Interest
DOE O 461.2	Onsite Packaging and Transfer of Materials of National

List B	
DOE Directives	Subject
	Security Interest
DOE O 470.4B, Admin Change 1	Safeguards and Security Program
DOE O 470.5	Insider Threat program
DOE O 471.1B	Identification and Protection of Unclassified Controlled Nuclear information
DOE O 471.3, Admin Change 1	Identifying and Protecting Official Use only Information
DOE M 471.3, Admin Change 1	Manual for Identifying and Protecting Official Use only Information
DOE O 471.5	Special Access Programs
DOE O 471.6	Information Security
DOE O 472.2	Personnel Security
DOE N 472.3	Implementation of Presidential Policy Directive 19, Protecting Whistleblowers with Access to Classified Information
DOE O 473.3A	Protection Program Operations
DOE O 474.2, Admin Change 2	Nuclear Material Control and Accountability
DOE O 475.1	Counterintelligence Program
DOE O 475.2B	Identifying Classified Information
DOE O 522.1	Pricing of Departmental Materials and Services
DOE O 523.1	Financial Management Oversight
DOE O 534.1B	Accounting
DOE O 551.1D	Official Foreign Travel
DOE O 552.1A	Travel Policy and Procedures
DOE O 580.1A	Department of Energy Personal Property Management Program
DOE G 580.1-1	Department of Energy Personal Property Management Guide
DOE-STD-1020-2012	Natural Phenomena Hazards Design and Evaluation Criteria for Department of Energy Facilities
DOE-STD-1027-92, Chg 1	Hazard Categorization and Accident Analysis Techniques for Compliance with DOE Order 5480.23, Nuclear Safety Analysis Reports
DOE-STD-1030-96	Guide to Good Practices for Lockouts and Tagouts
DOE-STD-1066-2012	Fire Protection
DOE-STD-1073-2003	Configuration Management Program
DOE-STD-1090-2011	Hoisting And Rigging
DOE-STD-1098-2008	Radiological Control
DOE-HDBK-1099-1996	Establishing Nuclear facility Drill Programs
DOE-STD-1120-2005	Integration of Environment, Safety, and Health into Facility Disposition Activities
DOE-STD-1129-2015	Tritium Handling and Safe Storage
DOE-STD-1134-1999	Review Guide for Criticality Safety Evaluations
DOE-STD-1158-2010	Self-Assessment Standard for DOE Contractor

List B	
DOE Directives	Subject
	Criticality Safety Reviews
DOE-HDBK-1169-2003	DOE Handbook Nuclear Air Cleaning Handbook
DOE-STD-1186-2004	Specific Administrative Controls
DOE-STD-1187-2007	Beryllium-Associated Worker Registry Data Collection and Management Guidance
DOE-STD-1189-2008	Integration of Safety into the Design Process
DOE-STD-1194-2011	Nuclear Materials Control and Accountability
DOE-HDBK-1208-2012	Accident Investigation and Prevention
DOE-STD-1212-2012	Explosives Safety
DOE-HDBK-1216-2015	Environmental Radiological Effluent Monitoring and Environmental Surveillance
DOE-STD-3006-2010	Planning and Conduct of Operational Readiness Reviews
DOE-STD-3007-2007	Guidelines for Preparing Criticality Safety Evaluations at Department of Energy Non-Reactor Nuclear Facilities
DOE-STD-3009-2014	Preparation of Nonreactor Nuclear Facility Documented Safety Analysis
DOE-HDBK-3010-1994 & Chg 1	Airborne Release Fractions/Rates and Respirable Fractions for Nonreactor Nuclear Facilities
DOE-STD-3011-2002	Guidance for Preparation of Basis for Interim Operation (BIO) Documents
DOE-HDBK-3012-2015	Guide to Good Practices for Operational Readiness Reviews (ORR), Team Leader's Guide
DOE-STD-3013-2012	Stabilization, Packaging, and Storage of Plutonium-Bearing Materials
DOE-STD-3014-1996	Accident Analysis for Aircraft Crash into Hazardous Facilities
DOE-STD-3020-2005	Specification for HEPA Filters Used by DOE Contractors
DOE-STD-3025-2007	Quality Assurance Inspection and Testing of HEPA Filters
DOE O 3731.1	Suitability, Position Sensitivity Designations, and Related Personnel Matters
DOE G 4401-7A	<i>Implementation Guide For Use With 10 CFR Part 850, "Chronic Beryllium Disease Prevention"</i>
DOE-STD-5506-2007	Preparation of Safety Basis Documents for Transuranic

PART III - LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS

SECTION J – LIST OF ATTACHMENTS

ATTACHMENT J-2: SUMMARY OF CONTRACT DELIVERABLES

#	Deliverable		EM-LA Action	Contract Deliverable
				Due Date
1	C.2.1	<i>Transition Plan</i>	Approval	15 days after NTP
2	C.2.1(2)	<i>Interface Agreements</i>	Information	90 days after NTP
3	C.2.1(3)	<i>Continuity of Procedures and Plans</i>	Information	90 days after NTP
4	C.2.2	<i>Transition Status Reports</i>	Information	Every Friday during Contract Transition
5	C.2.3	Permits/memorandums change plan	Information	90 days after NTP
			Information	
6	C.2.4	<i>Statement of Material Differences</i>	Information	90 days after NTP
7	C.2.5	<i>Identification of Property Inventory Discrepancies</i>	Information	90 days after NTP
8	C.2.7(1)	<i>Matrix of Personnel Interfaces (Zipper Plan)</i>	Information	90 days after NTP
9	C.2.7(2)	<i>Matrix of Personnel Interfaces (Zipper Plan) - Update</i>	Information	Within two weeks after an update is made
10	C.2.8	Inter-contractor ordering and financial agreements	Information	As needed

#	Deliverable		EM-LA Action	Contract Deliverable
				Due Date
11	C.2.9	Conduct a self-assessment of its completion of transition activities	Information	Prior to end of transition period
12	C.2.10	<i>Contractor's Executive Summary</i>	Information	2 days after NTP
13	C.3.1.1(1) H.73	<i>Contract Performance Baseline (CPB)</i>	Approval	90 days after NTP
14	C.3.1.1(2)	<i>Integrated Priority List (rolling Three Year Plan)</i>	Approval	Annually in July
15	C.3.1.2 and DOE O 413.3B	<i>Risk Management Plan</i>	Approval	90 days after NTP
16	C.3.1.4(1)	<i>30%, 60%, 90% and Final Designs</i>	Approval	As needed
17	C. 3.1.4(2)	<i>As-built designs</i>	Approval	45 days after project completion
18	C. 3.1.4(3)	<i>Long-term Monitoring and Maintenance Requirements</i>	Approval	45 days after project completion
19	C.3.1.5	<i>Contractor Progress/Status Report</i>	Information	Monthly per Attachment J-11
20	C.3.3.1	<i>ISMS Description</i>	Approval	No date specified
21	C.3.3.2	<i>Environmental, Safety, Health, and Quality (ESH&Q) Program Plan</i>	Approval	No date specified
22	C.3.3.2(2) H.42	<i>Worker Safety and Health Program (WSHP)</i>	Approval	No date specified
23	C.3.3.2(3)	<i>Report on Metrics and Statistics on the Safe</i>	Information	At least monthly (no day specified)

#	Deliverable		EM-LA Action	Contract Deliverable
				Due Date
		<i>Execution of Work</i>		
24	C.3.3.2(4)	<i>Annual Worker Safety and Health Report</i>	Information	Annually by December 31
25	C.3.3.2(5)	<i>Occupational Medical Program Plan</i>	Approval	No date specified
26	C.3.3.5(1)	<i>Nuclear Safety Culture Metrics Reports – Monthly and Annual Assessment</i>	Information	10th calendar day of the following month
				Annual Assessment date up to the Contractor
27	C.3.3.5(2)	Radiation protection program	Information	Before conducting radiological work
28	C.3.3.5(3)	<i>Changes to Existing Safety Basis</i>	Approval	As necessary
29	C.3.3.5(4)	<i>DOE Order 420.1C Exemption for Fire Protection for the current TA-54 facilities</i>	Approval by EM-HQ	No date specified
30	C.3.3.6(1)	<i>Emergency Management Plan</i>	Approval	No date specified
31	C.3.3.6(2)	COOP Plan and a Continuity Readiness Assurance Plan	Approval	No date specified

#	Deliverable		EM-LA Action	Contract Deliverable
				Due Date
32	C.3.4.2(1)	Sampling Management Program	Approval	90 days after NTP
33	C.3.4.2(2) and C.3.5.3	<i>Standard Operating Procedures for Sampling Management. Significant changes to these procedures shall also be submitted to EM-LA</i>	Acceptability	No date specified
34	C.3.4.4	Interface Agreement with the NNSA M&O Contractor for Radiation Protection Program	Information	No date specified
35	C.3.4.5	Annual updates to the 2016 Consent Order Appendix A indicating progress, campaigns, and NMED acceptance	Information	Before the end of each FY
36	C.3.5.1(2)	<i>Quality Assurance Plan (QAP)</i>	Approval	90 days after NTP
37	C.3.5.5(1)	<i>Records Management Plan</i>	Approval	60 days after the NTP
38	C.3.5.5(2)	<i>Image Quality Statistical Sampling Plan</i>	Approval	60 days after the NTP
39	C.3.5.5(3)	<i>Vital (Essential) Records Plan and Inventory</i>	Approval	120 days after the NTP, updated annually thereafter
40	C.3.5.5(4)	<i>Records Disposition Plan</i>	Approval	Within 120 days of NTP
41	C.3.7.2(1)	Information Security (IS) procedures	Approval	Before end of transition period

#	Deliverable		EM-LA Action	Contract Deliverable
				Due Date
42	C.3.7.2(2)	Operations Security (OPSEC) procedures	Approval	Before end of transition period
43	C.3.7.2(3)	Federal Information Processing Standard (FIPS) Publication 199 Risk Assessment for each IT System it Intends to Operate	Approval (Authorization to Operate)	180 calendar days after Completion of Contract Transition
44	C.3.8.4	Expected quantity of spaces for personnel beyond what was provided as GFSI	Information	As needed
45	C.4.1.3.1, C.4.1.3.2, and C.4.4	Report of costs collected and paid through contractual arrangements with the NNSA M&O Contractor for Newly-Generated TRU Wastes and Pit 38 and 37 Disposals	Information	As needed
46	C.4.1.4	Method of retrieving waste containers from Trenches A-D based on inspection and radiation surveys	Approval	No date specified
47	C.4.1.8	Exemption Requests for the use of Commercial Disposal Facilities per DOE Manual 435.1-1	Approval	As needed
48	C.4.8	DOE Project Completion Reports for waste stream retrievals	Information	No date specified
49	C.5.3.1	<i>GW Data Review Notifications</i>	Approval	15 th day of each month

#	Deliverable		EM-LA Action	Contract Deliverable
				Due Date
50	C.5.3.2	<i>GW Monitoring Reports - Periodic</i>	Information	Quarterly on November 30, February 28, May 31, and August 31
51	C.5.3.3	<i>IFGMP - Annual Update</i>	Approval	Annually
52	C.5.3.4	<i>County of Los Alamos SAP - Annual Update</i>	Approval	Annually
53	C.5.3.5	<i>Santa Fe County SAP - Annual Update</i>	Approval	Annually
54	C.5.3.6	<i>Appendix A SAP for the Pueblo of San Ildefonso - Annual Update</i>	Approval	Annually
55	C.5.3.7	<i>General Facility Information Document - Triennial Update</i>	Approval	Next required submittal in 2017
56	C.5.3.8	<i>Groundwater Aquifer Contaminant Maps and Fact Sheets</i>	Information	Annually on March 1
57	C.6.1.1	<i>Drilling work plans (DWP)</i>	Approval	As required for each drilling activity
58	C.6.1.6	<i>Final Well Configuration Design</i>	Approval	As required prior to each well installation
59	C.6.3(1)	<i>Well completion summary Fact Sheet</i>	Approval	30 days of completion of each regional aquifer well

#	Deliverable		EM-LA Action	Contract Deliverable
				Due Date
60	C.6.3(2)	<i>Well Completion Report</i>	Information	Within 120 days clock for regional aquifer wells beginning 30 days after well completion
61	C.6.4.5	<i>Rehabilitation Plan for Regional Monitoring Wells CdV-R-37-2</i>	Approval	No date specified
62	C.6.4.6	<i>Plug and Abandonment Plans</i>	Approval	No date specified
63	C.7.1.1(1)	<i>Compliance Metrics for the NPDES Individual Permit for Stormwater</i>	Information	Not defined but annually (no date specified)
64	C.7.1.1(2)	<i>Responses to the NMED Compliance Evaluation Inspections for the Individual Permit for Stormwater</i>	Redistribution to NMED	No date specified
65	C.7.1.2	<i>Annual storm water performance report for LA and Pueblo Canyon Wetland</i>	Information	April 30 of each year

#	Deliverable		EM-LA Action	Contract Deliverable
				Due Date
66	C.7.2(1)	<i>Los Alamos/Pueblo Canyon Watershed Sediment Transport Mitigation Project performance monitoring report – Annual Update</i>	Approval	April 30 of each year
67	C.7.2(2)	<i>Sandia Canyon Wetland Performance Report – Annual Update</i>	Information	April 30 of each year
68	C.8.2.4	<i>Final Alternative Compliance Requests under the NPDES Individual Permit for Stormwater</i>	Approval	As necessary
69	C.8.3	<i>Draft Individual Permit for Stormwater Renewal</i>	Approval	No date specified (Fall 2020)
70	C.8.5(1)	<i>IP SDPPP Annual Update</i>	Approval	May 1 of each year
71	C.8.5(2)	<i>IP Annual Report</i>	Approval	March 1 of each year
72	C.8.5(3)	<i>Sample Implementation Plan (SIP)</i>	Approval	March 1 of each year
73	C.9.1.2(1)	<i>RDX Remedy Completion Report (RCR) for the Surface CMI</i>	Approval	No date specified
74	C.9.1.2(2)	<i>Annual Progress Report for Corrective Measures Evaluation/Corrective Measures Implementation for Consolidated</i>	Information	Annually, by November 30
75	C.9.1.5	<i>RDX Corrective Measures Evaluation (CME) Report</i>	Approval	Within 160 days of completion of study

#	Deliverable		EM-LA Action	Contract Deliverable
				Due Date
76	C.9.2	<i>RDX Corrective measures implementation plan (CMIP)</i>	Approval	No date specified
77	C.9.4	<i>RDX Remedy Performance Annual Report</i>	Approval	Within 80 days of the end of the monitoring period
78	C.9.6	<i>Remedy Operational Plan</i>	Approval	No date specified
79	C.10.1.1	<i>Cr Annual performance report of the IM for plume control.</i>	Approval	Within 80 days of monitoring period completion
80	C.10.2	<i>Field Pilot Treatability Test Plan for Chromium</i>	Approval	No date specified
81	C.10.5	<i>Cr Corrective Measures Evaluation (CME) Report</i>	Approval	Within 160 days of completion of study
82	C.10.8	<i>Cr Corrective measures implementation plan (CMIP)</i>	Approval	No date specified
83	C.10.11	<i>Cr Annual Performance Report</i>	Approval	Within 80 days of monitoring period completion
84	C11.1.2	<i>Investigation Work Plan (IWP)</i>	Approval	As required
85	C11.1.8	<i>Investigation Reports (IRs)</i>	Approval	As required

#	Deliverable		EM-LA Action	Contract Deliverable
				Due Date
86	C.11.2.1(1)	<i>Biennial asphalt monitoring and removal activities and report</i>	Approval	December of each biennial year
87	C.11.2.1(2)	<i>Access Agreements</i>	Approval	As needed
88	C.11.2.2	<i>Phase II Investigation Report for Upper Los Alamos Canyon Aggregate Area</i>	Approval	No date specified
89	C.11.2.4	Delta Prime Site Aggregate Area Supplemental Investigation report (SIR) to adequately address NMED concerns and comments in the NOD	Approval	As required
90	C.11.2.5	<i>IR and CoCs Middle Los Alamos Canyon Aggregate Area</i>	Approval	As required
91	C.11.2.6	<i>IWP and IR for Upper Sandia Canyon Aggregate Area</i>	Approval	As required
92	C.11.2.8	<i>IR and CoCs or required remediation Upper Mortandad Canyon Aggregate Area</i>	Approval	As required
93	C.11.2.11	<i>IR and CoCs or required remediation Upper Cañada del Buey Canyon Aggregate Area</i>	Approval	As required

#	Deliverable		EM-LA Action	Contract Deliverable
				Due Date
94	C.11.2.14	<i>IR and CoCs for Starmer/Upper Pajarito Canyon Aggregate Area</i>	Approval	As required
95	C.11.2.15	Two mile Canyon Aggregate Area IR following all site completions, and submit CoC	Approval	As required
96	C.11.2.16	Three mile Canyon Aggregate Area IWP, IR following all site completions, and submit CoC	Approval	As required
97	C.11.2.17	Lower Pajarito Canyon Aggregate Area IR following all site completions, and submit CoC	Approval	As required
98	C.11.2.18(1)	IWP for TA-14, prepare and submit a final Phase II IR, and submit remaining CoCs	Approval	As required
99	C.11.2.18(2)	<i>TA 15 IR</i> and submit for remaining CoC	Approval	As required
100	C.11.2.18(3)	<i>TA 16 IR</i> and submit for remaining CoC	Approval	As required
101	C.11.2.19	<i>IR for Upper Water Canyon Aggregate Area</i>	Approval	As required
102	C.11.2.20	<i>IR and COCs Lower Water Canyon & Indio Canyon Aggregate Area</i>	Approval	As required
103	C.11.2.21	CoCs Potrillo/Fence Canyon Aggregate Area	Approval	As required

#	Deliverable		EM-LA Action	Contract Deliverable
				Due Date
104	C.11.2.22	<i>IR and COCs North Ancho Canyon Aggregate Area</i>	Approval	As required
105	C.11.2.23	<i>IR and COCs South Ancho Canyon Aggregate Area</i>	Approval	As required
106	C.11.2.24	<i>IR and COCs Chaquehui Canyon Aggregate Area</i>	Approval	As required
107	C.11.2.25	Comment responses to NMED-HWB, revise SIR, and complete COCs S-Site Aggregate Area	Approval	As required
108	C.11.2.26	Comment responses to NMED-HWB, revise SIR, and complete COCs TA-49 Inside Nuclear Environmental Site	Approval	As required
109	C.11.2.27	Comment responses to NMED-HWB, revise SIR, and complete COCs TA-49 Outside Nuclear Environmental Site	Approval	As required
110	C.12.1.3	IWP MDAs	Approval	As required
111	C.12.1.6	Clearance of Cultural Sites	Approval	As required
112	C.12.1.8	IRs with human health risk assessments compared with cleanup standards	Approval	As required

#	Deliverable		EM-LA Action	Contract Deliverable
				Due Date
113	C.12.1.9	CME MDAs	Approval	As required
114	C.12.1.12	Remedy Completion Report	Approval	As required
115	C.12.1.13	COC s and Removal from HWF Permit	Approval	As required
116	C.12.2.1(1)	<i>Project plan MDA-A General's Tanks Removal</i>	Approval	As required
117	C.12.2.1(2)	<i>IWP for the MDA-A Pits and Trenches Characterization</i>	Approval	No date specified
118	C.12.2.1(3)	<i>CMIP for MDA-A remedy and supporting safety basis changes</i>	Approval	No date specified
119	C.12.2.2(1)	<i>Annual effectiveness monitoring report for SVE at MDA-C</i>	Approval	No date specified
120	C.12.2.2(2)	<i>Radiological Dose Assessment Documents and other radiological design criteria documents</i>	Review	As required
121	C.12.2.2(3)	<i>CMIP for MDA-C, environmental evaluation documentation, and safety basis changes</i>	Approval	No date specified

#	Deliverable		EM-LA Action	Contract Deliverable
				Due Date
122	C.12.2.3(1)	Semi-annual Summary Report of SVE at Area G	Approval	As required
123	C.12.2.3(2)	CME, dose assessment and other radiological design criteria documentation, safety basis changes, and CMIP for MDA-G	Approval	No date specified
124	C.12.2.4	CME, dose assessment and other radiological design criteria documentation, safety basis changes, and CMIP for MDA-H	Approval	No date specified
125	C.12.2.5	CME, dose assessment and other radiological design criteria documentation, safety basis changes, and CMIP for MDA-L	Approval	No date specified
126	C.12.2.6	CME, dose assessment and other radiological design criteria documentation, safety basis changes, and CMIP for MDA-T	Approval	No date specified
127	C.12.2.7	CME, dose assessment and other radiological design criteria documentation, safety basis changes, and CMIP for MDA-AB	Approval	As required

#	Deliverable		EM-LA Action	Contract Deliverable
				Due Date
128	C.13.2	<i>Phase-Out Transition Plan</i>	Approval	At least 60 days prior to the end of the Base Period or Option Period 2 (if exercised) or as notified by the CO
129	C.13.3(1)	<i>Contract Closeout Plan</i>	Approval	At least 60 days prior to the end of the Base Period or Option Period 2 (if exercised) or as notified by the CO
130	C.13.3(2)	<i>Contractor Self- Assessment Report</i>	Information	Within 30 days of the completion of the contract term
131	H.5 A	<i>Contractor Employee Compensation Plan</i>	Approval	At the end of the Contract Transition Period
132	H.5 C	<i>(1) Annual Contractor Salary-Wage Increase Expenditure Report</i>	Information	30 days after the end of the CIP year
		<i>(2) List of the top five highly compensated executives</i>	Information	At the time of NTP and at the time of any subsequent change to their total compensation
		<i>(3) Annual Report of Compensation and Benefits in iBenefits</i>	Information	Annually – No later than March 1
133	H.5 D	<i>(4)(a)(i) Major Compensation program design changes.</i>	Approval	As required

#	Deliverable		EM-LA Action	Contract Deliverable
				Due Date
		<i>(4)(a)(ii) Variable pay programs/incentives</i>	Approval	Prior to implementation
		<i>(4)(a)(iii) Notification of planned increases and position to market data if contractor meets criteria</i>	Approval	Prior to Implementation1 st day of the CIP cycle
		<i>(4)(a)(iv) Compensation Increase Plan if contractor does not meet criteria in</i>	Approval	Annually if Criteria in (4)(a)(iii) is not met
		<i>(4)(a)(vi) Top Contractor Official and Key Personnel Salary Actions when change to the compensation or anytime a key personnel is replaced</i>	Approval	As required
134	H.5 E(3)	<i>(3)(a) Ben-Val study</i>	Information	Every two years for each benefit tier
		<i>(3)(c) Employee Benefits Cost Study Comparison</i>	Information	Annually

#	Deliverable		EM-LA Action	Contract Deliverable
				Due Date
135	H.5. E(4)	<i>Corrective Action Plan - When net benefit value exceeds the comparator group by 5%</i>	Approval	As required
	H.5. E(5)	<i>Analysis of specific plan costs - When average total benefit per capita cost exceeds comparator group by 5% or total benefit cost as a percent of payroll</i>	Information	As required
136	H.5 G(2)	<i>Limited-scope audit</i>	Information	Annually except every third year
	H.5 G(2)	<i>Copy of the qualified trustee or custodian's certification</i>		When limited-scope audits are completed
		<i>Full-scope Audit</i>		Every 3 years
137	H.5 G(6)	<i>Pension Management Plan Submitted into iBenefits</i>	Information	January 31 of each year
138	H.5 I(1)	<i>Actuarial Valuation Reports</i>	Information	Submitted by the due date for filing IRS Form 5500
139	H.5 I(2)	<i>Forms 5500</i>	Information	Upon submittal to the IRS
140	H.5 I(3)	<i>Forms 5300</i>	Information	Upon submittal to the IRS

#	Deliverable		EM-LA Action	Contract Deliverable
				Due Date
141	H.5 J	<i>Changes to Pension Plans that increase costs</i>	Approval	At least sixty (60) days prior to the adoption of any changes to a pension plan that increase costs
142	H.5 J(2)	<i>New benefit plans and changes to plan design or funding methodology</i>	Approval	At least sixty (60) days prior to the adoption of a new plan or changes to plan design or funding methodology
143	H.6 B(1)	<i>Threshold factors for the Contractor's Defined Benefit Pension Plan Meeting Test Requirements for following Two Plan Years</i>	Approval	Before beginning of Plan Year 2.
	H.6 B(2)	<i>Failure to meet test requirements (Corrective action plan)</i>	Approval	Upon identification by the Contractor that the Defined Benefit Pension Plan may not meet testing requirements for the current plan year and the following plan year
144	H.7 A(1)a	<i>List of personnel responsible for transitioning incumbent workforce and for developing transition agreements.</i>	Information	Within ten days after NTP
	H.7.A(1)b	<i>Description of all transition agreements with LANS to ensure compliance with Clause H.4 during the Contract Transition Period</i>	Information	Within ten days after NTP

#	Deliverable		EM-LA Action	Contract Deliverable
				Due Date
145	H.7 A(1)c	<i>Draft communication plan regarding implementation of the requirements of Clauses H.4 and H.5</i>	Information	Within ten days after NTP
146	H.7 A(2)a	<i>Draft WF Transition Plan</i>	Information	15 days after NTP
	H.7 A(3)	<i>Final WF Transition Plan</i>	Approval	30 days after NTP
	H.7 A(4)	<i>Provide copies of the Final transition agreements with LANS to ensure compliance with Clause H.4</i>	Approval	60 days after NTP
147	H.7 A(2)b	<i>Develop Final written communication plan with LANS</i>	Information	15 days after NTP
148	H.7 A(5)	<i>Submit report regarding the Implementation of the hiring preferences</i>	Information	Weekly during Contract Transition or less frequently if requested by the Contracting Officer
149	H.7 B	<i>Draft Benefits Transition Plan</i>	Approval	On or before the last day of the 90 day transition period
	H.7B(d)	<i>Description of the necessary transactions and a schedule for when the benefit plan will be developed and assets transferred</i>	Approval	On or before the last day of the 90 day transition period

#	Deliverable		EM-LA Action	Contract Deliverable
				Due Date
150	H.7 2(a)1	<i>List of Contractor personnel who will be responsible for the transition of the existing benefit plans or the development of new benefit plans</i>	Information	Within ten days after NTP
	H.7 2(a)3	<i>Provide estimated costs and detailed breakouts of the costs to accomplish workforce and benefits transition activities</i>	Information	Within ten days after NTP
151	H.7 2(b)	<i>Provide CO a list of the information that the Contractor has requested from LANS pertaining to the existing benefit plans</i>	Information	Within 15 days after NTP
152	H.7 2(c)1	Final Draft Benefits Transition Plan	Information	Within 20 days after NTP
	H.7.2(c)2	<i>Detailed description of plans and processes for compliance with H. 4 and H.5</i>	Information	Within 20 days after NTP
	H.7.2(c)3	<i>Submittal of Minutes from tele video, teleconference or in person meetings with LANS Benefits Administrators to Contracting Officer</i>	Information	Contracting Officer within two days of the meeting

#	Deliverable		EM-LA Action	Contract Deliverable
				Due Date
153	H.7 2(d)	<i>Final written Benefits Transition Plan</i>	Approval	Within 30 days after NTP
154	H.7 2(e)3(i)	<i>Draft copies of the transition agreements with the incumbent contractors to ensure compliance with Clause H.5</i>	Information	Within 45 days after NTP
	H.7 2(e)3(i)	<i>Draft or proposed final versions of any new defined benefit and defined contribution of the pension plans and other benefit plans</i>	Information	Within 45 days after NTP
	H.7 2(e)3(ii)	<i>Draft restated benefit plans and draft Summary Plan Descriptions (SPDs) for pension and other benefit plans sponsored by the incumbent contractors</i>	Information	Within 45 days after NTP
155	H.7 2(f)	<i>Submit final versions of transition agreements with the incumbent contractors to ensure compliance with Clause H.5, restated benefit plans and SPDs for pension and other benefit plans sponsored by the incumbent contractors, and any new defined benefit and defined contribution pension plans and other benefit plans</i>	Approval	No Later than 60 days after NTP

#	Deliverable		EM-LA Action	Contract Deliverable
				Due Date
156	H.7 2(h)1	<i>Upon Contracting Officer Request, Documents relating to benefit plans offered to Contractor Employees</i>	Information	After the Contract Transition Period and remaining period of performance
	H.7 2(h)2	<i>Upon Contracting Officer Request, Any and all other documents pertaining to implementation of and compliance with implementation of the compensation and benefit programs identified in Clause H.5</i>	Information	After the Contract Transition Period and remaining period of performance
	H.7 2(h)3	<i>Timely data responses to Departmental annual and ad hoc pension and PRB data requests</i>	Information	After the Contract Transition Period and remaining period of “within the timeframe specified by the Contracting officer or within one calendar day if no timeframe is specified
157	H.9(B)	<i>Economic bargaining parameters</i>	Approval	Prior to the Contractor entering into the collective bargaining process

#	Deliverable		EM-LA Action	Contract Deliverable
				Due Date
	H.9(E)	<i>Notification to DOE of matters of interest including organization actions, Unfair labor practice charges, etc.</i>	Information	Upon occurrence
	H.9(F)	<i>Notification to DOE of any planned or actual strike and/or work Stoppage</i>	Information	Prior to and/or upon occurrence
158	H.9 (G)	<i>Copy of all arbitration decisions</i>	Information	Within one week of receipt of the decision
159	H.9 (H)	<i>Report of Settlement in iBenefits</i>	Information	After ratification of a collective bargaining agreement during next open quarter
160	H.9 (I)	<i>Semi-annual report on grievances for which further judicial and/or administrative actions are anticipated, all final step grievances, and Information on all arbitration requests</i>	Information	June 30 and December 31, of each year
161	H.9 (I)	Provide information on all arbitration requests	Information	Immediately upon receipt of request
162	H.10 (c)	<i>Workforce restructuring plan (Specific Plan) if workforce will be reduce by 50 or more</i>	Approval	At least 60 days in advance of the first communication planned to

#	Deliverable		EM-LA Action	Contract Deliverable
				Due Date
		<i>due to involuntary separation or 100 or more through involuntary and/or voluntary separation</i>		be given to the employees and the public
163	H.10 (g)	<i>Perform an Adverse impact analysis (also known as a diversity analysis) when involuntary separations will affect more than 50 employees in a rolling 12 month period</i>	Information	Prior to notification of employees selected for involuntary separation
164	H.10 (j)	<i>Provide Actual and projected workforce reductions in iBenefits</i>	Information	No later than March 15 th of each year
165	H.11 (c)	<i>Standard Form 98 (e98), Notice of Intention to Make a Service Contract and Response Notice</i>	Information and submittal to Department of Labor	Upon determination of subcontract being covered by Service Contract Labor Standards
166	H.11 (e)	<i>Prepare and submit DBA Semi-Annual Enforcement Report in iBenefits</i>	Information	April 21 and October 21 of each year

#	Deliverable		EM-LA Action	Contract Deliverable
				Due Date
167	H.12 (a)	<i>Submit New compensation policies and all initial proposals for self-insurance</i>	Approval	Prior to Implementation
		<i>Copies of renewal for workers' compensation</i>	Information	TBD
168	H.12 (c)	<i>Settlement claims above the threshold to DOE</i>	Approval All settlement claims of \$100,000 or more must be approved by the Contracting Officer.	Prior to settlement
	H.12 (d)	<i>Significant changes to Workers Compensation coverage</i>	Approval	Prior to Implementation
169	H.15 (d)1	<i>Contractor shall disclose its estimating system in writing.</i>	Approval	No later than 60 days after contract NTP
170	H.16 (e)	<i>Notification of all proposed changes to the EVMS procedures and the impact of those changes - DOE will advise the Contractor of the acceptability of such changes as soon as practicable.</i>	Approval	Prior to implementation

#	Deliverable		EM-LA Action	Contract Deliverable
				Due Date
171	H.16 (h)	<i>Notification if Capital Project is Over-target baseline or over-target schedule</i>	Approval	When indicated by contract performance
172	H.17 (b)	<i>Provide written documentation to CO that accounting system meets the system criteria</i>	Approval	No later than 60 days after NTP
173	H.18 (b)	<i>Provide written document to CO purchasing system meets the system criteria</i>	Approval	No later than 60 days after NTP
174	H.19 (b) and Section I clause FAR 52.245-1, Government Property	<i>Provide written documentation to CO that property management system meets the system criteria</i>	Approval	No later than 60 days after NTP
175	H.31	<i>Organizational Conflict of Interest (OCI) Management Plan (Plan)</i>	Approval	10 days after the NTP
176	H.38 (a)	<i>Diversity plan</i>	Approval	Within sixty (60) calendar days after the NTP
		<i>Implementation of Diversity Plan</i>	Approval	Within thirty (30) calendar days of approval
177	H.40	<i>Draft copy of all communications or releases of information to the public, the media, or Members of Congress</i>	Approval	at least 7 calendar days prior to the planned issue date

#	Deliverable		EM-LA Action	Contract Deliverable
				Due Date
178	H.42(b)	<i>Individual subcontracting plan and any changes to the master subcontracting plan</i>	Approval	Prior to the beginning of each Government fiscal year, or other period as required by the Contracting Officer
179	H.51 (c)	<i>Copy of a written agreement from each of its employees who are granted access to, or furnished with, confidential information, whereby the employee agrees that he or she will not discuss, divulge, or disclose any such information</i>	Information	As required
180	H.60 1(e)	<i>Copies of all insurance policies or insurance arrangements</i>	Information	30 days after the purchase date
181	H.60 2(a)	<i>Annual experience reports for each type of insurance</i>	Information	Annually
182	H.60 2(b)	<i>Annual report of insurance costs and/or self-insurance charges</i>	Information	Annually
183	H.67	<i>Quality Assurance Plan (QAP)</i>	Approval	Prior to commencement of work affecting nuclear safety.
			Approval (updates)	Annually review and update as appropriate

#	Deliverable		EM-LA Action	Contract Deliverable
				Due Date
184	H.68 (c)	<i>Draft permit applications and other regulatory materials</i>	Approval	90 days prior to the date they are to be submitted to the regulatory agency
		<i>Final regulatory documents to DOE</i>		30 days prior to the date of submittal to the regulatory agencies for DOE's final review
185	H.68 (d)	<i>Environmental permits, authorizations, and regulatory approvals</i>	Information	Upon receipt from the regulatory agency
186	H.73 (C)	<i>Project Controls System Description (PCSD)</i>	Approval	During the Contract Transition Period
187	H.73 (D)(2)(a)	<i>Final CPB</i>	Approval	Six months after the Contract Transition Period
188	H.73 (D)(2)(d)	<i>Monthly status reports regarding the CPB</i>	Information	Monthly
189	H.73 (D)(4)(c)	CPB change proposal	Approval	Concurrently with a change proposal within 60 days of the issuance of a change order by DOE
190	H.73 (D)(6)	Monthly Performance Report	Information	Not later than the five business day prior to the end of each calendar month
191	H.75(a)	<i>Legal Management Plan that meets the requirements of 10 CFR 719.12</i>	Approval	Within 60 days of NTP

#	Deliverable		EM-LA Action	Contract Deliverable
				Due Date
192	H.75(a)	<i>Annual legal budget to Department Counsel</i>	Information	Submit with the Legal Management Plan
		<i>Report to Department Counsel comparing its budgeted and actual legal costs</i>	Information	Within 30 days of the conclusion of the period covered by each annual legal budget
193	I.31	<i>Changes to asset valuations or any other cost changes have occurred or are certain to occur as a result of a change in ownership.</i>	Approval	Within 30 days
194	I.9	OMB Standard Form LLL, Disclosure of Lobbying Activities	Information	Within 30 days of the end of the calendar quarter in which a change occurs
195	I.10	Code of Business Ethics and Conduct	Information	Within 30 days of NTP

#	Deliverable		EM-LA Action	Contract Deliverable
				Due Date
196	I.15	Reporting Executive Compensation and First-Tier Subcontract Awards	Information	Within 30 days of NTP and annually thereafter
197	I.20	Update of Publicly Available Information Regarding Responsibility Matters	Information	Semi-annually
198	I.65 I.69	Affirmative Action Plan for Females & Minorities	Approval	Within 30 days of NTP and updated annually by September 30
199	I.65	Equal Employment Report (EEO-1)	Information	Annually by September 30
200	I.68 I.69	Affirmative Action Plan for Veterans and Workers with Disabilities	Information	Within 30 days of NTP, and updated annually by September 30

#	Deliverable		EM-LA Action	Contract Deliverable
				Due Date
201	I.70	Federal Contractor Veterans' Employment Report (VETS-100A Report)	Information	Annually by September 30
202	I.78	Annual Reports on the Product Types and Dollar Value of Any USDA-Designated Biobased Products Purchased by the Contractor During the Previous Fiscal Year	Information	Annually by October 31
203	I.81 DOE O 350.1 10 CFR 707	Workplace Substance Abuse Program	Approval	Within 30 days of NTP, and updated annually thereafter or when significant changes occur
204	I.81 DOE O 350.1 10 CFR 707	Workplace Substance Abuse Plan Reports	Information	Semi-annually
205	DOE O 350.1	Employee Assistance Program Implementation Plan	Information	Within 60 days of NTP

#	Deliverable		EM-LA Action	Contract Deliverable
				Due Date
206	I.134	Bankruptcy Notification	Information	As applicable within 5 days of the initiation of the proceeding relating to the filing
207	I.138	Consent to Subcontract	Approval	As required
208	I.140	Reports of results for periodic physical inventories of property	Information	Annually by September 30
209	I.140	Input automated data into the Property Inventory Database System	Information	Annually by September 30
210	I.140	Reports of loss, damage, destruction, or theft of property	Information	As soon as facts become known

#	Deliverable		EM-LA Action	Contract Deliverable
				Due Date
211	I.140	Final property inventory for physically completed or terminated contracts	Information	60 days prior to contract completion or upon notice of termination
212	41 CFR 102-39.85	Annual Report of Sales and Exchange Transactions	Information	Annually within 90 days after the close of each fiscal year
213	41 CFR 102-36.295	Property Furnished to Non Federal Activities	Information	Annually
214	41 CFR 102-34.345 41 CFR 109-38.9	Motor Vehicle Fleet Reports	Information	Annually
215	DOE O 442.1A	Employee Concerns Program	Approval	Within 30 days of NTP

#	Deliverable		EM-LA Action	Contract Deliverable
				Due Date
216	DOE O 226.1	Contractor Assurance System description	Approval	Within 60 days of NTP
217	DOE O 232.2	Occurrence Reporting Processing System (ORPS) Reports	Information	As required

PART III - LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS

SECTION J – LIST OF ATTACHMENTS

ATTACHMENT J-3: LIST OF CONSENSUS STANDARDS

The following table contains a list of Consensus Standards that the Contractor is expected to use and may not be identified in the applicable DOE Directives. This list is not all inclusive.

Consensus Standards
American Industrial Hygiene Association (AIHA) "Emergency Response Planning Guidelines (ERPGs)"
IEEE N323A-"Radiation Protection Instrumentation Test and Calibration - 05/01/97"
B.O.C.A., Uniform Building Code or Local Fire and Building Codes
U.S. EPA Manual, 400-R-92-001, "Manual of Protective Action Guides and Protective Actions for Nuclear Incidents," 1991

PART III - LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS

SECTION J - LIST OF ATTACHMENTS

ATTACHMENT J-4: CONSTRUCTION WAGE RATE REQUIREMENTS

DOL issues DBA WDs reflecting prevailing wages and benefits paid by the construction industry within specific localities. The DBA WDs are further classified by the nature of the construction projects performed, specifically listed as "schedules": residential, building, highway, and heavy construction. A brief outline of the definitions for each schedule is listed below. Further details and examples may be found in DOL's "All Agency Memorandum No. 130 and 131" issued in 1978 (reference the WDOL Library Page).

- Building Construction. Includes construction of sheltered enclosures with walk-in access for the purpose of housing persons, machinery, equipment or supplies; all construction of such structures; the installation of utilities and of equipment, both above and below grade levels; as well as incidental grading, utilities and paving. Such structures need not be "habitable" to be building construction. Also, the installation of heavy machinery and/or equipment does not generally change the project's character as a building.
- Heavy Construction. Includes those projects that are not properly classified as either "building," "highway," or "residential." Unlike these classifications, heavy construction is not a homogenous classification. Because of this catch-all nature, projects within the heavy classification may sometimes be distinguished on the basis of their particular project characteristics, and separate schedules may be issued for dredging projects, water and sewer line projects, dams, major bridges, and flood control projects.
- Highway Construction. Includes construction, alteration or repair of roads, streets, highways, runways, taxiways, alleys, trails, paths, parking areas, and other similar projects not incidental to building or heavy construction.

Some contracts or projects may require more than one general schedule to be included depending on the nature and extent of the work. This is described in more detail in DOL's All Agency Memo No. 131. The contracting agency should provide designate the work to which each wage determination or part thereof applies per FAR 22.404-2.

General Decision Number: NM170011 01/06/2017

Superseded General Decision Number: NM20160011

State: New Mexico

Construction Type: Heavy

Counties: Cibola, Colfax, Guadalupe, Harding, Los Alamos,
McKinley, Mora, Quay, Rio Arriba, San Miguel and Union Counties
in New Mexico.

HEAVY CONSTRUCTION PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.20 for calendar year 2017 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2017. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/06/2017

* ELEC0611-011 07/01/2016

CIBOLA, COLFAX, GUADALUPE, HARDING, MCKINLEY, MORA, QUAY, RIO
ARRIBA, SAN MIGUEL, AND UNION COUNTIES

	Rates	Fringes

ELECTRICIAN

Zone 1.....	\$ 29.50	10.44

ZONE 1: Mileage calculated from the main post office in the following towns: Albuquerque-40 miles, Belen-12 miles, Carrizozo-12 miles, Clovis-12 miles, Espanola-14 miles, Farmington-6 miles, Gallup-10 miles, Las Vegas-8 miles, Los Lunas-12 miles, Portales-12 miles, Ratan-6 miles, Roswell-12 miles, Ruidoso-12 miles, Santa Fe-10 miles, Tucumcari-6 miles.

ZONE 2: Extending up to 20 miles beyond Zone 1, EXCEPT ALBURQUERQUE, shall receive 9% above Zone 1 rate.

ZONE 3: Extending up to 30 miles beyond Zone 1, EXCEPT ALBURQUERQUE, shall receive 15% above Zone 1 rate.

ZONE 4: Extending more than 30 miles beyond Zone 1, EXCEPT ALBURQUERQUE, shall receive 26% above Zone 1 rate.

* ELEC0611-013 07/01/2016

Los Alamos County

	Rates	Fringes
ELECTRICIAN.....	\$ 33.93	10.61

IRON0495-003 06/01/2016

	Rates	Fringes
IRONWORKER		
Structural and Reinforcing..	\$ 26.50	14.04

SUNM2009-005 09/14/2010

	Rates	Fringes
CARPENTER.....	\$ 22.26	6.20
LABORER: Common or General.....	\$ 13.26	0.35
LABORER: Flagger.....	\$ 10.90	0.00
OPERATOR: Backhoe.....	\$ 17.00	0.00
OPERATOR: Grader/Blade.....	\$ 18.79	2.35
OPERATOR: Loader (Front End)....	\$ 17.43	0.26
OPERATOR: Scraper.....	\$ 14.03	0.00
PLUMBER.....	\$ 26.27	7.69
TRUCK DRIVER: Dump Truck.....	\$ 11.90	0.00
TRUCK DRIVER: Water Truck.....	\$ 13.72	5.25

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter

* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION
&#65533;

General Decision Number: NM170029 09/22/2017 NM29

Superseded General Decision Number: NM20160029

State: New Mexico

Construction Type: Building

County: Los Alamos County in New Mexico.

BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.20 for calendar year 2017 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.20 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2017. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/06/2017
1	01/27/2017
2	02/24/2017
3	04/07/2017
4	09/15/2017
5	09/22/2017

CARP1353-007 06/01/2016

	Rates	Fringes

CARPENTER

Excluding Acoustical Ceiling Installation, Batt Insulation, Drywall Hanging, and Formwork.....	\$ 23.75	9.92

ELEC0611-017 01/01/2017

	Rates	Fringes

ELECTRICIAN.....	\$ 34.50	10.81

ENGI0953-010 06/01/2016

	Rates	Fringes
Power Equipment Operator		
(2) Roller(Dirt and Grade		
Compaction).....	\$ 21.97	6.10
(4) Bobcat/Skid Loader.....	\$ 22.81	6.10

IRON0495-008 06/01/2017

	Rates	Fringes
IRONWORKER, ORNAMENTAL,		
REINFORCING AND STRUCTURAL.....	\$ 26.50	15.05

LABO0016-005 06/01/2009

	Rates	Fringes
Laborer, Mason Tender Brick		
(3).....	\$ 17.06	4.86

PLUM0412-007 04/01/2017

	Rates	Fringes
PIPEFITTER (Including HVAC		
Pipe Installation).....	\$ 32.40	12.58
PLUMBER (Excluding HVAC Pipe		
Installation).....	\$ 32.40	12.58

* SHEE0049-012 04/01/2017

	Rates	Fringes
Sheet Metal Worker (HVAC Duct		
and System Installation Only)....	\$ 29.28	16.61

SUNM2010-010 11/09/2010

	Rates	Fringes
ACOUSTICAL CEILING MECHANIC.....	\$ 12.00	0.00
BOILERMAKER.....	\$ 21.77	3.98
BRICKLAYER.....	\$ 20.80	5.10
CARPENTER (Batt Insulation		
Only).....	\$ 26.07	5.96
CARPENTER (Drywall Hanging		
Only).....	\$ 19.13	0.00
CARPENTER (Form Work Only).....	\$ 18.80	5.61

CEMENT MASON/CONCRETE FINISHER...	\$ 16.27	3.94
DRYWALL FINISHER/TAPER.....	\$ 13.00	0.00
FLOOR LAYER: Carpet.....	\$ 18.05	4.49
GLAZIER.....	\$ 20.15	3.63
LABORER: Asphalt Raker.....	\$ 10.25	0.00
LABORER: Common or General.....	\$ 12.99	3.56
LABORER: Landscape & Irrigation.....	\$ 12.42	1.47
LABORER: Mason Tender - Cement/Concrete.....	\$ 11.51	0.85
LABORER: Pipelayer.....	\$ 13.78	2.20
OPERATOR: Backhoe.....	\$ 18.79	3.47
OPERATOR: Crane.....	\$ 24.38	4.60
OPERATOR: Forklift.....	\$ 20.86	4.60
OPERATOR: Grader/Blade.....	\$ 20.33	4.94
OPERATOR: Loader (Front End)....	\$ 19.76	4.84
PAINTER: Brush, Roller and Spray, Excludes Drywall Finishing/Taping.....	\$ 16.10	1.79
PLASTERER.....	\$ 17.65	5.29
ROOFER.....	\$ 18.84	0.00
SHEET METAL WORKER, Excludes HVAC Duct and Unit Installation.....	\$ 22.01	9.65
SPRINKLER FITTER (Fire Sprinklers).....	\$ 20.00	4.16
TILE FINISHER.....	\$ 14.02	0.00
TILE SETTER.....	\$ 14.30	1.02
TRUCK DRIVER: Dump Truck.....	\$ 11.00	0.00
TRUCK DRIVER: Pickup Truck.....	\$ 15.91	3.13

TRUCK DRIVER: Water Truck.....\$ 15.16 4.69

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

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where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

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Survey Rate Identifiers

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Union Average Rate Identifiers

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A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can

be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

PART III - LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS

SECTION J – LIST OF ATTACHMENTS

ATTACHMENT J-5: SERVICE CONTRACT ACT DETERMINATIONS

WD 15-5463 (Rev.-3) was first posted on www.wdol.gov on 08/08/2017

REGISTER OF WAGE DETERMINATIONS UNDER | U.S. DEPARTMENT OF LABOR
THE SERVICE CONTRACT ACT | EMPLOYMENT STANDARDS ADMINISTRATION
By direction of the Secretary of Labor | WAGE AND HOUR DIVISION
WASHINGTON D.C. 20210

Wage Determination No.: 2015-5463
Daniel W. Simms Division of | Revision No.: 3
Director Wage Determinations | Date Of Revision: 08/03/2017

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.20 for calendar year 2017 applies to all contracts subject to the Service Contract Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2017. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

State: New Mexico

Area: New Mexico County of Los Alamos

Fringe Benefits Required Follow the Occupational Listing		
OCCUPATION CODE - TITLE	FOOTNOTE	RATE
01000 - Administrative Support And Clerical Occupations		
01011 - Accounting Clerk I	15.74	
01012 - Accounting Clerk II	17.67	
01013 - Accounting Clerk III	19.76	
01020 - Administrative Assistant	21.99	
01035 - Court Reporter	20.47	
01041 - Customer Service Representative I	12.79	
01042 - Customer Service Representative II	14.38	
01043 - Customer Service Representative III	15.69	
01051 - Data Entry Operator I	13.34	
01052 - Data Entry Operator II	15.09	
01060 - Dispatcher, Motor Vehicle	18.13	
01070 - Document Preparation Clerk	15.25	
01090 - Duplicating Machine Operator	15.25	
01111 - General Clerk I	11.46	
01112 - General Clerk II	12.50	
01113 - General Clerk III	14.03	
01120 - Housing Referral Assistant	20.25	
01141 - Messenger Courier	12.08	
01191 - Order Clerk I	13.71	
01192 - Order Clerk II	15.09	
01261 - Personnel Assistant (Employment) I	16.70	
01262 - Personnel Assistant (Employment) II	18.68	

01263 - Personnel Assistant (Employment) III	20.83
01270 - Production Control Clerk	23.17
01290 - Rental Clerk	14.83
01300 - Scheduler, Maintenance	16.24
01311 - Secretary I	16.24
01312 - Secretary II	18.16
01313 - Secretary III	20.25
01320 - Service Order Dispatcher	16.20
01410 - Supply Technician	21.99
01420 - Survey Worker	16.95
01460 - Switchboard Operator/Receptionist	12.49
01531 - Travel Clerk I	11.82
01532 - Travel Clerk II	12.76
01533 - Travel Clerk III	13.57
01611 - Word Processor I	14.41
01612 - Word Processor II	16.18
01613 - Word Processor III	18.10
05000 - Automotive Service Occupations	
05005 - Automobile Body Repairer, Fiberglass	18.12
05010 - Automotive Electrician	18.12
05040 - Automotive Glass Installer	15.82
05070 - Automotive Worker	15.82
05110 - Mobile Equipment Servicer	13.50
05130 - Motor Equipment Metal Mechanic	18.12
05160 - Motor Equipment Metal Worker	15.82
05190 - Motor Vehicle Mechanic	18.12
05220 - Motor Vehicle Mechanic Helper	13.62
05250 - Motor Vehicle Upholstery Worker	15.82
05280 - Motor Vehicle Wrecker	15.82
05310 - Painter, Automotive	17.19
05340 - Radiator Repair Specialist	15.82
05370 - Tire Repairer	11.49
05400 - Transmission Repair Specialist	18.12
07000 - Food Preparation And Service Occupations	
07010 - Baker	12.76
07041 - Cook I	10.72
07042 - Cook II	12.80
07070 - Dishwasher	8.68
07130 - Food Service Worker	10.30
07210 - Meat Cutter	17.68
07260 - Waiter/Waitress	8.58
09000 - Furniture Maintenance And Repair Occupations	
09010 - Electrostatic Spray Painter	17.73
09040 - Furniture Handler	13.84
09080 - Furniture Refinisher	17.73
09090 - Furniture Refinisher Helper	15.07
09110 - Furniture Repairer, Minor	16.76
09130 - Upholsterer	17.73
11000 - General Services And Support Occupations	
11030 - Cleaner, Vehicles	10.13
11060 - Elevator Operator	10.13
11090 - Gardener	17.29
11122 - Housekeeping Aide	11.77
11150 - Janitor	11.77

11210 - Laborer, Grounds Maintenance	10.59
11240 - Maid or Houseman	9.48
11260 - Pruner	10.75
11270 - Tractor Operator	15.99
11330 - Trail Maintenance Worker	10.59
11360 - Window Cleaner	13.78
12000 - Health Occupations	
12010 - Ambulance Driver	15.94
12011 - Breath Alcohol Technician	19.84
12012 - Certified Occupational Therapist Assistant	25.32
12015 - Certified Physical Therapist Assistant	21.25
12020 - Dental Assistant	15.84
12025 - Dental Hygienist	41.27
12030 - EKG Technician	26.19
12035 - Electroneurodiagnostic Technologist	26.19
12040 - Emergency Medical Technician	15.94
12071 - Licensed Practical Nurse I	18.73
12072 - Licensed Practical Nurse II	20.92
12073 - Licensed Practical Nurse III	23.32
12100 - Medical Assistant	14.09
12130 - Medical Laboratory Technician	18.44
12160 - Medical Record Clerk	13.62
12190 - Medical Record Technician	15.65
12195 - Medical Transcriptionist	14.42
12210 - Nuclear Medicine Technologist	36.03
12221 - Nursing Assistant I	10.38
12222 - Nursing Assistant II	11.67
12223 - Nursing Assistant III	12.74
12224 - Nursing Assistant IV	14.29
12235 - Optical Dispenser	15.49
12236 - Optical Technician	14.53
12250 - Pharmacy Technician	15.50
12280 - Phlebotomist	14.29
12305 - Radiologic Technologist	26.71
12311 - Registered Nurse I	25.39
12312 - Registered Nurse II	31.06
12313 - Registered Nurse II, Specialist	31.06
12314 - Registered Nurse III	37.58
12315 - Registered Nurse III, Anesthetist	37.58
12316 - Registered Nurse IV	45.04
12317 - Scheduler (Drug and Alcohol Testing)	20.31
12320 - Substance Abuse Treatment Counselor	19.19
13000 - Information And Arts Occupations	
13011 - Exhibits Specialist I	17.35
13012 - Exhibits Specialist II	21.18
13013 - Exhibits Specialist III	25.33
13041 - Illustrator I	16.10
13042 - Illustrator II	19.95
13043 - Illustrator III	23.03
13047 - Librarian	22.91
13050 - Library Aide/Clerk	9.11
13054 - Library Information Technology Systems Administrator	20.67
13058 - Library Technician	15.10

13061 - Media Specialist I	15.31
13062 - Media Specialist II	17.18
13063 - Media Specialist III	19.07
13071 - Photographer I	15.88
13072 - Photographer II	17.63
13073 - Photographer III	21.70
13074 - Photographer IV	24.30
13075 - Photographer V	29.39
13090 - Technical Order Library Clerk	15.49
13110 - Video Teleconference Technician	18.57
14000 - Information Technology Occupations	
14041 - Computer Operator I	14.98
14042 - Computer Operator II	16.76
14043 - Computer Operator III	19.12
14044 - Computer Operator IV	21.26
14045 - Computer Operator V	24.34
14071 - Computer Programmer I (see 1)	22.41
14072 - Computer Programmer II (see 1)	26.14
14073 - Computer Programmer III (see 1)	
14074 - Computer Programmer IV (see 1)	
14101 - Computer Systems Analyst I (see 1)	
14102 - Computer Systems Analyst II (see 1)	
14103 - Computer Systems Analyst III (see 1)	
14150 - Peripheral Equipment Operator	14.98
14160 - Personal Computer Support Technician	21.52
14170 - System Support Specialist	23.38
15000 - Instructional Occupations	
15010 - Aircrew Training Devices Instructor (Non-Rated)	30.38
15020 - Aircrew Training Devices Instructor (Rated)	36.73
15030 - Air Crew Training Devices Instructor (Pilot)	44.06
15050 - Computer Based Training Specialist / Instructor	30.38
15060 - Educational Technologist	28.52
15070 - Flight Instructor (Pilot)	44.06
15080 - Graphic Artist	27.12
15085 - Maintenance Test Pilot, Fixed, Jet/Prop	44.06
15086 - Maintenance Test Pilot, Rotary Wing	44.06
15088 - Non-Maintenance Test/Co-Pilot	44.06
15090 - Technical Instructor	22.52
15095 - Technical Instructor/Course Developer	30.33
15110 - Test Proctor	18.16
15120 - Tutor	18.16
16000 - Laundry, Dry-Cleaning, Pressing And Related Occupations	
16010 - Assembler	9.92
16030 - Counter Attendant	9.92
16040 - Dry Cleaner	11.32
16070 - Finisher, Flatwork, Machine	9.92
16090 - Presser, Hand	9.92
16110 - Presser, Machine, Drycleaning	9.92
16130 - Presser, Machine, Shirts	9.92
16160 - Presser, Machine, Wearing Apparel, Laundry	9.92
16190 - Sewing Machine Operator	11.82
16220 - Tailor	12.42
16250 - Washer, Machine	10.38
19000 - Machine Tool Operation And Repair Occupations	

19010 - Machine-Tool Operator (Tool Room)	23.62
19040 - Tool And Die Maker	29.15
21000 - Materials Handling And Packing Occupations	
21020 - Forklift Operator	14.21
21030 - Material Coordinator	21.06
21040 - Material Expediter	21.06
21050 - Material Handling Laborer	10.90
21071 - Order Filler	11.53
21080 - Production Line Worker (Food Processing)	14.21
21110 - Shipping Packer	13.14
21130 - Shipping/Receiving Clerk	13.14
21140 - Store Worker I	9.03
21150 - Stock Clerk	14.59
21210 - Tools And Parts Attendant	14.21
21410 - Warehouse Specialist	14.21
23000 - Mechanics And Maintenance And Repair Occupations	
23010 - Aerospace Structural Welder	27.22
23019 - Aircraft Logs and Records Technician	20.67
23021 - Aircraft Mechanic I	25.48
23022 - Aircraft Mechanic II	27.22
23023 - Aircraft Mechanic III	28.69
23040 - Aircraft Mechanic Helper	18.28
23050 - Aircraft, Painter	23.62
23060 - Aircraft Servicer	20.67
23070 - Aircraft Survival Flight Equipment Technician	23.62
23080 - Aircraft Worker	22.12
23091 - Aircrew Life Support Equipment (ALSE) Mechanic I	22.12
23092 - Aircrew Life Support Equipment (ALSE) Mechanic II	25.48
23110 - Appliance Mechanic	17.79
23120 - Bicycle Repairer	13.23
23125 - Cable Splicer	25.48
23130 - Carpenter, Maintenance	20.21
23140 - Carpet Layer	20.77
23160 - Electrician, Maintenance	26.04
23181 - Electronics Technician Maintenance I	27.68
23182 - Electronics Technician Maintenance II	30.05
23183 - Electronics Technician Maintenance III	32.42
23260 - Fabric Worker	19.00
23290 - Fire Alarm System Mechanic	22.70
23310 - Fire Extinguisher Repairer	17.22
23311 - Fuel Distribution System Mechanic	25.48
23312 - Fuel Distribution System Operator	18.04
23370 - General Maintenance Worker	18.27
23380 - Ground Support Equipment Mechanic	25.48
23381 - Ground Support Equipment Servicer	20.67
23382 - Ground Support Equipment Worker	22.12
23391 - Gunsmith I	17.22
23392 - Gunsmith II	20.77
23393 - Gunsmith III	24.33
23410 - Heating, Ventilation And Air-Conditioning Mechanic	23.30
23411 - Heating, Ventilation And Air Contidioning	23.39

Mechanic (Research Facility)	
23430 - Heavy Equipment Mechanic	23.57
23440 - Heavy Equipment Operator	20.69
23460 - Instrument Mechanic	30.22
23465 - Laboratory/Shelter Mechanic	22.55
23470 - Laborer	10.90
23510 - Locksmith	22.55
23530 - Machinery Maintenance Mechanic	25.48
23550 - Machinist, Maintenance	25.48
23580 - Maintenance Trades Helper	15.20
23591 - Metrology Technician I	30.22
23592 - Metrology Technician II	32.27
23593 - Metrology Technician III	33.90
23640 - Millwright	24.33
23710 - Office Appliance Repairer	23.24
23760 - Painter, Maintenance	19.28
23790 - Pipefitter, Maintenance	24.23
23810 - Plumber, Maintenance	22.66
23820 - Pneudraulic Systems Mechanic	24.33
23850 - Rigger	24.33
23870 - Scale Mechanic	20.77
23890 - Sheet-Metal Worker, Maintenance	23.25
23910 - Small Engine Mechanic	18.24
23931 - Telecommunications Mechanic I	24.06
23932 - Telecommunications Mechanic II	25.71
23950 - Telephone Lineman	25.48
23960 - Welder, Combination, Maintenance	22.25
23965 - Well Driller	23.93
23970 - Woodcraft Worker	24.33
23980 - Woodworker	18.27
24000 - Personal Needs Occupations	
24550 - Case Manager	13.49
24570 - Child Care Attendant	10.31
24580 - Child Care Center Clerk	14.77
24610 - Chore Aide	9.40
24620 - Family Readiness And Support Services Coordinator	13.49
24630 - Homemaker	17.49
25000 - Plant And System Operations Occupations	
25010 - Boiler Tender	23.93
25040 - Sewage Plant Operator	22.17
25070 - Stationary Engineer	23.93
25190 - Ventilation Equipment Tender	15.20
25210 - Water Treatment Plant Operator	21.03
27000 - Protective Service Occupations	
27004 - Alarm Monitor	15.20
27007 - Baggage Inspector	13.59
27008 - Corrections Officer	15.36
27010 - Court Security Officer	16.86
27030 - Detection Dog Handler	15.20
27040 - Detention Officer	15.36
27070 - Firefighter	16.86
27101 - Guard I	13.59
27102 - Guard II	15.20

27131 - Police Officer I	18.47	
27132 - Police Officer II	20.52	
28000 - Recreation Occupations		
28041 - Carnival Equipment Operator	13.55	
28042 - Carnival Equipment Repairer	14.77	
28043 - Carnival Worker	9.34	
28210 - Gate Attendant/Gate Tender	13.76	
28310 - Lifeguard	12.25	
28350 - Park Attendant (Aide)	15.40	
28510 - Recreation Aide/Health Facility Attendant	11.23	
28515 - Recreation Specialist	19.06	
28630 - Sports Official	12.25	
28690 - Swimming Pool Operator	22.19	
29000 - Stevedoring/Longshoremen Occupational Services		
29010 - Blocker And Bracer	22.46	
29020 - Hatch Tender	22.46	
29030 - Line Handler	22.46	
29041 - Stevedore I	20.94	
29042 - Stevedore II	24.39	
30000 - Technical Occupations		
30010 - Air Traffic Control Specialist, Center (HFO) (see 2)	37.62	
30011 - Air Traffic Control Specialist, Station (HFO) (see 2)	25.94	
30012 - Air Traffic Control Specialist, Terminal (HFO) (see 2)	28.57	
30021 - Archeological Technician I	19.81	
30022 - Archeological Technician II	22.17	
30023 - Archeological Technician III	27.45	
30030 - Cartographic Technician	27.45	
30040 - Civil Engineering Technician	27.45	
30051 - Cryogenic Technician I	30.41	
30052 - Cryogenic Technician II	33.59	
30061 - Drafter/CAD Operator I	19.81	
30062 - Drafter/CAD Operator II	22.17	
30063 - Drafter/CAD Operator III	24.71	
30064 - Drafter/CAD Operator IV	30.41	
30081 - Engineering Technician I	17.64	
30082 - Engineering Technician II	19.81	
30083 - Engineering Technician III	22.17	
30084 - Engineering Technician IV	27.45	
30085 - Engineering Technician V	33.59	
30086 - Engineering Technician VI	40.64	
30090 - Environmental Technician	24.64	
30095 - Evidence Control Specialist	27.45	
30210 - Laboratory Technician	24.71	
30221 - Latent Fingerprint Technician I	30.41	
30222 - Latent Fingerprint Technician II	33.59	
30240 - Mathematical Technician	27.45	
30361 - Paralegal/Legal Assistant I	15.78	
30362 - Paralegal/Legal Assistant II	19.54	
30363 - Paralegal/Legal Assistant III	23.91	
30364 - Paralegal/Legal Assistant IV	28.93	
30375 - Petroleum Supply Specialist	33.59	
30390 - Photo-Optics Technician	27.45	
30395 - Radiation Control Technician	33.59	
30461 - Technical Writer I	25.67	

30462 - Technical Writer II	31.42	
30463 - Technical Writer III	37.99	
30491 - Unexploded Ordnance (UXO) Technician I		23.91
30492 - Unexploded Ordnance (UXO) Technician II		28.93
30493 - Unexploded Ordnance (UXO) Technician III		34.67
30494 - Unexploded (UXO) Safety Escort	23.91	
30495 - Unexploded (UXO) Sweep Personnel	23.91	
30501 - Weather Forecaster I	30.41	
30502 - Weather Forecaster II	36.99	
30620 - Weather Observer, Combined Upper Air Or	(see 2)	24.71
Surface Programs		
30621 - Weather Observer, Senior	(see 2)	27.45
31000 - Transportation/Mobile Equipment Operation Occupations		
31010 - Airplane Pilot	28.93	
31020 - Bus Aide	10.73	
31030 - Bus Driver	17.17	
31043 - Driver Courier	13.34	
31260 - Parking and Lot Attendant	9.72	
31290 - Shuttle Bus Driver	13.56	
31310 - Taxi Driver	10.53	
31361 - Truckdriver, Light	13.56	
31362 - Truckdriver, Medium	16.66	
31363 - Truckdriver, Heavy	18.93	
31364 - Truckdriver, Tractor-Trailer	18.93	
99000 - Miscellaneous Occupations		
99020 - Cabin Safety Specialist	14.10	
99030 - Cashier	9.97	
99050 - Desk Clerk	11.06	
99095 - Embalmer	23.91	
99130 - Flight Follower	23.91	
99251 - Laboratory Animal Caretaker I	13.46	
99252 - Laboratory Animal Caretaker II	15.03	
99260 - Marketing Analyst	23.47	
99310 - Mortician	23.91	
99410 - Pest Controller	20.30	
99510 - Photofinishing Worker	12.56	
99710 - Recycling Laborer	12.75	
99711 - Recycling Specialist	16.49	
99730 - Refuse Collector	10.99	
99810 - Sales Clerk	12.33	
99820 - School Crossing Guard	10.89	
99830 - Survey Party Chief	19.48	
99831 - Surveying Aide	17.72	
99832 - Surveying Technician	17.87	
99840 - Vending Machine Attendant	14.18	
99841 - Vending Machine Repairer	17.66	
99842 - Vending Machine Repairer Helper	12.72	

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors, applies to all contracts subject to the Service Contract Act for which

the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is the victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

ALL OCCUPATIONS LISTED ABOVE RECEIVE THE FOLLOWING BENEFITS:

HEALTH & WELFARE: \$4.41 per hour or \$176.40 per week or \$764.40 per month

HEALTH & WELFARE EO 13706: \$4.13 per hour, or \$165.20 per week, or \$715.87 per month

VACATION: 2 weeks paid vacation after 1 year of service with a contractor or successor, 3 weeks after 10 years, and 4 weeks after 15 years. Length of service includes the whole span of continuous service with the present contractor or successor, wherever employed, and with the predecessor contractors in the performance of similar work at the same Federal facility. (See 29 CFR 4.173)

HOLIDAYS: A minimum of ten paid holidays per year: New Year's Day, Martin Luther King Jr.'s Birthday, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day, and Christmas Day. (A contractor may substitute for any of the named holidays another day off with pay in accordance with a plan communicated to the employees involved.) (See 29 CFR 4.174)

THE OCCUPATIONS WHICH HAVE NUMBERED FOOTNOTES IN PARENTHESES RECEIVE THE FOLLOWING:

1) **COMPUTER EMPLOYEES:** Under the SCA at section 8(b), this wage determination does not apply to any employee who individually qualifies as a bona fide executive, administrative, or professional employee as defined in 29 C.F.R. Part 541. Because most Computer System Analysts and Computer Programmers who are compensated at a rate not less than \$27.63 (or on a salary or fee basis at a rate not less than \$455 per week) an hour would likely qualify as exempt computer professionals, (29 C.F.R. 541.400) wage rates may not be listed on this wage determination for all occupations within those job families. In addition, because this wage determination may not list a wage rate for some or all occupations within those job families if the survey data indicates that the prevailing wage rate for the occupation equals or exceeds \$27.63 per hour conformances may be necessary for certain nonexempt employees. For example, if an individual employee is nonexempt but nevertheless performs duties within the scope of one of the Computer Systems Analyst or Computer Programmer occupations for which this wage determination does not specify an SCA wage rate, then the wage rate for that employee must be conformed in accordance with the conformance procedures described in the conformance note included on this wage determination.

Additionally, because job titles vary widely and change quickly in the computer

industry, job titles are not determinative of the application of the computer professional exemption. Therefore, the exemption applies only to computer employees who satisfy the compensation requirements and whose primary duty consists of:

- (1) The application of systems analysis techniques and procedures, including consulting with users, to determine hardware, software or system functional specifications;
- (2) The design, development, documentation, analysis, creation, testing or modification of computer systems or programs, including prototypes, based on and related to user or system design specifications;
- (3) The design, documentation, testing, creation or modification of computer programs related to machine operating systems; or
- (4) A combination of the aforementioned duties, the performance of which requires the same level of skills. (29 C.F.R. 541.400).

2) AIR TRAFFIC CONTROLLERS AND WEATHER OBSERVERS - NIGHT PAY & SUNDAY PAY: If you work at night as part of a regular tour of duty, you will earn a night differential and receive an additional 10% of basic pay for any hours worked between 6pm and 6am. If you are a full-time employed (40 hours a week) and Sunday is part of your regularly scheduled workweek, you are paid at your rate of basic pay plus a Sunday premium of 25% of your basic rate for each hour of Sunday work which is not overtime (i.e. occasional work on Sunday outside the normal tour of duty is considered overtime work).

**** HAZARDOUS PAY DIFFERENTIAL ****

An 8 percent differential is applicable to employees employed in a position that represents a high degree of hazard when working with or in close proximity to ordnance, explosives, and incendiary materials. This includes work such as screening, blending, dying, mixing, and pressing of sensitive ordnance, explosives, and pyrotechnic compositions such as lead azide, black powder and photoflash powder. All dry-house activities involving propellants or explosives. Demilitarization, modification, renovation, demolition, and maintenance operations on sensitive ordnance, explosives and incendiary materials. All operations involving re-grading and cleaning of artillery ranges.

A 4 percent differential is applicable to employees employed in a position that represents a low degree of hazard when working with, or in close proximity to ordnance, (or employees possibly adjacent to) explosives and incendiary materials which involves potential injury such as laceration of hands, face, or arms of the employee engaged in the operation, irritation of the skin, minor burns and the like; minimal damage to immediate or adjacent work area or equipment being used. All operations involving, unloading, storage, and hauling of ordnance, explosive, and incendiary ordnance material other than small arms ammunition. These differentials are only applicable to work that has been specifically designated by the agency for ordnance, explosives, and incendiary material differential pay.

**** UNIFORM ALLOWANCE ****

If employees are required to wear uniforms in the performance of this contract (either by the terms of the Government contract, by the employer, by the state or local law, etc.), the cost of furnishing such uniforms and maintaining (by laundering or dry cleaning) such uniforms is an expense that may not be borne by an employee where such cost reduces the hourly rate below that required by the wage

determination. The Department of Labor will accept payment in accordance with the following standards as compliance:

The contractor or subcontractor is required to furnish all employees with an adequate number of uniforms without cost or to reimburse employees for the actual cost of the uniforms. In addition, where uniform cleaning and maintenance is made the responsibility of the employee, all contractors and subcontractors subject to this wage determination shall (in the absence of a bona fide collective bargaining agreement providing for a different amount, or the furnishing of contrary affirmative proof as to the actual cost), reimburse all employees for such cleaning and maintenance at a rate of \$3.35 per week (or \$.67 cents per day). However, in those instances where the uniforms furnished are made of "wash and wear" materials, may be routinely washed and dried with other personal garments, and do not require any special treatment such as dry cleaning, daily washing, or commercial laundering in order to meet the cleanliness or appearance standards set by the terms of the Government contract, by the contractor, by law, or by the nature of the work, there is no requirement that employees be reimbursed for uniform maintenance costs.

**** SERVICE CONTRACT ACT DIRECTORY OF OCCUPATIONS ****

The duties of employees under job titles listed are those described in the "Service Contract Act Directory of Occupations", Fifth Edition (Revision 1), dated September 2015, unless otherwise indicated.

**** REQUEST FOR AUTHORIZATION OF ADDITIONAL CLASSIFICATION AND WAGE RATE, Standard Form 1444 (SF-1444) ****

Conformance Process:

The contracting officer shall require that any class of service employee which is not listed herein and which is to be employed under the contract (i.e., the work to be performed is not performed by any classification listed in the wage determination), be classified by the contractor so as to provide a reasonable relationship (i.e., appropriate level of skill comparison) between such unlisted classifications and the classifications listed in the wage determination (See 29 CFR 4.6(b)(2)(i)). Such conforming procedures shall be initiated by the contractor prior to the performance of contract work by such unlisted class(es) of employees (See 29 CFR 4.6(b)(2)(ii)). The Wage and Hour Division shall make a final determination of conformed classification, wage rate, and/or fringe benefits which shall be paid to all employees performing in the classification from the first day of work on which contract work is performed by them in the classification. Failure to pay such unlisted employees the compensation agreed upon by the interested parties and/or fully determined by the Wage and Hour Division retroactive to the date such class of employees commenced contract work shall be a violation of the Act and this contract. (See 29 CFR 4.6(b)(2)(v)). When multiple wage determinations are included in a contract, a separate SF-1444 should be prepared for each wage determination to which a class(es) is to be conformed.

The process for preparing a conformance request is as follows:

- 1) When preparing the bid, the contractor identifies the need for a conformed occupation(s) and computes a proposed rate(s).
- 2) After contract award, the contractor prepares a written report listing in order

the proposed classification title(s), a Federal grade equivalency (FGE) for each proposed classification(s), job description(s), and rationale for proposed wage rate(s), including information regarding the agreement or disagreement of the authorized representative of the employees involved, or where there is no authorized representative, the employees themselves. This report should be submitted to the contracting officer no later than 30 days after such unlisted class(es) of employees performs any contract work.

3) The contracting officer reviews the proposed action and promptly submits a report of the action, together with the agency's recommendations and pertinent information including the position of the contractor and the employees, to the U.S. Department of Labor, Wage and Hour Division, for review (See 29 CFR 4.6(b)(2)(ii)).

4) Within 30 days of receipt, the Wage and Hour Division approves, modifies, or disapproves the action via transmittal to the agency contracting officer, or notifies the contracting officer that additional time will be required to process the request.

5) The contracting officer transmits the Wage and Hour Division's decision to the contractor.

6) Each affected employee shall be furnished by the contractor with a written copy of such determination or it shall be posted as a part of the wage determination (See 29 CFR 4.6(b)(2)(iii)).

Information required by the Regulations must be submitted on SF-1444 or bond paper.

When preparing a conformance request, the "Service Contract Act Directory of Occupations" should be used to compare job definitions to ensure that duties requested are not performed by a classification already listed in the wage determination. Remember, it is not the job title, but the required tasks that determine whether a class is included in an established wage determination. Conformances may not be used to artificially split, combine, or subdivide classifications listed in the wage determination (See 29 CFR 4.152(c)(1)).

PART III - LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS

SECTION J – LIST OF ATTACHMENTS

ATTACHMENT J-6: INTERFACES WITH NNSA MANAGING AND OPERATING CONTRACTOR SYSTEMS AND SERVICES

The Contractor shall put into place interface agreements with the NNSA Management and Operating (M&O) Contractor for use of the below referenced systems, services and shared facilities. These agreements shall include any necessary training required to use the systems and services, obtain the support of the M&O to support the Contractor's use of the systems and services, and obtain records of the systems' use for EM project activities. The use of these systems is necessary to ensure EM activities do not interfere with NNSA mission activities or evaluate and mitigate the EM activities impact on the environment.

Systems

1. Geographic Information System (GIS) for items such as location submittals for SWMU and Area of Concern (AOC) site boundary changes; map generation for reports, presentations, posters, etc.; sample planning locations and interfaces with the Environmental Information Management System (EIMS)/InTellus modules; Project Requirements Identification System (PRID) mapping to show planning and construction interfaces and conflicts.
 - a. The GIS is by necessity the single system that contains ALL mapping information for LANL and cannot be split out by contractors. The NNSA M&O Contractor will maintain and operate the software. There are no shared costs for such; however, minimal EM requested software modifications are expected and shall be paid for by the LLCC Contractor.
 - b. The NNSA M&O Contractor will allow a limited number of LLCC Contractor staff to have data entry access to the GIS such that all GIS information collected by the LLCC Contractor can be input to the GIS. These individuals shall be trained in accordance with NNSA M&O Contractor's procedures and training requirements. The NNSA M&O Contractor will issue crypto-cards to the Contractor personnel to allow system access.
 - c. The Contractor shall be responsible for producing their own maps and figures from the GIS to support reporting, briefings, communications, etc.
2. Integrated Review Tool (IRT) consists of several discrete systems (based on GIS) as the single system for showing all planned work across LANL and cannot be split out by contractors including, but not limited to, the following:
 - a. PRID for such items as project identification and location, subject matter expert review for project requirements, identification of potential conflicts for management consideration, and access for EM SMEs and project representatives.
 - b. Excavation Identification System (ExID) and call-before-you-dig considerations.

- c. The Contractor shall develop procedures that are consistent with the LANL NNSA M&O Contractor's procedures for accessing and using the PRID and the ExID systems. The Contractor shall establish an interface agreement with the NNSA M&O Contractor to fund that portion of the PRID and ExID reviews that cannot be performed by the Contractor's SMEs and must be provided by the NNSA M&O Contractor, such as NNSA mission SMEs and buried utility identification/surface clearance personnel.
 - d. The NNSA M&O Contractor is responsible for the operation and maintenance of the software itself. However, the Contractor and NNSA M&O Contractor executive software change control board (ESCCB) (below) shall control changes to the common software and possibly determine costs based on requestor of changes.
3. The EIMS/Intellus environmental database contracted for by the NNSA M&O Contractor with LOCUS Technologies, Inc. EIMS/InTellus is a database of all environmental data collected under the Consent Order as required by a settlement agreement between LANL and NMED on hexavalent chromium reporting. This database is required to make all environmental data searchable to the public. The Contractor may obtain access through the NNSA M&O subcontract with LOCUS Technologies until a suitable replacement EM subcontract directly with LOCUS Technologies, Inc. can be put into place. The NNSA M&O subcontract may not be assigned to the Contractor because the NNSA M&O will continue to upload other LANL environmental data into the same database.
4. Environmental Management System (EMS) access to provide updates for LANL site-wide planning and evaluation of site impacts to any operations at LANL. This system is a shared system for inputs and for which the NNSA M&O Contractor maintains primary responsibility for site planning.
 - a. The Contractor shall provide inputs to this system and share some of the cost of maintaining the software with the NNSA M&O Contractor through the ESCCB (below).
5. Waste Compliance Action Tracking System (WCATS) shall be split into two copies, one to be used by the NNSA M&O Contractor and one to be used by the Contractor for information on the waste streams.
 - a. The Contractor shall maintain the information on the newly generated and legacy CH-TRU stored in Area-G.
 - b. The NNSA M&O Contractor is currently the primary owner at LANL. The Contractor shall work with the NNSA M&O Contractor to obtain a copy of WCATS specifically for the Contractor to control and maintain for EM managed wastes. This copy must have linkages to allow information access for transferred wastes from NNSA to EM.
 - c. The Contractor shall maintain the system and execute software changes that are necessary for EM to implement changes resulting from WIPP Waste Acceptance Criteria (WAC) changes and from safety basis for Area G changes. Software changes will be coordinated between the NNSA M&O Contractor and the Contractor.

6. Los Alamos Material Control and Accountability System (LAMCAS) shall be used by both the NNSA M&O Contractor and the Contractor for information on and to track nuclear material control and accountability for radioactive waste products leaving LANL.
 - a. LAMCAS is a DOE complex-wide application.
 - b. The Contractor shall sample wastes for nuclear material content and submit this information into LAMCAS with the records for release of material off-site.
 - c. The NNSA M&O Contractor shall maintain the system, allow personnel access for data entry, and provide training materials to the Contractor.
7. Site Treatment Plan (STP) shall be coordinated between the Contractor and the NNSA M&O Contractor for the tracking, planning, and disposal of STP identified wastes. The list of EM STP wastes is included in *FY15 Site Treatment Plan Environmental Management MTRU [Mixed Transuranic waste] at Area G* (pdf and xlsx files). The Contractor shall operate such as not to generate any additional STP wastes. The Contractor shall notify the NNSA M&O Contractor on progress of disposing of STP wastes and coordinate documentation through modifications to the STP. The NNSA M&O Contractor is the STP lead organization.
8. Correspondence and Communications Action Tracking System (CCATS) shall be used for tracking letters and deliverables required under the Consent Order and Individual Permit (IP) for Stormwater.
 - a. CCATS was developed for the EM program. The Contractor shall make sure it maintains ownership of CCATS.
 - b. The Contractor shall allow the NNSA M&O Contractor to make a copy for its use.
9. Hydrogeologic Data Repository (database) shall continue to be run and be maintained to model the subsurface hydrogeologic structures at LANL.
 - a. The Contractor shall provide preliminary hydrogeologic model information to the NNSA M&O Contractor for subsurface remediation project analyses and for well and borehole drilling activities upon request.
 - b. The NNSA M&O Contractor shall provide all drilling data from wells and boreholes and geophysical testing to the LLCC Contractor so the Contractor can update the repository and hydrogeologic model.
 - c. The Contractor shall allow three NNSA M&O Contractor personnel to have read access to the repository and the model to pull data and run the model simulations.
 - d. The Contractor shall be responsible for all data entry, all model and programming changes, satisfaction of all quality assurance requirements for the database and model, all model validation activities, and output preparation for EM work scope activities.
 - e. The NNSA M&O Contractor shall be allowed report and model output capability within the system.

10. Comprehensive Well Inventory Database for LANL shall be maintained by the Contractor. The Contractor shall provide all necessary information as needed by the NNSA M&O Contractor or negotiate access to allow the NNSA M&O Contractor to enter and obtain the required data directly. This system is primarily used by EM, but is significantly used by the NNSA M&O Contractor. Since the NNSA M&O Contractor is responsible for less than half of the items in the system now, The Contractor shall maintain the database information for all wells to date. However, upon transfer of completed remediation and sampling infrastructure back to the NNSA M&O Contractor after the Contractor's cleanups are completed, the system will be transitioned back to the NNSA M&O Contractor. Therefore, this system cannot be replaced.
11. Electronic Public Reading Room (EPRR) was established as a single consolidated repository of information by the NNSA M&O Contractor in response to actions under the LANL Hazardous Waste Facility (HWF) Permit and extended to the Consent Order.
 - a. The Contractor shall input all necessary documents into the single EPRR.
 - b. The Contractor shall provide an estimate of the quantity and page count for all documents planned that have to be uploaded in each Fiscal Year to the NNSA M&O Contractor to ensure the system can handle the uploads.
 - c. The Contractor shall contribute to the maintenance of the EPRR.
12. Facility Information Management System (FIMS). The Contractor shall make sure that any facility transferred from the NNSA M&O Contractor is updated in FIMS. FIMS is GFS/I and there is no shared software maintenance costs.
13. Radiation Protection Information Technology (RP IT) Systems. The Contractor shall utilize some limited RP IT systems for obtaining information about exposures, etc.
14. Executive Software Change Control Board (ESCCB). The Contractor shall establish an ESCCB with the NNSA M&O Contractor to provide a governance and control structure for (a) shared systems or (b) software systems that are owned by one party or the other that require changes to support the other party.
 - a. Systems owned by the Contractor include: EIMS/InTellusNM, CCATS, Hydrogeologic Data Repository, and the Comprehensive Well Database.
 - b. Systems owned by the NNSA M&O Contractor include: GIS, IRT (including PRDI and ExID), EMS, WCATS, and EPRR.
15. CHEM Database. The Contractor shall track hazardous chemicals used in the environmental remediation work scope and provide that information to the LANL CHEM Database. This database is maintained by LANS for compliance with the Hazardous Waste Facility Permit for LANL as a whole. The Contractor shall not manage their hazardous chemical usage separately.

Services

16. Utility supplies such as water, sewage services, and electric power to permanent or semi-permanent structures on the LANL property shall be obtained from the NNSA M&O Contractor. The known utility services to be obtained to date include the following:

- a. Water, electric, and sewage for operationally controlled facilities for CH-TRU handling at TA-54. Utility systems are currently provided by the NNSA M&O Contractor for 54-8129, 54-8329, 54-8529, 54-8549, 54-8929, 54-8961, and 54-8989 and should continue to be maintained by the NNSA M&O Contractor. The Contractor shall establish easements and rights-of-way for this maintenance with the NNSA M&O Contractor.
 - b. Electric power to Mortandad Canyon for the chromium investigation activities.
 - c. The NNSA M&O Contractor shall isolate all utilities at TA-21 such that no NNSA M&O Services are provided at TA-21. Although electrical utilities are currently provided up to 21-8961 and 21-8989, this will not be continued and all temporary utilities necessary for work at TA-21 shall be provided by the Contractor. The Contractor shall provide the NNSA M&O Contractor access to disconnect the electrical utilities.
 - d. Temporary or portable power, water trucks, and temporary or portable sanitary solid waste facilities shall be the responsibility of the Contractor.
 - e. The Contractor shall provide for timely after-hour access to NNSA M&O Contractor utility systems located within TA54, Area G. The Contractor shall provide any pertinent information and safety requirements to the NNSA M&O Contractor for conducting work on these systems in support of the EM work scope.
17. Training programs, resources, and facilities to maintain the qualifications of personnel assigned to EM work scope that are necessary for site access including General Employee Training (GET) to support LANL site access, initial and annual security refresher training, specific area access training such as for the Pajarito corridor facilities and TA-16 facilities, shared system access and use including for PRID and Ex-ID systems.
- a. The NNSA M&O Contractor shall provide approved materials to the Contractor for each of the agreed to training modules.
 - b. The Contractor shall utilize these materials and track the training of their owner personnel and subcontractors to allow their access to LANL and to specific work areas, such as TA-16.
 - c. The Contractor and the NNSA M&O Contractor shall negotiate requirements to establish training program reciprocity for training such as Occupational Safety and Health Administration (OSHA), Hazardous Waste Operations and Emergency Response Standard (HAZWOPER), and Radiological worker.
 - d. Note that security training lapses might eliminate some building access.
18. Safeguards and Security (S&S) Program provisions for those projects and activities that are within the Laboratory boundary shall be provided by the NNSA M&O Contractor and the LANL security contractor Wackenhut, Inc. These S&S Program activities include Personnel Security, Information Security, Physical Security, Program Management, Cyber Security, Classification, site security posture, and site protective strategies. The Contractor shall comply with the current Site Security Plan and the Contractor shall follow its provisions and comply with its controls when working within NNSA M&O

Operational Control Area at LANL. The Contractor shall be responsible for security in those EM operational control areas.

19. The Contractor shall provide cyber security for new IT infrastructure access.
 - a. The NNSA M&O Contractor will specify requirements that the Contractor must follow to access the NNSA M&O systems within the NNSA M&O Contractor-managed IT and cyber-security infrastructure.
 - b. The Contractor shall provide all necessary IT and cyber-security controls for those Contractor-provided IT and cyber-security infrastructure and systems.
20. Personal security badging including issuance and control of security badges, credentials, and shields for personnel accessing LANL proper shall be obtained from the LANL NNSA M&O Contractor Badging Office. Although DOE will conduct any necessary security clearances, security clearance paperwork for Contractor personnel issued a clearance shall be maintained by the NNSA M&O Contractor. The Contractor shall provide an initial estimate of necessary badges and clearance levels to include justification that are necessary for the work to be performed. It is expected that only work within the LANL NNSA M&O operational control areas that require clearances and in the EM operational controlled area at TA-54 Area G would require either "L" or "Q" clearances. The Contractor shall enter into an agreement (if necessary) for pre-employee background checks, drug testing, and submission of requests for clearance activity with the NNSA M&O Contractor.
21. Foreign National Visits and Assignments, Unclassified Visits, Area and Facility access, and Contraband Pass issuance necessary to access LANL on-site facilities shall be coordinated through the NNSA M&O Contractor.
22. Occupational Medicine facilities and support unless arrangements can be made for independent facilities and staff support (e.g., LAMC).
 - a. The Contractor shall negotiate continuation of these services for approximately 60 current personnel that are included in specific medical surveillance programs including beryllium and radiological bioassay programs.
23. Emergency Management Program for LANL including police coordination and assistance, fire and rescue services, HAZMAT, security emergencies, and medical response services are provided through the NNSA M&O Contractor.
 - a. The NNSA M&O Contractor shall provide for incident commander, safety officer, operations officer, entry teams, decontamination, safety, and rehab within the NNSA operationally controlled areas on-site. The Contractor shall provide incident commander, safety officer, operations officer, entry teams, decontamination, safety, and rehab off-site or in completely EM operationally controlled areas such as TA-21 (see map).
 - b. The NNSA M&O Contractor will also provide all HAZMAT response for all spills events (being above a de minimus fitting drip amount).
 - c. The NNSA Emergency Management Program also includes emergency event notifications and emergency storm warning through Doppler radar, fire hazard through soil moisture monitoring and 'red flag day' notifications, and

communication through the Facility Operations Director (FOD) system and procedures.

- d. Although the NNSA M&O Contractor's FOD system is in place for activities within the NNSA operational controlled areas, the Contractor shall not use the NNSA M&O Contractor FOD system for work within the EM operational control areas such as TA-21. However, the Contractor shall interface with the NNSA M&O Contractor such that the LANL programs are coordinated and do not conflict.

24. Emergency Operations Center (EOC) is provided for LANL by the NNSA M&O Contractor.

- a. The Contractor shall comply with direction provided by EOC authorized individuals during emergency situations including (but not exclusive to) security emergencies and wildfires.
- b. The Contractor is not expected to have to provide resources for the EOC but shall provide information on potentially impacted EM sites and activities when requested.
- c. The Contractor shall provide a primary and backup contact for answering EOC questions.
- d. The EOC provides for work control on the LANL site within NNSA M&O Contractor operationally controlled areas for after normal LANL work hours and weekends. The Contractor shall make arrangements through the NNSA M&O FOD and the EOC for any work required outside of normal NNSA M&O work days and hours (e.g., well drilling has requirements for around-the-clock operations while drilling within the water table).

25. Field communication for LANL shall be accessed through the existing NNSA M&O communications towers.

- a. The Contractor shall enter into an interface agreement for this compatibility with the NNSA M&O Contractor. This agreement shall include a dedicated channel for the Contractor's use.
- b. Initial equipment including radios, batteries, and chargers being used by the EM program will be transitioned from the LCBC Contractor to the Contractor. This equipment has already been configured by the NNSA M&O Contractor.
- c. New or replacement hand-held and truck-based systems, batteries and chargers shall be provided by the Contractor and shall be compatible with the NNSA M&O tower system, and
- d. The Contractor shall provide three hand-held units and chargers to the EM Los Alamos Field Office (EM-LA) for their personnel for field visits.

26. The NNSA M&O Contractor Master Task Order Agreement (MTOA) Analytical Laboratory contracts issued by NNSA M&O Contractor are with (a) ARS and (b) Southwest Research Institute (SWRI). The Contractor shall obtain access through the cost-share provisions of the NNSA M&O subcontracts with ARS and SWRI until suitable replacement subcontracts can be put into place. The NNSA M&O Contractor

subcontracts cannot be taken over because the NNSA M&O Contractor will continue to use its subcontracts for other LANL environmental data collection and analysis.

27. Airnet monitoring stations are located and maintained around LANL by the NNSA M&O Contractor to support both Title V Air Permitting and Radiological National Emissions Standards for Hazardous Air Pollutants (NESHAP). The Airnet monitoring system is also used for monitoring aluminum, beryllium and calcium resulting from EM activities. The Contractor shall negotiate costs for those stations that are required for EM work scope activities such as excavation and demolition of structures at TA-21 and operations at TA-54 Area G. The Contractor shall coordinate Title V Air Permitting activities with the NNSA M&O Contractor. Sampling and data analysis will continue to be performed by the NNSA M&O Contractor. This data will NOT be expected to be loaded into EIMS/InTellus. (See Section C.3.4.8)
- a. Three Airnet stations around TA-21 that are currently in the LANL boundary network will have to be reallocated to the Contractor to support TA-21 cleanups.
 - b. Eight Airnet stations currently at TA-54 will have to continue to be operated for EM operations at TA-54 Area-G.
 - c. The Contractor shall be required to pay for three stack monitoring locations in TA-54 Area-G necessary to support the Contractor's operations for EM.
28. Human Health and Ecological Risk Assessment Program. This program is primarily necessary for the Contractor to complete the work scope. However, this program also provides for the NNSA M&O Contractor to complete the annual environmental surveillance reporting for LANL.
- a. The Contractor shall determine and report soil screening levels and screening action levels to the NNSA M&O Contractor for comparative purposes in the annual reports.
 - b. The Contractor shall negotiate with the NNSA M&O Contractor to provide specific Next Box monitoring information relevant to specific canyons' investigation activities.
 - c. The NNSA M&O Contractor shall manage the Nest Box insect and fauna monitoring network in the canyons of the Pajarito Plateau and provide the necessary data to the Contractor.
29. Facility Operations Directorate (FOD). The Contractor shall establish interfaces between the NNSA M&O Contractor FOD and the Contractor FOD for several services and notifications:
- a. The NNSA M&O FOD shall provide notifications for emergency conditions such as Doppler radar and storm warnings, red-flag days, and other emergency responses and conditions that would affect the Contractor's work.
 - b. The NNSA M&O Contractor shall schedule and authorize the Contractor's work within the NNSA M&O Operational Control Areas within LANL
 - c. The Contractor shall provide notification of the Contractor's work within EM Operational Control Areas to allow for emergency and HAZMAT responses.

30. Internet Access for facilities within the NNSA M&O Controlled portion of LANL. The NNSA M&O Contractor will allow for ESNet to allow internet access without having to go through the NNSA M&O Contractor's IT system. The Contractor shall be responsible for providing costs for the ESNet directly to the provider.
31. LANL Taxi. This is site-wide services provided by the NSNA M&O Contractor. Charge codes are not used for contractors or subcontractors now and this is expected to continue for the Contractor.
32. Explosive Ordnance Disposal. The Contractor shall coordinate with the NNSA M&O Contractor when explosive ordnance is identified in the course of EM work scope. The Contractor shall negotiate transportation of any ordnance to an NNSA M&O disposal facilities and the NNSA M&O Contractor will detonate that ordnance.

Shared Facilities

33. Core Facility. This facility may be a shared item for maintenance and upkeep between the Contractor and the NNSA M&O Contractor. This facility stores both cores from environmental activities which are the responsibility of the Contractor and cores from non-environmental activities which are the responsibility of the NNSA M&O Contractor. See Section C 3.8.5.
34. Roads and Grounds. "MAP_16-0025-05_EM_Features, pdf" in highlight identifies which roads EM shall be responsible for maintaining. Any contaminated structures that EM will maintain are also included within those EM operational Control areas. The Contractor shall also maintain other structures such as wells, well pads, gage stations, and short road spurs to those pads and stations as identified on "MAP_16-0025-04_DOE_IFGWMP locations.pdf." All other site roads and grounds will be maintained by the NNSA M&O Contractor. The Contractor will NOT be required to contribute to the general LANL roads and grounds maintenance and upkeep.

Documents

35. SWEIS Yearbook. The Contractor shall provide descriptive and quantifiable information on the Contractor's EM Program activities, impacts to the environment, public and workers to the NNSA M&O Contractor for the SWEIS annual yearbook. Any conflicts arising from these activities will be raised to EM-LA for resolution with NA-LA.

Shared Activities

36. Shared responsibilities for Fire Response and Law Enforcement. The Contractor will be covered by DOE EM payments into the Los Alamos County Department of Public Safety (DPS). The Contractor and the NNSA M&O Contractor organizations shall assist each other when requested by DPS.

EM Operational Control Concept

37. Los Alamos National Laboratory (LANL) is owned by the Department of Energy (DOE) and managed by the National Nuclear Security Administration (NNSA). LANL is operated by an NNSA Managing and Operating (M&O) Contractor. The DOE Office of Environmental Management (EM) conducts legacy environmental remediation activities at LANL currently utilizing the Los Alamos Legacy Cleanup Bridge Contract (LA-LCBC)

and in the future (starting in Federal Fiscal Year 2018) using a Los Alamos Legacy Cleanup Contractor (LLCC). EM-LA and the LA-LCBC currently conduct cleanup activities utilizing the NNSA and M&O Contractor's processes.

EM-LA is proposing an operational control concept for several areas both outside of and within the current LANL footprint that would allow the EM contractor and subcontractors to more effectively conduct environmental remediation activities than is currently being conducted. An operational control area is defined within criteria that includes the following for either EM or National Nuclear Security Administration (NNSA) control:

Physical Controls. The controlling organization (EM or NA) controls physical access to a particular area and tracks personnel working within the area, utilizing controlled keys, gates, and badge entry and exit, etc. Physical access controls may be graded depending on location, such as on the road past the RANT facility, there may not be a control device, but entering Area G has a fence with a gate and operations personnel that control access.

Surface Activities. The controlling organization (EM or NA) controls all of the surface activities from near-surface dirt, such as operational covers (nominally 6-8 inches in depth) over material disposal areas (MDAs), up through structures that exist within the control area. The Controlling organization shall inspect, monitor, surveillance, and maintain surface features within their operational control areas. Examples include maintaining operational covers over Nuclear Environmental Sites (NES) which are safety basis controls applied to Hazard Category II sites, and maintaining roads necessary to conduct work within the controlled area.

Below-Grade Activities. An EM controlling organization ONLY controls below surface where below-grade sampling is required and where remedies require excavation of a below-surface structure or area (such as excavation of an MDA, e.g., General's Tanks removal action or retrieval of legacy TRU waste) and remedies dealing with groundwater. An NA controlling organization controls all other subsurface structures and facilities including buried utilities and buried disposal pits. Buried legacy piping at TA-21 would be a solid waste management unit (SWMU) that would be excavated and thus fall under EM operational control. The below-grade retrievable CH-TRU in Area G that will be removed as part of the EM remediation activities also falls under the excavation provision. EM is declaring operational control of these CH-TRU waste locations even though these locations are below the current operational cover.

Work Authorization. The controlling organization (EM or NA) controls the authorization of work and work schedules within the operational control area through processes that mirror those of the Laboratory's Facility Operations Directorate (FOD). FODs will communicate with other FODs for the authorization of the non-controlling organization's work within the controlled area.

Facility and Infrastructure Ownership versus Control. The controlling organization (EM or NA) maintains any structures or facilities for which the controlling organization has ownership. The owning organization will maintain all structures and facilities for which it has ownership within an area controlled by the other organization. Where structures and facilities have formally been transferred from a non-area controlling organization to the area controlling organization, (such as the domes in Area G), the area controlling organization (new owner) shall maintain the structures and facilities. Note that readiness to base funding (RTBF) funding agreements are separate from EM Operational Control.

Examples:

- For TA-54, the EM Contractor would take operational control of and specifically take transfer (ownership) of the domes and facilities within the Area G fence that are necessary for contact-handled transuranic (CH-TRU) waste operations and future demolition such as domes and hard facilities at Area G. The EM Contractor would also take operational control of the assorted maintenance facilities and trailers on the south-side of the road just outside the Area G gate. The EM Contractor and NNSA M&O Contractor would share maintenance of the access road that terminates at the Area G gate because Area G is so close to the NNSA Treatment, Storage, and Disposal Facility (TSDF) at Material Disposal Area L. The EM Contractor would maintain the current surface operational cover over the low-level radioactive waste (LLW) disposal pits and above within Area G, but would not take transfer of the pits below the current operational cover. NNSA and the M&O Contractor would still manage the PA/CA for the disposed of waste in the pits.
- For TA-21, the EM Contractor would take operational control of the entire area for remediation activities. The EM Contractor would control the gate access and keys. The EM Contractor would take transfer of ownership of TA-21-257 which we would cleanout and demolish. The EM Contractor would authorize and control work on site through the EM Contractor's FOD equivalent.
- For the marked Rendija Canyon tract, the EM Contractor is working remediation activities and there are no facilities to transfer. The EM Contractor would control work by contractors doing ordnance surveys of SWMUs paid for by EM. The EM Contractor would facilitate NNSA M&O Contractor activities on site for land transfer such as kiosk maintenance and postings. NNSA would continue with land transfer activities such as deed controls and negotiations with the County of Los Alamos. The EM Contractor would authorize and control work on site through the EM Contractor's FOD equivalent.
- For Lower Los Alamos Canyon, the EM Contractor would take operational control for remediation activities in the canyon and on canyon edges from below TA-02 all the way to the "Y" in the road on State Route 4 and the Los Alamos Canyon Low-Head Weir. This corresponds with the transition from the paved Omega Road (NA) to the improved but non-paved Omega Road (EM). The NNSA M&O Contractor would control work in the Upper and Middle Los Alamos Canyon areas and the EM Contractor would control and authorize work in the Lower Los Alamos Canyon. The EM Contractor would have to get a key from the NNSA M&O Contractor to pass through the Upper and Middle LA Canyon areas to do work in the lower areas. The EM Contractor would authorize and control its work in the Lower LA Canyon areas.

PART III - LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS

SECTION J – LIST OF ATTACHMENTS

ATTACHMENT J-7: INTERFACES WITH OTHER CONTRACTORS

The LLCC Contractor shall interface with other current DOE prime contractors include the following:

1. Los Alamos National Security, LLC (LANS), Contract No. DE-AC52-06NA25396, the NNSA M&O Contractor for landlord functions, work control, access and security, IT and equipment services, etc. (as defined in Section J, Attachment J-6).
2. LANS, also the EM Contractor for the LANL Cleanup Bridge Contract (LCBC), Contract No. DE-EM0003528. This interface will be for the transition of EM work scope that remains incomplete under the Bridge Contract to this LLCC.
3. U.S. Army Corps of Engineers, used for various tasks including National Environmental Policy Act (NEPA) and New Mexico Office of the State Engineer permitting on Chromium Investigation.
4. TSAY Professional Services Inc., Contract No. DE-EM0003298, is for technical support and minor construction. The TSAY Contract will not be extended through the LLCC period of performance, but the last task order is anticipated to be placed at the time of transition. Technical resources necessary for strategy development for Consent Order and Individual Permit interfaces shall be provided by the LLCC Contractor upon assuming full responsibility of the work.
5. DLE Technical Services, LLC, Contract No. DE-EM0002035 Task Order No. 0455-12-202970-01, is for the execution of independent verification surveys of land parcels being prepared for transfer under Public Law 105-119.
6. Project Time and Cost, LLC (PT&C), via an Interagency Agreement with the U.S. Army Corps of Engineers, provides technical support services to EM-LA. PT&C will help EM-LA with oversight of the LLCC.
7. Expert reviewers from other DOE sites review and comment on LLCC work scope such as for chromium contamination workshops and deliverable reviews. This includes personnel from the Savannah River Site, the Hanford Site, and Pacific Northwest National Laboratory.
8. Federal waste transportation contractors currently being used for shipment of M/LLW to both commercial disposal sites and to the National Nuclear Security Site in Nevada.
9. Central Characterization Project (CCP) personnel provided for characterization and shipment to WIPP of legacy and EM-managed CH-TRU already accepted into TA-54, Area G. The primary point of program interface will be the presentation of the CH-TRU waste stream that meets all CCP requirements for shipment configuration and content for CCP characterization and efficient packaging for shipment. The Contractor shall provide the appropriate space and equipment for CCP to perform their activities within TA-54, Area G. The CCP shall conduct the characterization and packaging of CH-TRU to WIPP from the waste stream within TA-54, Area G presented by the Contractor.

10. Centera, Security Operations Contractor (SOC), subcontractor to the NNSA M&O, provides site access controls, security services, and emergency response for the entire LANL site.
11. Locus Technologies, Inc., provides the Environmental Information Management System (EIMS) which is required under the Compliance Order with NMED to maintain environmental sample data accessible to the public. This service must continue and shall be obtained through the NNSA M&O Contractor until a suitable replacement subcontract can be issued by the LLCC Contractor. The LLCC must obtain written approval from the Contracting Officer to use a different company. The subcontracted services shall provide for inclusion of NMED-OB data and the NNSA M&O environmental data within the same database.
12. ARS for analytical laboratory services – NNSA M&O Subcontractor
13. Southwest Research Institute (SWRI) for analytical laboratory services. – NNSA M&O Subcontractor
14. National Environmental Policy Act (NEPA) Contractor to NA-LA. The Contractor shall provide descriptive and quantifiable information on the Contractor's EM Program activities, impacts to the environment, public and workers. The Contractor shall assist in the planning and development of Supplement Analyses conducted for the Site-Wide Environmental Impact Statement (SWEIS) being conducted by NA-LA. Any conflicts arising from these activities will be raised to EM-LA for resolution with NA-LA.
15. Sigma Science, Inc. (SSI) – provides the Documented Safety Analysis (DSA) and Initial Technical Safety Requirements (TSR). The Contractor shall work with SSI to understand the safety basis envelope and the analyzed risks in comparison with the Contractor's technical approach to the CH-TRU work scope.
16. Lakeworth, Inc. – provides the current monitoring of the airport landfill evapo-transportative cover and methane and moisture monitoring system. The Contractor shall interface with Lakeworth to take over the monitoring at the expiration the current Lakeworth Contract in FY 2019.

PART III - LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS

SECTION J – LIST OF ATTACHMENTS

ATTACHMENT J-8: CAMPAIGN CROSSWALK TO PWS SECTIONS

Campaign Title	PWS Elements	PWS Descriptions	Number of SWMUs/AOCs
Chromium Interim Measures and Characterization	C.10.1 – C.10.6	Chromium Groundwater Interim Measures	1
Historical Properties Completion	C.11.2.1, C.11.2.3, C.11.2.2, C.11.2.5	Remaining high-angle remediation and sites on Los Alamos County or Private Property Gauje/Barrancas/Rendija, Bayo Pueblo Upper Los Alamos, Middle Los Alamos SWMUs and AOCs in TA-0 and TA-1	84 (7) (31) (46)
RDX Characterization	C.9.1	RDX Surface Water completion and Groundwater characterization	2
Supplemental Investigation Reports (SIR)	C.11.2.25, C.11.2.21, C.11.2.16, C.11.2.26, C.11.2.27, C.11.2.18, C.11.2.22, C.11.2.7, C.11.2.11, C.11.2.8, 9, and 10.	Supplemental Investigation Reports and Certificates of Completion for the following Aggregate Areas: • S-Site, • Potrillo and Fence Canyons, • Threemile Canyon, • TA-49 Inside Nuclear Environmental Site (NES), • TA-49 Outside NES, • Canon de Valle TA-14, • North Ancho Canyon, • Lower Sandia Canyon, • Upper Canada del Buey, and • Mortandad Canyon.	62 15 19 9 3 20 2 16 48 28
TA-21 D&D and Cleanup	C.11.2.04	DP Site Aggregate Area including DP East, Site Cleanup activities, buried waste line excavation, corrective actions at TA-21-004(b)-99, demolition of TA-21-257, and demolition of DP West and buried contaminated soils	41
RDX Remedy Campaign	C.9.2-5	CMIP, Implementation, Permitting, and Remedy Operations	(2 above)
Known Cleanup Sites		Sol removal from 20 sites from	20

(Above SSLs)		previous investigations	
General's Tanks (MDA-A)	C.12.2.1	MDA-A General's Tanks Removal Action [This is a radiological-only DOE campaign and is not listed in the 2016 Consent Order, Appendix C.]	2
MDAs -A & -T Remedy	C.12.2.1 C.12.2.6	Pits and Trenches Characterization and MDA-A Corrective Measures Evaluation Report and MDA-A Remedy Project MDA-T Remedy Project And TA-21-257 post demolition accessible SWMUs and AOCs	28
Chromium Final Remedy	C.10.7-9	Chromium Groundwater Remediation	N/A
Southern Boundary Protection	C.11.2.23, C.11.2.24, C.11.2.20	South Ancho Canyon Aggregate Area Chaquehui Canyon Aggregate Area Lower Water Canyon Aggregate Area	59
MDA-C	C12.2.2	MDA-C	1
Sandia Canyon Watershed	C.11.2.6, C.11.2.7, C.11.2.8, C.11.2.9, C.11.2.10, C.11.2.11, C.11.2.12, C.11.2.13	Upper Sandia Canyon Aggregate Area, Lower Sandia Canyon Aggregate Area, Upper Mortandad Canyon Aggregate Area, Middle Mortandad and Ten Site Canyons Aggregate Area PMR. Lower Mortandad and Cedro Canyons Aggregate Area PMR, Upper Canada del Buey Canyon Aggregate Area, Middle Canada del Buey Canyon Aggregate Area PMR, Lower Mortandad and Lower Canada del Buey Canyons Aggregate Area PMR	49
Pajarito Watershed	C.11.2.14, C.11.2.15, C.11.2.16, C.11.2.17	Starmer/Upper Pajarito Canyons Aggregate Area, Twomile Canyon Aggregate Area, Threemile Canyon Aggregate Area, Lower Pajarito Canyon Aggregate Area	167
Upper Water Watershed	C.11.2.18,	Canon de Valle Aggregate Area TA-15,	253

	C.11.2.19 C.11.2.25	Canon de Valle Aggregate Area TA-16, Canon de Valle Aggregate Area TA-14, Upper Water Canyon Aggregate Area S-Site Canyon Aggregate Area	
MDA-AB	C.12.2.7, C.11.2.26, C.11.2.27	MDA-AB TA-49 Inside NES TA-49 Outside NES	12
MDA-H Remedy	C.12.2.4	MDA-H	1
MDAs –G& -L Remedy	C.12.2.3, C.12.2.5	MDA-G MDA-L MDA-L Interim Measure Soil Vapor Extraction (SVE) System	12
Non-Campaign Base Program Activities	C.3, C.7 C.5 C.7 C.6 C.7 C.8	Programmatic Requirements distributed across the programs, Monitor Surface Water Gage Stations Monitor Groundwater per IFGMP and Other Programs Monitor Early Notification System for BDD Drilling (Install Additional Groundwater Wells Required for Other Activities) Monitor IP Sampling Individual Permit Surface Water Corrective Actions	N/A

PART III - LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS

SECTION J – LIST OF ATTACHMENTS

ATTACHMENT J-9: REGIONAL PURCHASING PROGRAM

EM is committed to building a strong supplier base in northern New Mexico businesses and the local Native American pueblos and tribes in the purchases of goods and services. Since 1995, through its procurement policies and a regional purchasing program, Contractors have strengthened the regional business enterprise, stimulated greater regional employment and infrastructure, increased the business tax base in northern New Mexico, and worked hard to reduce regional dependence on federal investment. This Program provides more substantive preferences to northern New Mexico businesses and local Native American pueblos and tribes through a pricing preference, supplier assistance, regional procurement advisory efforts, and a sustainable procurement strategy.

The Contractor must appreciate the contract work scopes' potential impact on the local and regional economy, and commit to benefiting the northern New Mexico Community (which includes Taos, Santa Fe, Rio Arriba, Sandoval, Mora, San Miguel, and Los Alamos Counties, and the eight regional Pueblos of Nambe, Picuris, Pojoaque, San Ildefonso, San Juan, Santa Clara, Taos, and Tesuque) in the future.

The Contractor's Regional Purchasing Program will contribute to the continued economic development of northern New Mexico while continuing to meet EM program expectations.

The Contractor must make efforts to evaluate the necessity to have certain services performed on site or whether it is feasible and/or cost-effective to outsource these activities. As contracts come up for renewal, the Contractor will review the scopes of work to determine how best to meet mission requirements, while taking the local economy and the local business community into consideration. The following principles and practices are geared toward supplier development by helping build the capability, competency, and capacity of the local business community to enable them to provide competitive goods and services to the Contractor and improve their ability to serve other customers locally, regionally and nationally. These principles and practices will be implemented by incorporation into the acquisition policies and procedures (i.e. Acquisition Procedures), as appropriate.

- (1) Northern New Mexico (NNM) purchasing preference. The Contractor will maximize procurement opportunities for NNM businesses whenever possible.*

A NNM business concern is a business that is actively engaged in doing business in NNM, has an operative business location in NNM, and uses labor from NNM. To meet these requirements, a business must be able to demonstrate, if and when requested, through the submission of New Mexico gross receipts tax and unemployment compensation tax forms or otherwise, that for the calendar year preceding the submission of its bid/offer:

- (a) it has been properly authorized to do business and has been operating in NNM with a staff of three or more full time equivalent employees (of which 51% must reside in NNM), and that it currently has a facility in NNM that can support the business activity contemplated by the Statement of Work / Scope of Work; or*

(b) it has historically operated in NNM with two or less full time equivalent employees who reside in NNM, it is independently owned (i.e., its owner(s) exercise(s) close control over operations and decisions which are not subject to control or the power to control by others), its majority ownership interest is held by residents of NNM, it has been properly authorized to do business in NNM and it currently has a facility in NNM that can support the business activity contemplated by the Statement of Work / Scope of Work.

In accordance with its Small Business Subcontracting Plan, the Contractor will give preference to NNM small businesses for acquisitions exceeding a competitive threshold by adding a 5% adjustment factor to be applied to the proposed total evaluated bid/cost of those qualified suppliers whose businesses do not meet the definition of a NNM small business concern. This pricing preference will be flowed down via subcontract clauses in subcontracts and purchase orders with a value of \$5 million or greater. Subcontractors and suppliers with such subcontracts and purchase orders will be required to report achievements on a semi-annual basis to their Contractor Procurement Specialist.

- (2) New services. Newly required services will be pursued via subcontracts, unless such services are required to be performed by Contractor employees. The Contractor will determine whether they possess the necessary skills or whether it is an economic or programmatic advantage to develop said skills internally prior to pursuing any subcontract solicitation or award.
- (3) Business alliances. The Contractor will actively participate with local and regional business alliances and associations, including but not limited to the Northern New Mexico Supplier Alliance, Small Business Development Centers, Minority Business Development Centers, the New Mexico 8(a) and Minority Business Association, Regional Chambers of Commerce and others that will enable development of regional small business suppliers of goods and services that are normally procured to help prepare them to compete effectively for subcontracts and purchase orders. These business alliances may include training and mentoring programs and/or encouraging the participation in regional trade associations which will better enable regional businesses to build viability, capacity and sustainability, to allow them to better satisfy Laboratory and other customer needs and/or requirements. This will include encouraging businesses to form their own mentor-protégé programs, participate in any Contractor mentor-protégé programs, or the SBA 8(a) mentor-protégé program.
- (4) Assistance. The Contractor will make prospective regional suppliers aware of sponsored supplier forums aimed at focused training on proposed EM requirements, forecasted opportunities, and how best to prepare themselves to compete on procurements. Said forums will be held on a semiannual basis and will also focus on forecasted business opportunities, how to do business with the Contractor, and matchmaking/ teaming events between large and small businesses on large and complex EM and LANL requirements. The Contractor will also endeavor to make prospective regional suppliers aware of any assistance that may be available from associations such as the Northern New Mexico Supplier Alliance (NNMSA), Regional Development Corporation (RDC), Small Business Development Centers (SBDC's), the Los Alamos Commerce and Development Corporation (LACDC), NM 8(a) and Minority Business Association, or other entities that will allow regional suppliers to better operate a successful business, build capacity and sustainability, and network among each other and learn to compete in markets other than LANL.

Some examples include, but not limited to, utilizing an independent third party auditor by small businesses that do not have the capability or the capacity to maintain and internal audit activity; getting assistance on obtaining appropriate SBA certifications or obtaining GSA contracts, co-sponsoring more matchmaking events with small and large businesses on major procurement packages that are conducive to small business set-asides, such as the recent VMS/Staff Augmentation matchmaking event; sponsoring specific forums for substantive acquisition changes such as subcontract templates, security requirements, new ES&H plans, etc.

- (5) Long-term subcontracts. When appropriate, the Contractor will award purchase orders and subcontracts for multiple-year terms to meet long term programmatic requirements for products and services and create more stable business relationships with regional strategic suppliers, such as the Blanket Ordering Agreements that will replace the legacy JIT subcontracts. The Contractor procurement strategy on commodity purchases should be to maximize Blanket Ordering Agreements to the maximum extent possible. Competition will be used to ensure best value for the Contractor and the Government. The Contractor should commit to providing small and regional local businesses the opportunities to compete for business, which will include the pricing preference to regional suppliers and subcontractors. In addition, all subcontracts and purchase orders should be reviewed to ensure that the Contractor and government are receiving value for their money. One of the initiatives should be to consolidate scopes of work wherever possible, both to decrease the cost of administration and to leverage the dollars more effectively. This may result in fewer subcontractors, but with larger scopes and values which in itself creates more stable business relationships for regional strategic suppliers. A focus will remain to maximize small business participation on all procurement opportunities via teaming arrangements and matchmaking events as discussed previously. The Contractor will direct prospective suppliers to the U.S. Small Business Administration and other financial entities that are in the business of making capital available to commercial sources.
- (6) Subcontractor transitions. In any re-competition of major on-site support subcontractors, the Contractor will require any and all offerors to submit technical and cost proposals that will maximize the stability of the workforce and to assure continuity in operations. The pricing preference cited herein will flow down to any new subcontracts that exceed \$5M that may result from any re-competition. Transition plans shall be submitted for Contractor approval prior to subcontract awards.
- (7) Financial incentives. The Contractor will continue to encourage any major support subcontractors, through performance goals tied to financial incentives, to further subcontract in a manner that to the maximum extent practicable promotes regional economic diversification.

A Consortium of Major LANL Subcontractors and the Regional Development Corporation will be available to assist successful subcontractors to leverage economic resources that will promote regional economic diversification in the seven counties and pueblos listed herein. The Consortium of Major Subcontractors is an independent organization consisting of LANL major subcontractors interested in leveraging their resources to create greater economic and community impact in the northern New Mexico Community. The Contractor does not have to be a member of the Consortium, however, representatives may be invited by the Consortium to attend quarterly meetings for informational and interactive purposes only.

- (8) Importing new businesses. The Contractor will actively participate with the Regional Development Corporation and local chambers of commerce on practices (e.g. forecasting, training, technology transfer, etc.) intended to attract businesses to northern New Mexico where regional capabilities do not exist. The Contractor will also be an active participant of the quarterly Regional Chamber meetings to communicate their procurement strategies, forecasted opportunities, and other information as may be requested by Chamber representatives.
- (9) Subcontracting for research at New Mexico colleges and universities. The Contractor shall engage New Mexico colleges and universities for acquiring research efforts in support of EM programs. The Contractor will pursue a streamlined process for acquiring research efforts in support of EM programs from New Mexico colleges and universities.

Measuring Program success.

Program success will ultimately be measured by regional economic indicators, including the number of companies positively impacted via the pricing preference, new services acquired via subcontract as opposed to performed in-house, customer/stakeholder surveys and other program impacts that bring about economic diversification. The Contractor will measure the following:

- a. number of times a northern New Mexico small business is solicited,
- b. number of times a northern New Mexico small business responds to a solicitation,
- c. the number of times a northern New Mexico small business is solicited, responds and is successful based on the pricing preference, and
- d. the number of times a northern New Mexico small business is solicited, is responsive and awarded a purchase order/subcontract without the pricing preference playing a factor.

PART III - LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS

SECTION J – LIST OF ATTACHMENTS

ATTACHMENT J-10: PERFORMANCE EVALUATION AND MEASUREMENT PLAN

To be incorporated later.

PART III - LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS

SECTION J – LIST OF ATTACHMENTS

ATTACHMENT J-11: GOVERNMENT FURNISHED SERVICES AND ITEMS (GFS/I)

Process

EM-LA is committed to providing effective support to the Contractor throughout the period of Contract performance, and the Contractor may request that EM-LA consider providing additional GFS/I. To manage the GFS/I to be furnished under the Contract and to evaluate the additional GFS/I that may be required by the Contractor, the Contractor shall submit for EM-LA approval:

- *Government-Furnished Services and Information Request* (Deliverable C.1.7(1)), a 12-month advance projection of GFS/I to be furnished under the Contract and additional Contractor-requested GFS/I, to be submitted prior to each fiscal year. EM-LA will review the 12-month advance projection. If EM-LA can support the additional Contractor-requested GFS/I, EM-LA will notify the Contractor within 30 days that the additional Contractor-requested GFS/I can be provided, and will provide the Contractor details regarding the EM-LA action(s). The supported GFS/I will be added to Attachment J-11, Government-Furnished Services and Information (GFS/I), as an EM-LA commitment to the Contractor.
- *Government-Furnished Services and Information Request – Update*, a quarterly update to the projection of GFS/I to be furnished under the Contract and additional Contractor-requested GFS/I, to be submitted prior to each quarter. EM-LA will review the quarterly update. If EM-LA can support the additional Contractor-requested GFS/I, EM-LA will notify the Contractor within 15 days that the additional Contractor-requested GFS/I can be provided, and will provide the Contractor details regarding the EM-LA action(s). The supported GFS/I will be added to Attachment J-12, Government-Furnished Services and Information (GFS/I), as an EM-LA commitment to the Contractor.

If EM-LA cannot support a Contractor request, EM-LA will notify the Contractor within 15 days that the requested GFS/I cannot be provided, and there will be no EM-LA commitment to the Contractor to furnish the GFS/I. For the additional Contractor-requested GFS/I, EM-LA will use its best efforts to meet additional GFS/I commitments to the Contractor. However, in the event that EM-LA is unable, for any reason, to provide the Contractor with its requested additional GFS/I, the Contractor remains fully and solely responsible for obtaining the needed services and/or information in a timely manner and without any further recourse against EM-LA.

Government Furnished Services and Items/Information

Facility Space for Personnel

1. The EM-LA Field Office provides office space for the Contractor at the Pueblo Complex, a Los Alamos School District property that will be under lease through EM-LA. Although this complex is 50,132 sq. ft., it has wide hallways and only 37,665 sq. ft. for office space for 159 individuals. EM-LA will provide for initial configuration and subsequent changes for offices and cubicles. Within the Pueblo Complex, EM-LA shall use spaces for 55 individuals (both Federal and support contractor staff); this Federal space shall not be available for Contractor staff.

2. The EM-LA Field Office provides office space for the Contractor at three office trailers located within Area-G for management of the waste disposition activities. These trailers are 800 sq. ft. each that should be sufficient for 30 personnel total. Within this space allocation, EM-LA shall use spaces for 5 Federal or support service staff; this Federal space shall not be available for Contractor staff.
3. The Contractor shall identify any additional office space needs beyond that provided above in accordance with the "Process" section above. Subcontractors are not currently expected to require office space unless proposed to be included in the contract proposal.

Regulatory

4. The NMED-approved *Decision Tree for Land Application of IDW Solids from Construction of Wells and Boreholes* (Figure J-11-1) and the NMED-approved *NOI Decision Tree for Drilling, Development, Rehabilitation, and Sampling Purge Water* (Figure J-11-2) are provided for Contractor use.

Figure J-11-1 – Decision Tree for Land Application of IDW Solids from Construction of Wells and Boreholes

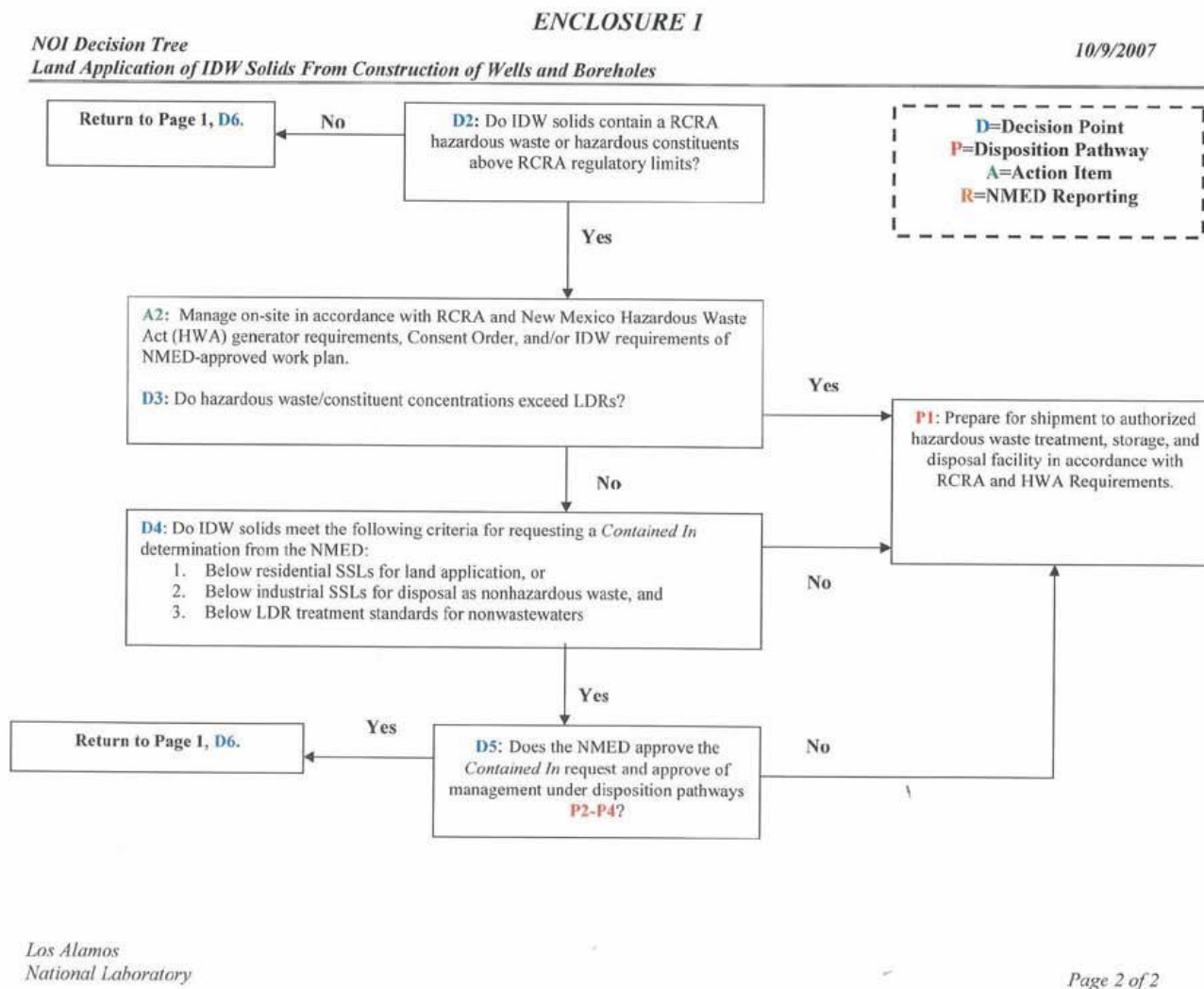
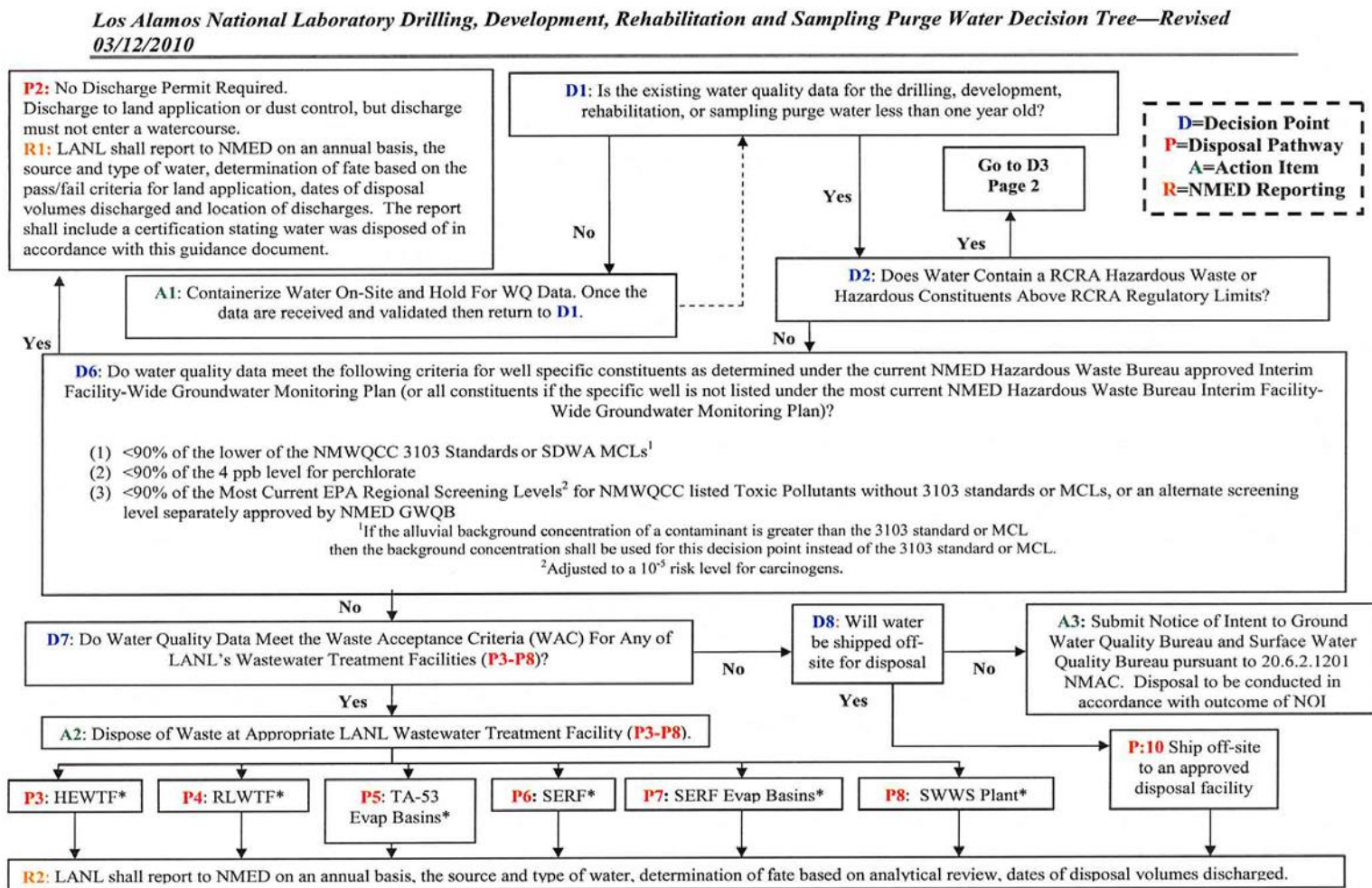


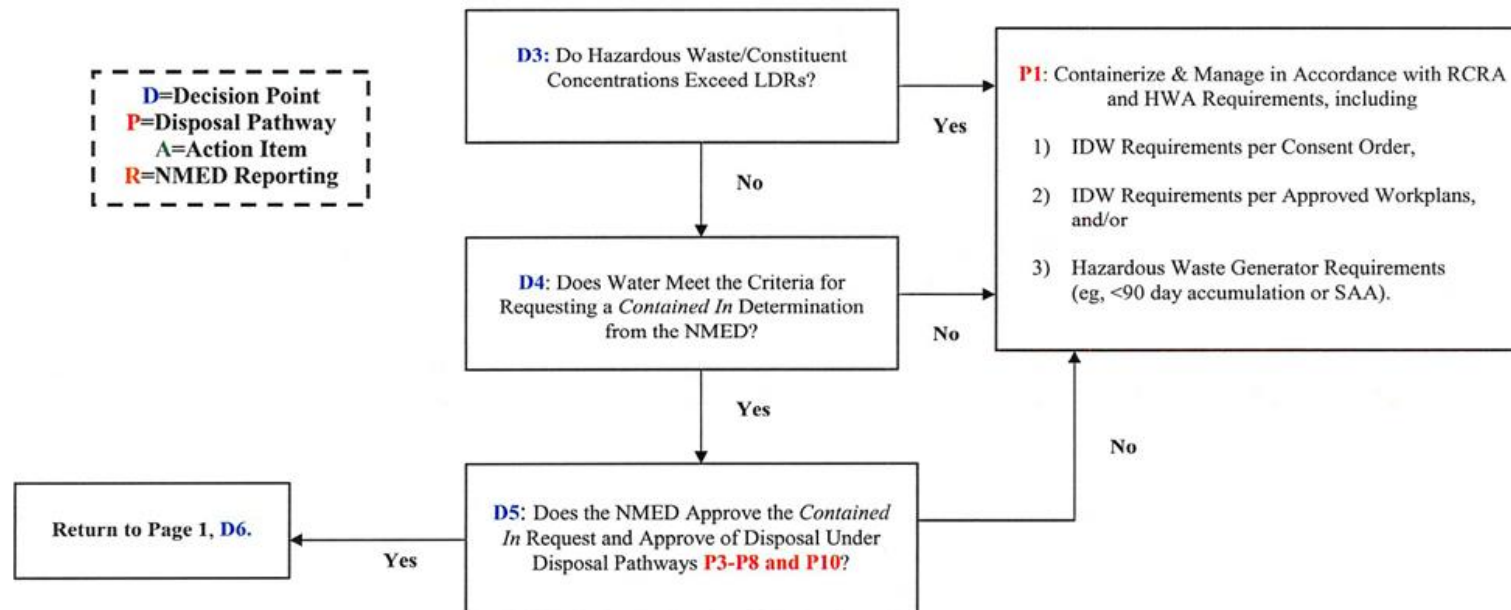
Figure J-11-2 – NOI Decision Tree for Drilling, Development, Rehabilitation, and Sampling Purge Water

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*Nothing in this guidance document shall be construed as relieving the United States Department of Energy or the Los Alamos National Security, LLC, of its obligation to comply with all other applicable federal, state, and local laws, regulations, permits or orders.

*Los Alamos National Laboratory Drilling, Development, Rehabilitation and Sampling Purge Water Decision Tree—Revised
03/12/2010*

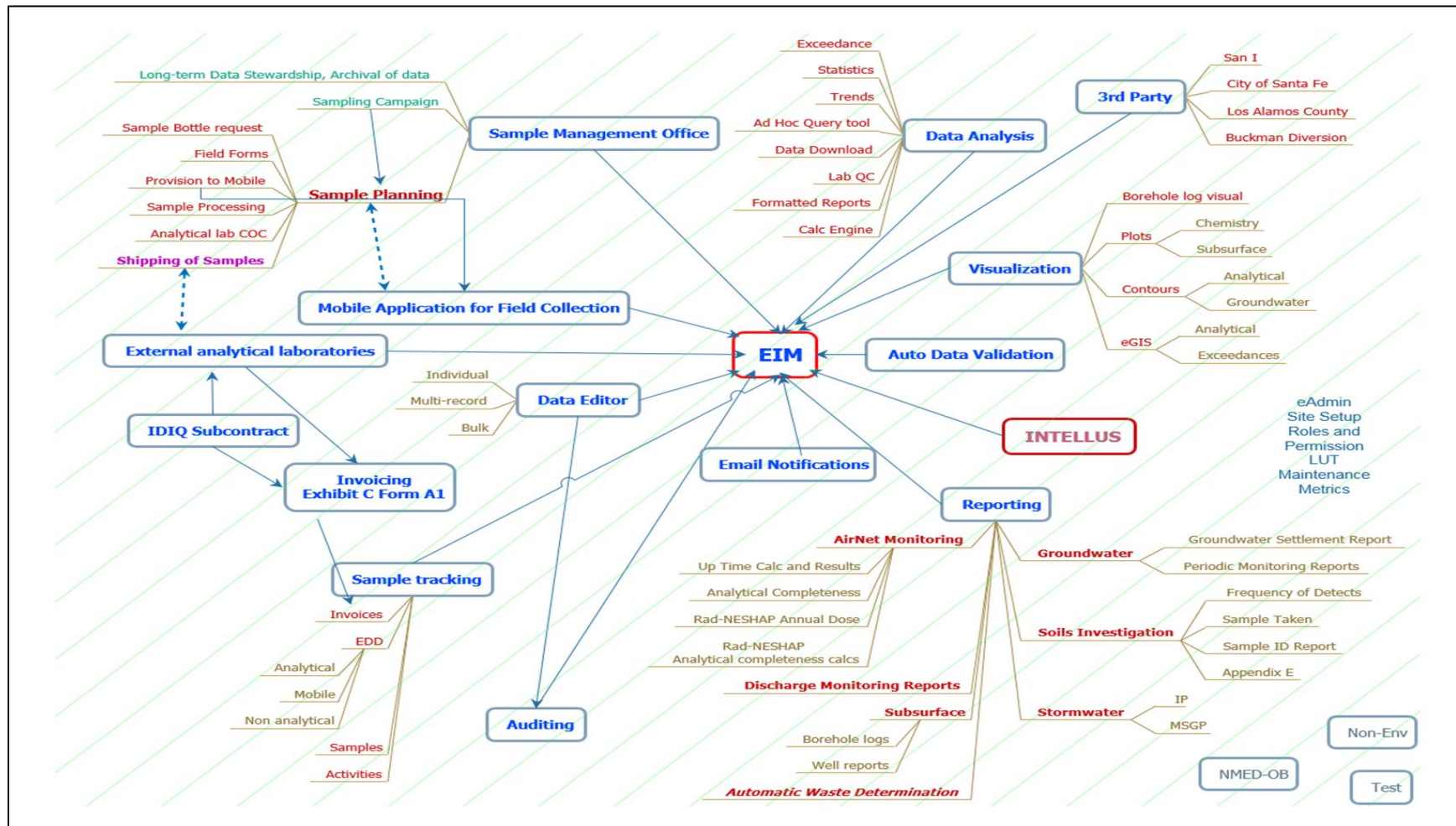


*Nothing in this guidance document shall be construed as relieving the United States Department of Energy or the Los Alamos National Security, LLC, of its obligation to comply with all other applicable federal, state, and local laws, regulations, permits or orders.

5. Letter of designation of Contractor's personnel as duly authorized representative to work directly with NMED-HWB to address the firm-fixed price (FFP) IFGMP execution of groundwater sampling campaigns to include the submittal, technical discussions, comment resolution, and acceptance of the Periodic Monitoring Reports (PMR) resulting in NMED-HWB approval.
6. Letter of designation of Contractor's personnel as duly authorized representative to work directly with US EPA (and the NMED-SWQB in an informational capacity) to address the firm-fixed price (FFP) IP execution of surface water sampling campaigns to include the submittal, technical discussions, comment resolution, and documentation of resulting.
7. EM-LA shall provide a HQ contract name that will provide review and approval of safety basis documentation as the DOE-EM Cognizant Technical Authority (CTA). The LLCC Contractor shall provide for an acceptable review time to obtain CTA approval.
8. EM-LA commitment to provide review and signature on dual-signature technical reports under the Compliance Order on Consent to NMED and the Individual Permit for Stormwater to the U.S. Environmental Protection Agency (US EPA).
9. For documents prepared by the contractor that are for sole Contractor signature or for joint Contractor and EM-LA signature, the following EM-LA and DOE document review times are considered GFS/I:

Document Category	Work Days for Review or Completion
Groundwater Program related plans and reports for acceptance and signature	5 days
Soil Remediation Reports, Work Plans, Corrective Measures Reports and Plans, etc. for acceptance and signature	5 days
Surface water and Storm Water related reports, plans, and IP Corrective Action Certifications for acceptance and signature	5 days
EM-LA participation in Product Peer Review of documents (Groundwater Program related plans and reports, HIR, IWP, CME, Surface Water Performance Reports, etc.) for provision of comments	10 days
DOE review of safety basis related documents for review and comment by EM-LA and HQ staff and separately for review and approval/concurrence of the HQ CTA	20 days each
Permit reviews that require acceptance signature or concurrence	10 days

10. Mind Map for the Environmental Information Management System (EIMS). This process flow shall be used by the LLCC in managing the EIMS and utilizing the various modules associated with sample planning, data integration, and reporting. The LLCC may propose changes to EM-LA for improvements to this process flow.



Operational Systems

11. ORPS reporting system is provided by DOE for use by contractors. Although the system is provided by DOE, the Contractor shall develop suitable procedures for their use.
12. DOE/Albuquerque Operations Office Analytical Management Program (AMP) auditors shall provide audits of programmatic commercial analytical laboratories. The Contractor shall coordinate audit activities with the AMP. The Contractor shall also interact with DOE/HQ on National EDD, analytical, and auditing efforts.
13. The Integrated Planning, Accountability, and Budgeting System (IPABS) current schedule of input requirements for operations activity performance reporting information entry by the Contractor. The system and schedule are provided by DOE-EM to EM-LA. Although the "*IPABS Monthly To-Do List and Due Dates Calendar FY 2016.pdf*" is attached, subsequent calendars will be available at the following link under Other Documents: <https://ipabs-is.em.doe.gov/ipabs3/Modules/General/Help.aspx> . Subsequent FY calendars will be essentially similar to that for FY 2016.
14. The federal Facility Information Management System (FIMS) for inputting facility condition information and status updates including costs and schedule for demolition and completion.
15. The Project and Assessment Reporting System (PARS)-II and the current schedule of input requirements for capital asset project for the Contractor Project Performance information entry. The system and schedule are provided by DOE to EM-LA.

PARS II	IPABS:
Last workday of the Month: Upload CPP file	Before middle of 2nd full working week: Enter Base Performance Measures
3rd workday: Federal Project Director enters monthly analysis	Friday of 2nd full working week: Approve Base Performance Measures
6th workday: Program Office enters monthly analysis	End of 3rd working week: Enter EVM data
9th workday: OECM monthly assessment	No Later than Tuesday of the 4th working week: Approve EVM data
By 25th: OECM publishes data	NOTE: IPABS deadlines are an approximation. For specific due dates, consult the IPABS annual reporting calendar on the main page of IPABS.

Waste Management

16. Waste Characterization, Assay, and Transportation System (WCATS) platform for waste characterization and documentation is provided by DOE as GFS/I and is managed and

operated locally by the NNSA Managing and Operating Contractor. This system will be utilized by both the NNSA M&O Contractor (currently Los Alamos National Security, LLC (LANS)) for newly generated TRU wastes at Area G and the EM contractor awarded this contract for EM legacy waste activities.

17. The WIPP Shipping Baseline Schedule shall be provided to the Contractor by EM-LA. However, the WIPP Shipping Baseline Schedule is developed and prepared by the Carlsbad Field Office (CBFO) and is provided to EM-LA.
 - a. The initial WIPP opening date to receive ANY TRU shipments is **TBD**.
 - b. The date of first allocated LANL EM shipment to WIPP is **TBD**.
 - c. Rate of LANL EM shipments to WIPP is **TBD**.
 - d. The estimated WIPP maintenance shutdown period will be a three week period from late December through early January each year. No shipments will be made during the maintenance outage. It should be expected that the WIPP shutdown will be expanded.
18. Transport containers in which to load CH-TRU for shipment to WIPP shall be provided by WIPP. The numbers and types of containers shall be negotiated following Contractor evaluation of the WIPP Shipping Baseline Schedule (above).
19. Transportation of TRU wastes from LANL to WIPP shall be provided by EM-LA or DOE national contract for transportation of wastes. Coordination of this schedule shall be provided by the EM-LA based on the Contractor's proposed schedule and negotiated agreement on advanced preparation.
20. Documented Safety Analysis (DSA) for legacy and newly-generated TRU waste operations shall be provided by EM-LA to the Contractor around the time of contract award. The associated Technical Safety Requirements (TSR) that specify the controls necessary to implement the DSA MAY potentially also be provided by EM-LA to the Contractor around the time of the contract award.
21. EM-LA provides the following NNSA Fire Protection Exemption – *Approval of Exemption Request to Department of Energy Order 420.1C for the Lack of Automatic Fire Extinguishing Systems at Los Alamos National Laboratory (LANL), Technical Area (TA)-54, Area G, Waste Storage and Handling Domes, LANL-DOE-ORDER-420.1B-EX-2010-002, R.2, Letter from Don F. Nichols to Kimberly Lebak Davis, May 18, 2015:*

PART III - LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS			
SECTION J - LIST OF ATTACHMENTS			
ATTACHMENT J-12: GOVERNMENT FURNISHED PROPERTY LIST			
<u>List of EM Buildings, Structure, and Non-Real Property Outside of Technical Area 54</u>			
Property ID	Property Name	Sq. Ft.	Site Name
21-0107	Underground Acid Tank		
21-0108	Underground Acid Tank		
21-0503	Underground Tank		
21-0504	Underground Tank		
21-2429	Fencing		
21-0462	Transportainer		
21-1023	Transportainer		
21-1024	Transportainer		
21-1026	Transportainer		
21-1027	Transportainer		
<u>List of EM Buildings, Structure, and Non-Real Property Inside of Technical Area 54</u>			
Property ID	Property Name	Sq. Ft.	Site Name
54-0002	LAB SUPPORT FAC AREA G	1,617	Operations Building
54-0008	CONTAMINATED DRUM STRG	651	
54-0011	STORAGE BLDG	1,136	WASTE MGMT CONTROL FACILITY
54-0020	EQUIPMENT SHELTER BLDG	680	
54-0025	PARKLINE METAL SHED		
54-0033	TRU-WASTE DRUM PREP	8,325	
54-0048	TENSION SUPPORT DOME	12,614	STORAGE OF RADIOACTIVE WASTE BARRELS. A THERMAL FIRE DETECTION SYSTEM WILL BE INSTALLED.
54-0049	TENSION SUPPORT DOME	25,041	WIPP STORAGE (MIXED WASTE)
54-0092	HAZARD STORAGE SHED		
54-0094	TRANSIT BLDG		
54-0111	METAL SHED		
54-0144	METAL STORAGE SHED		
54-0145	METAL STORAGE SHED		
54-0146	METAL STORAGE SHED		
54-0153	TENSION SUPPORT DOME	18,610	
54-0154	MORGAN SHED		
54-0155	MORGAN SHED		
54-0156	MODIFIED MORGAN SHED	192	
54-0157	MORGAN SHED		
54-0169	MORGAN SHED		
54-0174	SAFETY STORAGE SHED		
54-0175	SAFETY STORAGE SHED		
54-0176	SAFETY STORAGE SHED		
54-0177	METAL STORAGE SHED		
54-0186	TRANSPORTAINER		

54-0218	SEMI-TRAILER		
54-0223	SEMI-TRAILER		
54-0224	TENSION SUPPORT DOME	5,829	
54-0229	TENSION SUPPORT DOME	20,498	
54-0230	TENSION SUPPORT DOME	19,695	
54-0231	TENSION SUPPORT DOME	21,363	
54-0232	TENSION SUPPORT DOME	19,679	
54-0242	TRAILER	510	
54-0245	DOUBLEWIDE TRAILER PO 8519K	1,434	
54-0246	DOUBLEWIDE TRAILER PO 8519K	1,420	
54-0247	DOUBLEWIDE TRAILER PO 8519K	1,439	
54-0273	MORGAN SHED		
54-0274	TRANSPORTAINER		
54-0276	SHED		
54-0282	TENSION SUPPORT DOME	7,245	
54-0283	TENSION SUPPORT DOME	14,439	
54-0289	UTILITY BUILDING	240	FIRE PROTECTION RISER BLDG
54-0295	SHED		
54-0304	HVAC EQUIP BLDG	104	
54-0306	TRAILER	355	
54-0315	CONTROL BLDG	734	
54-0321	WOOD SHED		
54-0323	METAL SHED		
54-0324	TRAILER	458	
54-0325	TRAILER	997	
54-0326	SEMI-TRAILER		
54-0356	TRANSPORTAINER		
54-0358	MODIFIED TRANSPORTAINER		
54-0359	MODIFIED TRANSPORTAINER		
54-0364	SHED		
54-0365	ROVER SEMI-TRAILER		
54-0366	TRANSPORTAINER		
54-0367	TRANSPORTABLE	702	
54-0370	CHEM-STOR SHED		
54-0371	MODIFIED MORGAN SHED		
54-0372	MODIFIED MORGAN SHED		
54-0373	CHEM-STOR SHED		
54-0375	TENSION SUPPORT DOME	30,150	
54-0377	TRANSPORTAINER		
54-0378	TRANSPORTAINER		
54-0379	TRANSPORTAINER		
54-0380	TRANSPORTAINER		
54-0381	TRANSPORTAINER		
54-0382	TRANSPORTAINER		
54-0383	TRANSPORTAINER		
54-0384	TRANSPORTAINER		
54-0385	TRANSPORTAINER		

54-0386	TRANSPORTAINER		
54-0387	TRANSPORTAINER		
54-0388	TRANSPORTAINER		
54-0389	TRANSPORTAINER		
54-0390	TRANSPORTAINER		
54-0391	TRANSPORTAINER		
54-0392	TRANSPORTAINER		
54-0393	TRANSPORTAINER		
54-0394	TRANSPORTAINER		
54-0395	TRANSPORTAINER		
54-0396	TRANSPORTAINER		
54-0397	TRANSPORTAINER		
54-0398	TRANSPORTAINER		
54-0400	TRANSPORTAINER		
54-0401	TRANSPORTAINER		
54-0402	TRANSPORTAINER		
54-0412	DECON & VOLUME REDUCTION SYS BLDG	13,284	
54-0419	SEMI-TRAILER		
54-0424	TRAILER	125	
54-0427	TRANSPORTAINER		
54-0428	TRANSPORTAINER		
54-0429	TRANSPORTAINER		
54-0438	MODIFIED TRANSPORTAINER		
54-0440	TRANSPORTAINER		
54-0441	TRANSPORTAINER		
54-0442	TRANSPORTAINER		
54-0443	TRANSPORTAINER		
54-0444	TRANSPORTAINER		
54-0445	TRANSPORTAINER		
54-0446	TRANSPORTAINER		
54-0447	TRANSPORTAINER		
54-0448	TRANSPORTAINER		
54-0450	TRANSPORTAINER		
54-0454	TRANSPORTAINER		
54-0457	TRANSPORTAINER		
54-0458	TRANSPORTAINER		
54-0459	TRANSPORTAINER		
54-0460	GUARD STATION		
54-0465	TRANSPORTAINER		
54-0466	TRANSPORTAINER		
54-0467	TRANSPORTAINER		
54-0476	TRANSPORTAINER		
54-0477	TRANSPORTAINER		
54-0478	TRANSPORTAINER		
54-0479	TRANSPORTAINER		
54-0480	MORGAN SHED		
54-0481	TRANSPORTAINER		

54-0483	MODIFIED TRANSPORTAINER	160	
54-0484	TRANSPORTAINER		
54-0486	MODIFIED TRANSPORTAINER		
54-0487	TRANSPORTAINER		
54-0491	MODIFIED TRANSPORTAINER		
54-0492	TRANSPORTAINER		
54-0501	3 SIDED STORAGE BLDG		
54-0522	TRANSPORTAINER		
54-0523	TRANSPORTAINER		
54-0527	WELLS CARGO TRAILER		
54-0532	TRANSPORTABLE	1,410	
54-0533	TRANSPORTABLE	3,550	
54-0543	CONCRETE PAD		
54-0541	TRANSPORTAINER		
54-0545	TRANSPORTAINER		
54-0546	TRANSPORTAINER		
54-0571	TRANSPORTAINER		
54-0572	TRANSPORTAINER		
54-0573	TRANSPORTAINER		
54-0574	TRANSPORTAINER		
54-0577	HE-RTR BLDG	1,590	
54-0578	HE-RTR CONTROL BLDG	246	
54-0580	CANOPY		
54-1027	MIXED WASTE STORAGE SHED		
54-1028	MIXED WASTE STORAGE SHED		
54-1030	MIXED WASTE STORAGE SHED		
54-1041	MIXED WASTE STORAGE SHED		
54-1053	CHEM SHED		
54-1058	TRAILER	360	
54-1059	TRANSPORTAINER		
54-9500	TRANSPORTABLE (Doublewide)	1,440	

List of EM Equipment to be Transferred

Computer and communications equipment including telephones, cellular phones, and pagers that are assigned to individuals will be identified following personnel transition to the Contractor.

Identifier	Official Name	Manufacturer	Model	Serial Number	Asset Value	Acquisition Date
486902	FORK LIFT GAS ENGINE 4T	HYSTER	H8CC	C005017707X	\$ 22,079.00	9/1/1977
657053	VEHICLE ATV	POLARIS	R10WH76AG	4XAWH76A6A2878878	\$ 22,285.00	9/14/2009
657054	VEHICLE ATV	POLARIS	R10WH76AG	4XAWH76A9A2878888	\$ 22,285.00	9/14/2009
657055	VEHICLE ATV	POLARIS	R10WH76AG	4XAWH76A5A2879424	\$ 22,285.00	9/14/2009
657056	VEHICLE ATV	POLARIS	R10WH76AG	4XAWH76A6A2879741	\$ 22,285.00	9/14/2009
657057	VEHICLE ATV	POLARIS	R10WH76AG	4XAWH76AXA2878396	\$ 22,285.00	9/14/2009
657058	VEHICLE ATV	POLARIS	R10WH76AG	4XAWH76A4A2879463	\$ 22,285.00	9/14/2009
657059	VEHICLE ATV	POLARIS	R10WH76AG	4XAWH76AXA2879452	\$ 22,285.00	9/14/2009
657060	VEHICLE ATV	POLARIS	R10WH76AG	4XAWH76A1A2879677	\$ 22,285.00	9/14/2009
657108	CAMERA DIGITAL	CANON	POWERSHOT	8126219386	\$ 724.00	2/20/2009
657109	CAMERA DIGITAL	CANON	POWERSHOT	8126217676	\$ 724.00	2/20/2009
657110	CAMERA DIGITAL	CANON	POWERSHOT	8126219383	\$ 724.00	2/20/2009
657111	CAMERA DIGITAL	CANON	POWERSHOTSD780IS	8423228074	\$ 279.99	5/8/2009
657112	CAMERA DIGITAL	OLYMPUS	STYLUSTOUGH6000	Q85513144	\$ 279.99	7/15/2009
657113	CAMERA DIGITAL	OLYMPUS	STYLUSTOUGH6000	Q85513145	\$ 279.99	7/15/2009
657116	VEHICLE ATV	POLARIS	R09WH68AG	4XAWH68A792718317	\$ 12,149.00	6/26/2009
657118	GENERATOR	DEWALT	6300W	2912002967	\$ 2,005.66	7/30/2009
657144	RADIO PORTABLE	MACOM	P5150	9080634	\$ 1,407.47	1/18/2010
657152	RADIO PORTABLE	HARRIS	P5100	9080615	\$ 1,407.47	1/8/2010
659380	FORK LIFT 8T	HYSTER	H165XL	E007D01526P	\$ 64,099.51	3/8/1993
726364	FORK LIFT	CLARK	975	3M12540	\$ 58,375.20	2/28/1981
733759	TRAILER	TIMPTE INC	220SC	2	\$ 28,200.00	6/1/1989
740880	TRACTOR GRADER	SMA EQUIPMENT	GALION850	G580010U200781	\$ 104,510.95	12/10/1993
740933	GENERATOR ELC	ONAN CORP	60DGCB	L930528236	\$ 9,635.86	1/24/1994
740950	TRACTOR	CATERPILLAR INC	621F	11N08825	\$ 290,198.41	1/31/1994
750697	COMPRESSOR AIR	SULLAIR	250DPQJDD	498355IHH	\$ 11,320.00	9/1/1988
753578	CRANE BRIDGE INSTALLED 1T	KRANCO INC	UHESC	10255	\$ 29,291.95	1/1/1989
761948	DETECTOR LEAK	VARIAN	936L537	65K009	\$ 24,180.00	9/1/1989
763709	TRUCK LIFT F	TOYOTA	25FG30	11785	\$ 19,315.00	5/1/1990
763732	LOADER FRONT END	JOHN DEERE	644E	DW644EB522387	\$ 99,071.00	6/1/1990
822186	RADIO RECEIVER TRANSMITTER	GENERAL ELECTRIC CO	MRK	288549	\$ 2,636.00	6/10/1999
822233	RADIO RECEIVER TRANSMITTER	GENERAL ELECTRIC CO	MRK	288596	\$ 2,636.00	6/10/1999
822437	RADIO RECEIVER TRANSMITTER	GENERAL ELECTRIC CO	MRK	288800	\$ 2,636.00	6/10/1999
822439	RADIO RECEIVER TRANSMITTER	GENERAL ELECTRIC CO	MRK	288802	\$ 2,636.00	6/10/1999
823276	TRAILER MOBILE DECONTAMINATION	KENTUCKY	1KKVD4529	78143	\$ 203,135.09	4/1/1992
830635	CRANE	BRODERSON MFG CORP	IC801B	101671	\$ 60,010.80	7/3/1985
835031	LOADER BACKHOE	CASE CORP	1850	HG0191924	\$ 60,779.25	6/16/1995

835091	TRAILER	WELLS CARGO	EW2424	C200L25S2026829	\$ 18,911.35	7/11/1995
838256	CRANE	BRODERSON MFG CORP	IC801D	180826	\$ 64,095.00	12/1/1990
840379	FORK LIFT	KOEHRING	6036	OH1259	\$ 52,029.00	11/1/1990
844235	COUNTER P ALPHA BETA	BERTHOLD ANALYTICAL INSTRUMENTS INC	LB770L2	346	\$ 28,369.88	12/1/1991
844240	COUNTER P ALPHA BETA	BERTHOLD ANALYTICAL INSTRUMENTS INC	LB770L2	NONE	\$ 28,369.88	12/1/1991
844243	COUNTER P ALPHA BETA	BERTHOLD ANALYTICAL INSTRUMENTS INC	LB770L2	NONE	\$ 40,156.96	12/1/1991
847087	TRUCK LIFT F	TOYOTA	25FG30	5FG3010545	\$ 21,830.00	12/21/1994
901616	COUNTER COUNT RATE LINEAR	EBERLINE INSTRUMENTS	HFM7A	133	\$ 14,889.50	7/20/1993
903775	CAMERA DIGITAL	OLYMPUS	C2100	116724507	\$ 700.00	1/23/2002
907424	LOADER	BOBCAT	943	503313747	\$ 32,304.07	11/17/1993
917597	SHREDDER TREE	BANDIT	200	7843	\$ 14,376.48	8/15/1994
917988	LOADER FRONT END	CATERPILLAR INC	936F	8AJ01215	\$ 94,525.39	10/13/1994
919735	TRACTOR	JOHN DEERE	5200	LV5200D321222	\$ 42,804.66	11/17/1994
920228	DETECTOR	EDGERTON GERMESHAUSEN GRIER	GEM70195P	34TP40512A	\$ 31,650.92	10/20/1994
925541	FORK LIFT	WIGGINS LIFT CO INC	WD300Y	IGGINSWLC951002	\$ 99,315.97	4/3/1995
925752	TRAILER	WELLS CARGO	EW3224	C200R21S2026835	\$ 12,305.80	6/16/1995
926513	TRAILER	WELLS CARGO	EW2424	C200L22S2026349	\$ 18,790.35	6/16/1995
926539	TRAILER	WELLS CARGO	EW3224	200R23S20268	\$ 12,305.80	6/29/1995
932710	FORK LIFT	YALE	5030E	N576016	\$ 15,885.00	4/7/1995
935537	SYSTEM RADIOGRAPHIC	ELLIS WATTS	1	14596	\$ 1,103,306.79	1/4/1996
936725	COUNTER D NEUTRON	CANBERRA INDUSTRIES INC	HEDAS	NONE	\$ 329,505.00	9/10/1996
941673	FORK LIFT	LOBO LIFT	526FGU30	60700	\$ 33,690.11	10/4/1996
942469	COUNTER COUNT RATE LINEAR	EBERLINE INSTRUMENTS	HFM7A	126 (1)	\$ 14,973.50	12/6/1996
943092	FORK LIFT	TOYOTA	30	305FBCU25601	\$ 37,584.26	1/5/1999
943110	FORK LIFT	TOYOTA	526FGU30	506FGU306198	\$ 24,983.00	1/28/1999
943185	TRUCK LIFT F	TOYOTA	526FG030	506FGU306199	\$ 24,983.00	2/26/1999
947645	COUNTER AIRBORNE PARTICLE	RUPPRECHT PATASHNICK	1400A	303510 (1)	\$ 15,174.00	8/28/1998
947646	COUNTER AIRBORNE PARTICLE	RUPPRECHT PATASHNICK	1400A	303511 (1)	\$ 15,174.00	8/28/1998
948054	FORK LIFT	TOYOTA	I	506FGU30615	\$ 24,995.00	5/12/1999
948175	COUNTER ALPHA BETA	BERTHOLD ANALYTICAL INSTRUMENTS INC	30466LB202	1428301042	\$ 43,345.62	7/7/1999
948512	COUNTER ALPHA	BERTHOLD ANALYTICAL INSTRUMENTS INC	LB7702B	30466	\$ 32,389.03	1/5/2000
948513	COUNTER ALPHA	BERTHOLD ANALYTICAL INSTRUMENTS INC	LB7702B	69310667380	\$ 32,389.04	1/5/2000
955183	DETECTOR LEAK	VARIAN	959	LLJ8008	\$ 17,867.40	9/14/1998
955184	DETECTOR LEAK	VARIAN	959	LLJ8009	\$ 17,867.40	9/14/1998
955457	RADIO RECEIVER TRANSMITTER	ERICSSON	PK2PGT	277474	\$ 1,823.00	10/28/1998
955458	RADIO RECEIVER TRANSMITTER	ERICSSON	PK2PGT	277478	\$ 1,823.00	10/28/1998
957124	SPECTROMETER GAMMA RAY	PERKIN ELMER CORPORATION	DSPEC	387	\$ 14,450.00	2/16/2000
957342	COUNTER AIRBORNE PARTICLE	RUPPRECHT PATASHNICK	1400A	140AB2320300	\$ 15,277.50	9/25/2000
957769	COUNTER D RADIATION	EBERLINE INSTRUMENTS	PCM2	NONE	\$ 129,547.87	9/29/1999

958120	VEHICLE TRENCHER	RUST TRACTOR	330LB	NONE	\$ 327,195.97	9/11/2000
959231	SHELTER	MOBILE MINI	AZ323261	AS40KYU536	\$ 16,425.00	7/18/2000
962349	GENERATOR E	WHISPERWATT	DCA15SPX3	5457562	\$ 13,914.00	10/10/2002
962350	GENERATOR E	WHISPERWATT	DCA25SS1U	7104563	\$ 15,800.00	10/10/2002
962418	CAMERA DIGITAL	OLYMPUS	3040	153735289	\$ 915.93	8/6/2001
962515	VEHICLE ATV	KAWASAKI	KAF620P9F	JK1AFCR159D900974	\$ 15,930.00	12/11/2008
962527	VEHICLE VAN	METRO MOTORS	5932	505214	\$ 11,498.65	8/6/2001
962530	VEHICLE VAN	METRO MOTORS	KAANM8D1	414151	\$ 11,206.65	8/6/2001
962537	VEHICLE ATV	POLARIS	R08RH68AG	4XARH68A082379850	\$ 10,499.00	3/11/2008
962542	VEHICLE TRUCK	METRO MOTORS	AM251	K511424	\$ 11,498.55	1/22/2003
962543	VEHICLE TRUCK	METRO MOTORS	AM251	K511423	\$ 11,498.55	1/22/2003
962563	VEHICLE ATV	POLARIS	R09WH68AR	4XAWH68A092707983	\$ 10,200.00	8/22/2009
963464	BOAT PONTOON 18	FISHER BOATS	FREEDOM180	USBUI13081K899	\$ 13,000.00	8/24/2000
963467	VEHICLE ATV	POLARIS	RANGER	4XAWH76A7A2883068	\$ 19,633.00	12/22/2009
973632	RADIO RECEIVER TRANSMITTER	ERICSSON	PK2PGT	9341426	\$ 1,987.00	5/30/1996
973634	RADIO RECEIVER TRANSMITTER	ERICSSON	PK2PGT	9341429	\$ 1,987.00	5/30/1996
976439	COUNTER P NEUTRON	PERKIN ELMER CORPORATION	AMSR150	177	\$ 12,050.00	9/24/2001
977207	COUNTER	RUPPRECHT PATASHNICK	COUNTER	140AB2364601	\$ 15,277.50	6/27/2001
977536	COUNTER AIRBORNE PARTICLE	RUPPRECHT PATASHNICK	1400A	140AB2357601	\$ 15,277.50	5/18/2001
978995	RADIO MOBILE	ORION	D2PMTX	1804835	\$ 2,076.00	11/6/2001
978996	RADIO MOBILE	ORION	D2PMTX	1804836	\$ 2,076.00	11/6/2001
979823	DETECTOR LEAK	VARIAN	959	LLE2007	\$ 13,160.00	5/15/2002
979921	DRIVER	NUCLEAR FILTER TECHNOLOGY	NONE	NONE	\$ 20,000.00	7/3/2002
981719	RADIO RECEIVER TRANSMITTER	MOTOROLA	HT1000	355AAN1738Z	\$ 651.09	6/29/2000
987298	CAMERA DIGITAL	NIKON INC	COOLPIXP5000	30313801	\$ 367.95	5/30/2007
988782	FORK LIFT	TOYOTA	526FGU35	60963	\$ 50,911.41	10/24/2000
989343	FORK LIFT	HYSTER	H65XM	B562B15820	\$ 32,909.33	9/27/2001
989374	FORK LIFT	HYSTER	H230XL2	E007DO04628Y	\$ 101,810.45	10/2/2001
989377	LIFT DRUM	EASY LIFT EQUIPMENT	DH80096CR	J01028	\$ 15,583.00	10/3/2001
989702	LIFT DRUM	EASY LIFT EQUIPMENT	DH85096CRS	E0104602900	\$ 16,083.00	5/22/2001
993275	TRAILER MOBILE LAB	PARAGON	CVG3227WB	1SC200R29P40137	\$ 47,526.76	9/14/1999
994862	COMPACTOR	GRANUTECH SATURN SYSTEMS	5200SPM	E1800199	\$ 574,458.53	5/5/1999
1090135	RADIO TRANSCEIVER	ERICSSON	PT2PTX	534645	\$ 2,236.00	11/29/2000
1096047	MACHINE PLASTIC WRAPPING	ORION	LPD085	V1884	\$ 10,995.00	1/13/2012
1102559	LIFT PLATFORM	IDEAL	NONE	41T039	\$ 50,910.96	4/28/2003
1102894	TRAILER	MALOY	TRAILER	NONE	\$ 48,000.00	2/23/2004
1106948	SHIELD	MESA STEEL	HERCULESII	NONE	\$ 33,643.98	9/14/2002
1107902	VEHICLE ATV	POLARIS	RANGER	4XARD50A22	\$ 10,350.00	10/17/2002
1114823	COUNTER D RADIATION	EBERLINE INSTRUMENTS	PCM2	NONE	\$ 60,352.16	8/30/2002
1114888	WINCH	WESTBAY INSTRUMENTS	3014	MEW2951	\$ 27,000.00	9/6/2002
1116198	RADIO PORTABLE	MOTOROLA	PK2PTX	9351709	\$ 500.00	12/20/2002
1116203	RADIO	MOTOROLA	PK3	267608	\$ 500.00	12/20/2002
1116205	RADIO	MOTOROLA	PK3	267622	\$ 500.00	12/20/2002
1123899	FORK LIFT	HYSTER	H50XM	H177B42857A	\$ 22,867.00	9/24/2003

1123900	FORK LIFT	HYSTER	H60XM	H177B41929A	\$ 24,820.00	9/24/2003
1123963	MACHINE PLASTIC WRAPPING	ORION	L55	20030313168	\$ 13,595.00	4/8/2003
1124047	FORK LIFT ELECTRIC	TOYOTA	7FBCU55	60056	\$ 58,158.60	6/3/2003
1124049	FORK LIFT	TOYOTA	7FGU25	NONE	\$ 32,547.49	6/3/2003
1124321	VEHICLE VAN	METRO MOTORS	1040	LS4BCB0D23A088550	\$ 11,206.65	9/2/2003
1124323	VEHICLE VAN	METRO MOTORS	1040	LS4BCB0D43A088548	\$ 11,206.65	9/2/2003
1129401	VEHICLE ATV	KAWASAKI	KAF620RAF	JK1AFCR11AB505576	\$ 16,474.50	9/1/2009
1129406	VEHICLE ATV	POLARIS	R09WH68AG	4XAWH68AX92706372	\$ 18,360.00	8/26/2009
1129407	VEHICLE ATV	POLARIS	R09WH68AG	4XAWH68A292873759	\$ 18,360.00	8/26/2009
1131554	CONTAINER	MALLOY	CONTAINER	NONE	\$ 162,429.82	10/18/2002
1131605	TRAILER MOBILE LAB	EMI	HENC	NONE	\$ 391,684.83	3/1/2002
1131630	SCALE HIGHWAY	FAIRBANKS SCALES	PTR390	H624811EA	\$ 223,763.55	8/22/2001
1131673	ELEVATOR LIFT PLATFORM	EPD TECHNOLOGY CORP	TRUPACTII	NONE	\$ 199,870.00	3/12/2003
1131698	WINCH	MOSDAX	9015	MER3420	\$ 15,000.00	11/18/2003
1131715	WINCH POWER	MOUNT SOPRIS	4MXC1000	1707	\$ 15,000.00	1/19/2005
1131765	RADIO PORTABLE	MACOM	PK3PTX	553817	\$ 1,601.40	9/24/2002
1134350	COUNTER AIRBORNE PARTICLE	RUPPRECHT PATASHNICK	1400A	140AB2467403	\$ 17,460.00	9/24/2003
1135076	RADIO PORTABLE	MACOM	PK3PTX	573332	\$ 1,597.40	5/25/2004
1142793	CAMERA DIGITAL	SONY CORP OF AMERICA	DSCF828	1372027	\$ 987.61	4/13/2004
1145529	MANIPULATOR	CENTRAL RESEARCH LABORATORIES INC	L	8010	\$ 51,062.73	9/30/1999
1149255	CAMERA DIGITAL	OLYMPUS	STYLUS500	596535962	\$ 379.95	3/14/2005
1150157	CAMERA DIGITAL	CANON	POWERSHOTXSX100IS	6128217316	\$ 249.95	5/13/2008
1150190	RADIO PORTABLE	MACOM	P5100	9078906	\$ 2,273.11	6/19/2007
1153525	CAMERA DIGITAL	CANON	PC1057	8821202775	\$ 672.00	3/8/2006
1153539	CAMERA DIGITAL	OLYMPUS	STYLUS770SW	D06545704	\$ 309.95	6/14/2007
1153540	CAMERA DIGITAL	OLYMPUS	STYLUS770SW	D20505284	\$ 309.95	6/14/2007
1153546	CAMERA DIGITAL	OLYMPUS	STYLUS770SW	D06583844	\$ 309.95	7/11/2007
1153547	CAMERA DIGITAL	OLYMPUS	STYLUS770SW	D06583845	\$ 309.95	7/11/2007
1162071	RADIO PORTABLE	MACOM	P5150	9080290	\$ 2,237.11	9/24/2008
1162073	RADIO PORTABLE	MACOM	P5150	9080226	\$ 2,237.11	10/6/2008
1181230	CAMERA DIGITAL	OLYMPUS	C770	369030578	\$ 568.99	8/24/2005
1206432	VEHICLE ATV	POLARIS	700EFL	4XARD68A36B039539	\$ 10,100.00	9/20/2006
1206437	TRAILER LOCKER SHOWER	PREFERRED BUILDING SYSTEMS	NONE	NONE	\$ 75,279.00	12/31/1997
1206451	BOX GLOVE	LANL	GB1121	1425Y801115	\$ 119,906.77	4/10/2003
1206634	TRANSPORTAINER	MALLOY	8X8X20	200394	\$ 13,700.00	12/15/2009
1206799	CONTAINER	MALLOY	CONTAINER	1325021	\$ 22,822.00	9/18/2010
1207110	SHELTER	BIG TOP MANUFACTURING	NONE	NONE	\$ 20,500.00	10/5/2012
1207185	FORK LIFT	TOYOTA	7FBH25	35833	\$ 10,923.94	1/31/2014
1207203	TANK WATER	WICHITA TANK	FRACTANK	140102	\$ 45,000.00	5/14/2014
1207204	TANK WATER	WICHITA TANK	FRACTANK	140108	\$ 45,000.00	5/14/2014
1207205	TANK WATER	WICHITA TANK	FRACTANK	140109	\$ 45,000.00	5/14/2014
1207206	TANK WATER	WICHITA TANK	FRACTANK	140110	\$ 45,000.00	5/14/2014
1207207	TANK WATER	WICHITA TANK	FRACTANK	140111	\$ 45,000.00	5/14/2014
1207208	TANK WATER	WICHITA TANK	FRACTANK	140113	\$ 45,000.00	5/14/2014

1207209	TANK WATER	WICHITA TANK	FRACTANK	140114	\$ 45,000.00	5/14/2014
1207290	LIFT DRUM	LIFTOMATIC MATERIAL HANDLING	ERGOMATIC750PWPL	UNKNOWN	\$ 12,750.00	9/1/2014
1207371	CLEANER VACUUM	NILFISK	390718	3.82014E+12	\$ 29,077.47	7/15/2014
1207394	EXTRACTOR GAS VAPOR	CATALYTIC COMBUSTION CORP	4LPDBLOWERSVEPACKAGE	WO61732	\$ 29,875.00	8/29/2014
1212420	VEHICLE ATV	POLARIS	R10WH76AG	BAM200903300325	\$ 19,960.00	9/10/2009
1212421	VEHICLE ATV	POLARIS	R10WH76AG	BAM200907020535	\$ 19,960.00	9/10/2009
1212422	VEHICLE ATV	POLARIS	R10WH76AG	BAM200904100353	\$ 19,960.00	9/10/2009
1212423	VEHICLE ATV	POLARIS	R10WH76AG	BAM200907020479	\$ 19,960.00	9/10/2009
1212561	VEHICLE ATV	POLARIS	RANGER	BAM01003050355	\$ 11,999.00	7/28/2010
1212562	VEHICLE ATV	POLARIS	RANGER	BAM0103050323	\$ 11,999.00	7/28/2010
1212570	TRACTOR BACKHOE	JOHN DEERE	200CLC	FF200CX505994	\$ 67,000.00	5/11/2010
1212571	TRACTOR BACKHOE	JOHN DEERE	200CLC	FF200CX506304	\$ 74,007.00	5/11/2010
1212572	TRACTOR BACKHOE	JOHN DEERE	200CLC	FF200CX505731	\$ 67,000.00	5/11/2010
1212573	TRACTOR BACKHOE	JOHN DEERE	200CLC	FF200CX506147	\$ 67,000.00	5/11/2010
1212574	TRACTOR BACKHOE	JOHN DEERE	200CLC	FF200CX506014	\$ 67,000.00	5/11/2010
1212575	TRACTOR BACKHOE	JOHN DEERE	270CLC	FF270CX702383	\$ 96,500.00	1/29/2010
1212576	TRACTOR BACKHOE	BROKK	400	981026S	\$ 369,576.98	11/20/2009
1212578	DETECTOR	CANBERRA INDUSTRIES INC	INSPECTOR1000	S023266	\$ 14,200.00	12/1/2011
1219676	CHAMBER ENVIRONMENTAL TEST	FLUTE	NONE	NONE	\$ 25,000.00	6/6/2012
1219677	CHAMBER ENVIRONMENTAL TEST	FLUTE	NONE	NONE1	\$ 15,000.00	6/6/2012
1219678	RADIO BASE STATION	GENERAL ELECTRIC CO	MDS4790A	40681	\$ 10,641.42	9/19/2012
1219680	METER WATER	YSI INC	EXO2	13A100995	\$ 14,785.00	2/21/2013
1220077	TRACTOR	CAPACITY	TJ5000	41MFB5116DL024320	\$ 108,135.00	3/5/2014
1229336	COMPUTER SERVER	HEWLETT PACKARD	PROLIANTDL380	USE938N651	\$ 7,948.13	10/5/2009
1230234	CAMERA DIGITAL	NIKON INC	D5100	3204846	\$ 756.23	12/13/2011
1230238	RADIO PORTABLE	HARRIS	P5400	A40114000A87	\$ 640.99	4/30/2013
1230239	RADIO PORTABLE	HARRIS	P5400	A40114000D3C	\$ 640.99	4/30/2013
1230240	RADIO PORTABLE	HARRIS	P5400	A40114000A88	\$ 640.99	4/30/2013
1230241	RADIO PORTABLE	HARRIS	P5400	A40114000D3B	\$ 640.99	4/30/2013
1230242	RADIO PORTABLE	HARRIS	P5400	A40114000D39	\$ 640.99	4/30/2013
1230243	RADIO PORTABLE	HARRIS	P5400	A40114000D41	\$ 640.99	4/30/2013
1230244	RADIO PORTABLE	HARRIS	P5400	A40114000D3A	\$ 640.99	4/30/2013
1230245	RADIO PORTABLE	HARRIS	P5400	A40114000D3D	\$ 640.99	4/30/2013
1230246	RADIO PORTABLE	HARRIS	P5400	A40114000D40	\$ 640.99	4/30/2013
1230247	RADIO PORTABLE	HARRIS	P5400	A40114000D38	\$ 640.99	4/30/2013
1230248	RADIO PORTABLE	HARRIS	P5400	A40114000D3F	\$ 640.99	4/30/2013
1230249	RADIO PORTABLE	HARRIS	P5400	A40114000D3E	\$ 640.99	4/30/2013
1230250	RADIO PORTABLE	HARRIS	P5400	A40114000A85	\$ 640.99	4/30/2013
1231795	PRINTER	HEWLETT PACKARD	DESIGNJET5500PS	SG46E2400T	\$ 11,196.00	7/12/2005
1232256	TRAILER MOBILE LAB	WANDERER	187TBWAGON	4XTTN18223C2	\$ 11,995.00	9/27/2004
1232325	WINCH POWER	WESTBAY INSTRUMENTS	3036	DCB3460	\$ 15,000.00	12/14/2004
1232775	SPECTROMETER	X RAY INSTRUMENTATION ASSOCIATES	PXI1031	11BE281	\$ 12,000.00	8/31/2006
1232784	SYSTEM IMAGING	FEDERAL COMMUNICATIONS GROUP INC	IMAGINGSYSTEM	607KVVN012711	\$ 23,675.86	9/21/2006
1232853	CONVEYOR	CANBERRA INDUSTRIES INC	NONECONVEYOR	NONE	\$ 248,699.78	10/28/2004

1233086	GENERATOR DSL 150KW MTRGNR	CUMMINS	GENSET	C050760206	\$ 23,267.00	5/19/2005
1233506	SYSTEM SCANNING	VJ TECHNOLOGIES	1300	NONE	\$ 174,800.00	12/7/2005
1233534	FORK LIFT	TOYOTA	7FGU30	68254	\$ 27,999.00	1/31/2006
1233535	FORK LIFT	TOYOTA	7FGU30	68105	\$ 27,999.00	1/31/2006
1233536	FORK LIFT	TOYOTA	7FGU30	68100	\$ 27,999.00	1/31/2006
1233558	FORK LIFT	TOYOTA	7FGU30	68711	\$ 27,999.00	3/7/2006
1233621	FORK LIFT ELECTRIC	TOYOTA	7FBH20	26186	\$ 30,495.00	4/7/2006
1235592	CAMERA VIDEO	SONY CORP OF AMERICA	HVRZ7U	115079	\$ 5,650.00	9/30/2010
1235882	VEHICLE ATV	KAWASAKI	MULE410	JK1AFCR10BB509510	\$ 16,222.63	9/21/2011
1235883	VEHICLE ATV	KAWASAKI	300	JK1AFCR10BB511225	\$ 16,222.63	9/21/2011
1236246	GENERATOR ELC TRL MTD	GENSET CO	DKAF5753586	B060890423	\$ 27,251.00	4/7/2006
1237675	AIR SAMPLER	CANBERRA INDUSTRIES INC	AS1700R	13000004	\$ 11,500.00	9/9/2008
1237676	AIR SAMPLER	CANBERRA INDUSTRIES INC	AS1700R	1084464	\$ 11,500.00	9/9/2008
1237884	DETECTOR LEAK	VARIAN	959	LL0909L809	\$ 20,347.47	9/23/2009
1237929	FORK LIFT	TOYOTA	8FGU25	20080	\$ 28,688.00	12/4/2009
1238128	DETECTOR LEAK	VARIAN	LD959MT	LLJ7083	\$ 16,970.25	10/1/2007
1238302	TRANSIT SURVEYORS	TOPCON TECHNOLOGIES INC	60664	950210	\$ 39,900.00	9/22/2008
1238484	PLOTTER	HEWLETT PACKARD	DESIGNJETZ6100PS	MY96U89029	\$ 11,495.00	9/9/2009
1238592	DETECTOR LEAK	VARIAN	959	LL0910L830	\$ 20,347.47	10/20/2009
1238651	ALARM SYSTEM	ASTI TRANSPORTATION SYSTEMS	MVT465	NONE	\$ 34,000.00	4/27/2010
1239132	TRAILER	MALOY	TRAILER	NONE	\$ 32,015.00	5/27/2010
1239133	TRAILER	MALOY	TRAILER	NONE	\$ 32,015.00	5/27/2010
1239140	COUNTER F RADIATION	CANBERRA INDUSTRIES INC	ASM1000	13000106	\$ 15,501.00	7/8/2010
1239142	COUNTER F RADIATION	CANBERRA INDUSTRIES INC	ASM1000	13000112	\$ 15,501.00	7/8/2010
1239254	LIFT DRUM	WELCH	DH80040	C1100198015707	\$ 15,792.00	3/10/2011
1239255	LIFT DRUM	WELCH	DH80040	C1100298015659	\$ 15,792.00	3/10/2011
1239256	LIFT DRUM	WELCH	DH80040	C1100398015657	\$ 15,792.00	3/10/2011
1239588	RADIO RECEIVER TRANSMITTER	MIDLAND INDUSTRIES INC	RF310	50615714	\$ 450.00	10/8/2008
1239589	RADIO RECEIVER TRANSMITTER	MIDLAND INDUSTRIES INC	RF310	50615432	\$ 450.00	10/8/2008
1239835	LIFT	GENIE	Z45	Z452509A39	\$ 47,280.03	9/22/2009
1239940	SYSTEM ROBOTIC	EARTHCAM INC	MEGAPIXELCAMROBOTIC	NONE	\$ 22,983.35	2/18/2010
1239992	COUNTER F RADIATION	CANBERRA INDUSTRIES INC	ASM1000	13000103	\$ 15,501.00	6/3/2010
1239993	COUNTER F RADIATION	CANBERRA INDUSTRIES INC	ASM1000	13000101	\$ 15,501.00	6/3/2010
1239995	COUNTER F RADIATION	CANBERRA INDUSTRIES INC	ASM1000	13000105	\$ 15,501.00	6/3/2010
1240000	PRINTER MULTIFUNCTIONAL	CANON	IPF755	AAA0705	\$ 14,675.00	6/15/2010
1240598	VEHICLE ATV	POLARIS	RANGER	4XARH50A6CB427608	\$ 13,338.19	11/2/2011
1240624	CAMERA VIDEO	LAVAL UNDERGROUND SURVEYS	RCAM1000	205719	\$ 14,260.00	2/7/2012
1240644	LIFT DRUM	VALLEY CRAFT	F80116A9	A32811800B0412	\$ 14,537.02	4/23/2012
1240645	LIFT DRUM	VALLEY CRAFT	F80116A9	A32811800A0412	\$ 14,537.02	4/23/2012
1240646	LIFT DRUM	VALLEY CRAFT	F80116A9	A32811800C0412	\$ 14,537.02	4/23/2012
1240649	COUNTER ALPHA BETA	BERTHOLD TECHNOLOGIES	LB790	6036	\$ 48,260.00	5/8/2012
1240650	COUNTER ALPHA BETA	BERTHOLD TECHNOLOGIES	LB790	6038	\$ 48,260.00	5/8/2012
1240776	LIFT DRUM	EASY LIFT EQUIPMENT	DH800	H12019	\$ 16,395.00	8/15/2012
1240777	LIFT DRUM	EASY LIFT EQUIPMENT	DH800	H12020	\$ 16,395.00	8/15/2012

1240778	LIFT DRUM	EASY LIFT EQUIPMENT	DH800	H12021	\$ 16,395.00	8/15/2012
1240868	POWER SUPPLY	CUMMINS	25DSKCA	B120308901	\$ 35,912.00	9/7/2012
1242834	COMPUTER SERVER	DELL COMPUTER	POWEREDGET310	2V3BZV1	\$ 2,668.29	12/5/2012
1243814	VEHICLE ATV	KAWASAKI	KAF620RDF	JK1AFCR15DB518688	\$ 16,707.41	3/20/2013
1244729	CONTAINER WASTE STORAGE	MALLOY	NONECONTAINERWASTESTO RAGE	NONE	\$ 33,212.00	8/14/2013
1247063	SCALE	FAIRBANKS SCALES	INOHR2500F2	1.3287E+11	\$ 85,167.00	2/10/2014
1247197	LIGHT FLOODLIGHT	PROGRESS SOLAR SOLUTIONS	SLT800	1P9B71319DR661032	\$ 22,395.00	9/6/2013
1247198	LIGHT FLOODLIGHT	PROGRESS SOLAR SOLUTIONS	SLT800	1P9B71319DR661029	\$ 22,395.00	9/6/2013
1247199	LIGHT FLOODLIGHT	PROGRESS SOLAR SOLUTIONS	SLT800	1P9B71315DR661030	\$ 22,395.00	9/6/2013
1247200	LIGHT FLOODLIGHT	PROGRESS SOLAR SOLUTIONS	SLT800	1P9B71318DR661037	\$ 22,395.00	9/6/2013
1247201	LIGHT FLOODLIGHT	PROGRESS SOLAR SOLUTIONS	SLT800	1P9B71314DR661035	\$ 22,395.00	9/6/2013
1247202	LIGHT FLOODLIGHT	PROGRESS SOLAR SOLUTIONS	SLT800	1P9B71310DR661033	\$ 22,395.00	9/6/2013
1247203	LIGHT FLOODLIGHT	PROGRESS SOLAR SOLUTIONS	SLT800	1P9B71317DR661045	\$ 22,395.00	9/6/2013
1247727	SYSTEM SURVEYOR	TRIMBLE NAVIGATION	M3DR3	D046019	\$ 10,398.45	2/6/2014
1248080	LIFT DRUM	VALLEY CRAFT	F80144A7A	NONE	\$ 20,982.37	5/2/2014
1248083	LIGHT FLOODLIGHT	PROGRESS SOLAR SOLUTIONS	SLT800	1P9B71319ER661033	\$ 22,716.11	5/5/2014
1248084	LIGHT FLOODLIGHT	PROGRESS SOLAR SOLUTIONS	SLT800	1P9B71310ER661034	\$ 22,716.11	5/5/2014
1248085	LIGHT FLOODLIGHT	PROGRESS SOLAR SOLUTIONS	SLT800	1P9B71318ER661010	\$ 22,716.11	5/5/2014
1248086	LIGHT FLOODLIGHT	PROGRESS SOLAR SOLUTIONS	SLT800	1P9B71311ER661009	\$ 22,716.11	5/5/2014
1248185	PUMP WATERBOOSTER	TP PUMP & PIPE	NONE	NONE	\$ 13,174.50	7/18/2014
1248186	PUMP WATERBOOSTER	TP PUMP & PIPE	NONE	NONE1	\$ 13,174.50	7/18/2014
1251072	VEHICLE ATV	POLARIS	R14UH88AR	4XAUH88A5EG284219	\$ 12,874.00	9/4/2014
1251073	VEHICLE ATV	POLARIS	R14UH88AR	4XAUH88A9EG862015	\$ 12,874.00	9/4/2014
1251120	CONVEYOR	LAUYANS	LISRCONV001A	NONE	\$ 44,551.00	9/12/2014
1251678	POWER SUPPLY	CUMMINS	25DSKCA	B120298591	\$ 42,312.00	9/15/2014
1252164	FREEZER	POLAR KING	I88	A14087223	\$ 16,270.38	10/1/2014
1256207	RADIO PORTABLE	MACOM	MRKII	572596	\$ 2,241.78	9/24/2004
1256407	RADIO PORTABLE	MACOM	P5150	9076137	\$ 1,407.47	9/1/2005
1256411	RADIO PORTABLE	MACOM	P5150	9078194	\$ 1,407.47	9/1/2005
1256608	RADIO TRANSCEIVER	MACOM	MAHMSNDXX	9080250	\$ 1,407.47	2/24/2009
1256609	RADIO TRANSCEIVER	MACOM	MAHMSNDXX	9080265	\$ 1,407.47	2/24/2009
1256931	CAMERA DIGITAL	OLYMPUS	FE4020	U7BA25787	\$ 129.99	7/11/2011
1257197	CAMERA DIGITAL	NIKON INC	COOLPIXP5000	30189821	\$ 399.95	10/12/2011
1257198	CAMERA DIGITAL	NIKON INC	COOLPIXP5000	30189820	\$ 399.95	10/12/2011
1257279	RADIO RECEIVER TRANSMITTER	HARRIS	MAEXCN1XX	A40114000B38	\$ 640.99	7/12/2012
1257281	RADIO RECEIVER TRANSMITTER	HARRIS	MAEXCN1XX	A40114000B37	\$ 640.99	7/12/2012
1257282	RADIO RECEIVER TRANSMITTER	HARRIS	MAEXCN1XX	A40114000B2D	\$ 640.99	7/12/2012
1257283	RADIO RECEIVER TRANSMITTER	HARRIS	MAEXCN1XX	A40114000B1D	\$ 640.99	7/12/2012
1257284	RADIO RECEIVER TRANSMITTER	HARRIS	MAEXCN1XX	A40114000B36	\$ 640.99	7/12/2012
1257290	RADIO RECEIVER TRANSMITTER	HARRIS	MAEXCN1XX	A40114000B33	\$ 640.99	7/12/2012
1257291	RADIO RECEIVER TRANSMITTER	HARRIS	MAEXCN1XX	A40114000B35	\$ 640.99	7/12/2012

1257292	RADIO RECEIVER TRANSMITTER	HARRIS	MAEXCN1XX	A40114000B39	\$ 640.99	7/12/2012
1257314	CAMERA DIGITAL	NIKON INC	COOLPIXP5100	31152058	\$ 439.96	8/20/2012
1301788	RADIO PORTABLE	HARRIS	P5400	A40114000A84	\$ 640.99	4/30/2013
1301789	RADIO PORTABLE	HARRIS	P5400	A40114000A16	\$ 640.99	4/30/2013
1405006	RADIO	HARRIS	P5450	A40114000FAA	\$ 640.99	2/19/2014
1405007	RADIO	HARRIS	P5450	A40114000F8E	\$ 640.99	2/19/2014
1405023	SERVER	HEWLETT PACKARD	PROLIANTDL320	USE409SKAT	\$ 4,003.31	3/11/2014
1405048	CAMERA DIGITAL	SONY CORP OF AMERICA	DSCRX100	6555890	\$ 649.95	4/3/2014
1405312	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B000260	\$ 814.00	8/8/2014
1405313	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B0000124	\$ 814.00	8/8/2014
1405314	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B000125	\$ 814.00	8/8/2014
1405315	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B000120	\$ 814.00	8/8/2014
1405316	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B000261	\$ 814.00	8/8/2014
1405317	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B000262	\$ 814.00	8/8/2014
1405318	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B000118	\$ 814.00	8/8/2014
1405319	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B000119	\$ 814.00	8/8/2014
1405320	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B000258	\$ 814.00	8/8/2014
1405321	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B000257	\$ 814.00	8/8/2014
1405322	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B000259	\$ 814.00	8/8/2014
1405323	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B000121	\$ 814.00	8/8/2014
1405324	RADIO PORTABLE	HARRIS	DPXGPBU1B	S4015B000256	\$ 814.00	8/8/2014
1405325	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B000116	\$ 814.00	8/8/2014
1405453	CAMERA DIGITAL	CANON	POWERSHOTXSX100IS	8.52051E+11	\$ 269.95	8/26/2014
1405454	CAMERA DIGITAL	CANON	POWERSHOTXSX100IS	8.52051E+11	\$ 269.95	8/26/2014
1405455	CAMERA DIGITAL	CANON	POWERSHOTXSX100IS	8.52051E+11	\$ 269.95	8/26/2014
1405456	CAMERA DIGITAL	CANON	POWERSHOTXSX100IS	8.52051E+11	\$ 269.95	8/26/2014
1405484	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B000201	\$ 814.00	8/29/2014
1405485	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B000204	\$ 814.00	8/29/2014
1405486	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B000028	\$ 814.00	8/29/2014
1405487	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B000076	\$ 814.00	8/29/2014
1405488	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B000082	\$ 814.00	8/29/2014
1405489	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B000081	\$ 814.00	8/29/2014
1405490	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B000205	\$ 814.00	8/29/2014
1405491	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B000027	\$ 814.00	8/29/2014
1405492	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B000150	\$ 814.00	8/29/2014
1405493	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B000080	\$ 814.00	8/29/2014
1405494	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B000085	\$ 814.00	8/29/2014
1405495	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B000151	\$ 814.00	8/29/2014
1405496	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B000152	\$ 814.00	8/29/2014
1405497	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B000153	\$ 814.00	8/29/2014
1405498	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B000148	\$ 814.00	8/29/2014
1405499	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B000154	\$ 814.00	8/29/2014
1405500	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B000149	\$ 814.00	8/29/2014
1405502	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B000079	\$ 814.00	8/29/2014
1405503	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B000083	\$ 814.00	8/29/2014
1405504	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B000155	\$ 814.00	8/29/2014

1405505	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B000147	\$ 814.00	8/29/2014
1405506	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B000084	\$ 814.00	8/29/2014
1405507	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B000077	\$ 814.00	8/29/2014
1405508	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B000078	\$ 814.00	8/29/2014
1407416	RADIO PORTABLE	HARRIS	P5400	A4011401142	\$ 640.99	8/18/2014
1407417	RADIO PORTABLE	HARRIS	P5400	A40114001140	\$ 640.99	8/18/2014
1407418	RADIO PORTABLE	HARRIS	P5400	A4011400113F	\$ 640.99	8/18/2014
1407419	RADIO PORTABLE	HARRIS	P5400	A40114001143	\$ 640.99	8/18/2014
1407420	RADIO PORTABLE	HARRIS	P5400	A40114001141	\$ 640.99	8/18/2014
1407421	RADIO PORTABLE	HARRIS	P5400	A4011400113C	\$ 640.99	8/18/2014
1407422	RADIO BASE STATION	HARRIS	431CT5300002	203064	\$ 1,960.29	8/18/2014
1407441	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B001005	\$ 1,829.80	3/17/2015
1407442	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B000662	\$ 1,829.80	3/17/2015
1407443	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B000656	\$ 1,829.80	3/17/2015
1407445	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B000657	\$ 1,829.80	3/17/2015
1407446	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B001000	\$ 1,829.80	3/17/2015
1407448	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B000661	\$ 1,829.80	3/17/2015
1407449	METER WATER	YSI INC	EXO2	13H101747	\$ 14,785.00	2/21/2013
1500502	VEHICLE ATV	POLARIS	R14TH76AA	4XATH76A2E2557638	\$ 16,023.00	10/23/2014
1500503	VEHICLE ATV	POLARIS	R14TH76AA	4XATH76A0E4320425	\$ 16,023.00	10/23/2014
1501536	FREEZER	KLINGE	DAIKIN	108819	\$ 30,793.57	11/19/2014
1505737	FORKLIFT DIESEL	GENIE	GTH844	GTH81420409	\$ 94,317.05	10/15/2014
1505909	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B000938	\$ 825.00	6/25/2015
1505910	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4105B000940	\$ 825.00	6/25/2015
1505923	RADIO BASE STATION	HARRIS	431CT5300002	203980	\$ 1,960.29	3/18/2016
1512187	MACHINE MOWER LAWN	JOHN DEERE	5100E	1LV5100ETDY141064	\$ 41,340.55	10/2/2015
1512602	ANALYZER GAS	LUMASENSE TECHNOLOGIES	INNOVA1412I	713035	\$ 56,760.00	3/27/2015
1513111	CAMERA DIGITAL	GOPRO	CHDHN302	A0315C921C0	\$ 299.95	5/19/2015
1513112	CAMERA DIGITAL	GOPRO	CHDHN302	A0315C8DB0C	\$ 299.95	5/19/2015
1513204	REFRIGERATION UNIT	KLINGE	LXD10EA15	114603	\$ 30,793.57	2/27/2015
1513233	CONTROL CHILLER TEMP	TRANE CO	CGAM040F2	U15E49123	\$ 36,143.00	7/17/2015
1513477	RADIO PORTABLE	HARRIS	XG25P	A4015B002780	\$ 781.00	10/21/2015
1513478	RADIO PORTABLE	HARRIS	XG25P	A4015B002779	\$ 781.00	10/21/2015
1513479	RADIO PORTABLE	HARRIS	XG25P	A4015B002778	\$ 781.00	10/21/2015
1513480	RADIO PORTABLE	HARRIS	XG25P	A4015B002777	\$ 781.00	10/21/2015
1513481	RADIO PORTABLE	HARRIS	XG25P	A4015B002776	\$ 781.00	10/21/2015
1513482	RADIO PORTABLE	HARRIS	XG25P	A4015B002784	\$ 781.00	10/21/2015
1513483	RADIO PORTABLE	HARRIS	XG25P	A4015B002785	\$ 781.00	10/21/2015
1513484	RADIO PORTABLE	HARRIS	XG25P	A4015B002783	\$ 781.00	10/21/2015
1513485	RADIO PORTABLE	HARRIS	XG25P	A4015B002782	\$ 781.00	10/21/2015
1513486	RADIO PORTABLE	HARRIS	XG25P	A4015B002781	\$ 781.00	10/21/2015
1515273	MACHINE MOWER LAWN	KUBOTA	ZG332060	UNKNOWN	\$ 13,536.40	8/27/2015
1516567	VEHICLE ATV	POLARIS	RGREV	4XARC08G5EE813173	\$ 11,734.00	9/16/2015
1517144	RADIO PORTABLE	HARRIS	XG25P	A4015B001401	\$ 781.00	10/2/2015
1517145	RADIO PORTABLE	HARRIS	XG25P	A4015B001397	\$ 781.00	10/2/2015
1517146	RADIO PORTABLE	HARRIS	XG25P	A4015B001405	\$ 781.00	10/2/2015
1517147	RADIO PORTABLE	HARRIS	XG25P	A4015B001402	\$ 781.00	10/2/2015

1517148	RADIO PORTABLE	HARRIS	XG25P	A4015B001396	\$ 781.00	10/2/2015
1517149	RADIO PORTABLE	HARRIS	XG25P	A4015B001404	\$ 781.00	10/2/2015
1517150	RADIO PORTABLE	HARRIS	XG25P	A4015B001403	\$ 781.00	10/2/2015
1517151	RADIO PORTABLE	HARRIS	XG25P	A4015B001399	\$ 781.00	10/2/2015
1517152	RADIO PORTABLE	HARRIS	XG25P	A4015B001400	\$ 781.00	10/2/2015
1517153	RADIO PORTABLE	HARRIS	XG25P	A4015B001398	\$ 781.00	10/2/2015
1517181	RADIO PORTABLE	HARRIS	XG25P	A4015B001361	\$ 781.00	10/2/2015
1517182	RADIO PORTABLE	HARRIS	XG25P	A4015B001364	\$ 781.00	10/2/2015
1517183	RADIO PORTABLE	HARRIS	XG25P	A4015B001359	\$ 781.00	10/2/2015
1517184	RADIO PORTABLE	HARRIS	XG25P	A4015B001297	\$ 781.00	10/2/2015
1517185	RADIO PORTABLE	HARRIS	XG25P	A4015B001362	\$ 781.00	10/2/2015
1517186	RADIO PORTABLE	HARRIS	XG25P	A4015B001296	\$ 781.00	10/2/2015
1517187	RADIO PORTABLE	HARRIS	XG25P	A4015B001360	\$ 781.00	10/2/2015
1517188	RADIO PORTABLE	HARRIS	XG25P	A4015B001365	\$ 781.00	10/2/2015
1517189	RADIO PORTABLE	HARRIS	XG25P	A4015B001363	\$ 781.00	10/2/2015
1517190	RADIO PORTABLE	HARRIS	XG25P	A4015B001298	\$ 781.00	10/2/2015
1517215	FORK LIFT	CATERPILLAR INC	2EP11000	FN452148	\$ 87,800.00	10/7/2015
1612078	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B002736	\$ 781.00	3/24/2016
1612079	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B002747	\$ 781.00	3/24/2016
1612080	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B002751	\$ 781.00	3/24/2016
1612081	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B002752	\$ 781.00	3/24/2016
1612082	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B002754	\$ 781.00	3/24/2016
1612083	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B002759	\$ 781.00	3/24/2016
1612084	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B002764	\$ 781.00	3/24/2016
1612085	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B002766	\$ 781.00	3/24/2016
1612086	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B002769	\$ 781.00	3/24/2016
1612087	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B002770	\$ 781.00	3/24/2016
1612088	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B002771	\$ 781.00	3/24/2016
1612089	RADIO PORTABLE	HARRIS	DPXGPBU1B	A4015B002775	\$ 781.00	3/24/2016
1612289	ANALYZER MULTI CHANNEL	ORTEC	DIGIDART	16167491	\$ 13,252.00	6/22/2016
1612290	ANALYZER MULTI CHANNEL	ORTEC	DIGIDART	16167492	\$ 13,252.00	6/22/2016
1612444	UNKNOWN	FUJIFILM OPTICAL DEVICES USA	XP90	6SD18739	\$ 199.95	8/8/2016
1614641	FORK LIFT	TOYOTA	8FBCU30	65187	\$ 36,862.00	4/13/2016
1614643	TRAILER	HALL INDUSTRIES	NONETOWBAR	375782	\$ 20,381.61	4/20/2016
1614898	RADIO PORTABLE	HARRIS	XG25P	A4015B002750	\$ 781.00	12/22/2015
1614899	RADIO PORTABLE	HARRIS	XG25P	A4015B002742	\$ 781.00	12/22/2015
1614900	RADIO PORTABLE	HARRIS	XG25P	A4015B002743	\$ 781.00	12/22/2015
1614901	RADIO PORTABLE	HARRIS	XG25P	A4015B002728	\$ 781.00	12/22/2015
1614902	RADIO PORTABLE	HARRIS	XG25P	A4015B002726	\$ 781.00	12/22/2015
1614953	RADIO BASE STATION	HARRIS	MAMWSNMXX	A40126002747	\$ 1,560.09	3/4/2016
1615157	CONTAINER WASTE STORAGE	TERMINAL MFG CO INC	NONE	NONE	\$ 12,000.00	1/11/2016
1615158	BOX GLOVE	TERMINAL MFG CO INC	NONEBOXGLOVE	NONE	\$ 24,700.00	1/11/2016
1615288	REFRIGERATION UNIT	UTILITY	3000R	1UYVS2530HU768209	\$ 72,500.00	3/10/2016
E28237	TRAILER	WANDERER	217TB	4XTTN21243C237232	\$ 19,256.00	9/13/2002
E304250	TRACTOR	CUMMINS	TJ5000	NONE	\$ 53,220.06	5/5/2003

E304251	TRAILER	BALQON	NAUTILUSXE20	NONE	\$ 209,450.00	11/2/2011
LR0058	COPIER	LANIER	LD550CS	V1395100063	\$ -	10/25/2011
LR0177A	COPIER	CANON	IRADVC5035	EUQ50222	\$ 9,942.00	2/23/2012
LR0313	COPIER	CANON	IRADVC5255	JMG00893	\$ 18,070.00	1/5/2012
LS0351	COPIER	XEROX	W5675PTG	WTM001418	\$ -	11/7/2011
LS0388	COPIER	XEROX	WC7345PFG	FKA465644	\$ -	11/7/2011
LS0535	COPIER	XEROX	7775	RFX001953	\$ 23,506.00	11/7/2011
LS0536	COPIER	XEROX	7775	RFX001960	\$ 23,506.00	11/7/2011
LS0538	COPIER	XEROX	7556	XKP066767	\$ 18,987.00	11/7/2011
LS0540	COPIER	XEROX	7556	XKP033770	\$ 18,987.00	11/7/2011
LS0577	COPIER	XEROX	7775	RFX031751	\$ 23,506.00	11/7/2011
LS0590	COPIER	XEROX	550PRO	XPN334918	\$ 31,200.00	11/7/2011
LS0600	COPIER	XEROX	7775	RFX002300	\$ 26,804.00	11/7/2011
LS0606	COPIER	XEROX	WC7775	RFX031834	\$ 23,303.00	11/7/2011
LS0613	COPIER	XEROX	WC7775	RFX014941	\$ 23,506.00	11/7/2011
LS0621	COPIER	XEROX	XC550G	XPN335305	\$ 25,900.00	11/7/2011
LS0624	COPIER	XEROX	WC7855	MX4136418	\$ 17,742.00	11/7/2011
LS0625	COPIER	XEROX	WC5875	EX9016663	\$ 20,585.00	11/7/2011
LS0637	COPIER	XEROX	WC7775	RFX031891	\$ 23,506.00	11/7/2011
LS0643	COPIER	XEROX	WC7775	RFX031881	\$ 23,506.00	11/7/2011
LS0649	COPIER	XEROX	WC7855	MX4206059	\$ 17,742.00	11/7/2011
LS0652	COPIER	XEROX	WC7855	MX4206339	\$ 17,742.00	11/7/2011
LS0663	COPIER	XEROX	WC7855	MX4206346	\$ 17,742.00	11/7/2011
LS0666	COPIER	XEROX	WC7970	BOW174029	\$ 19,938.00	11/7/2011
LS0672	COPIER	XEROX	WC7845	MX4206775	\$ 13,078.00	11/7/2011
LS0681	COPIER	XEROX	WC7845	MX4206863	\$ 13,078.00	11/7/2011
LS0721	COPIER	XEROX	WC7855	MX4210196	\$ 19,938.00	11/7/2011

PART III - LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS SECTION J - LIST OF ATTACHMENTS ATTACHMENT J-13: GSA-LEASED VEHICLES								
TAG NO	Model	Manufacturer	YR	VIN	Mileage Rate	Monthly Lease Rate	BOAC	Fuel Type
41-2606N	GRCARAVAN	Dodge	2013	2C4RDGBG5DR763142	0.19	224	897009	ETH/GAS
61-0267N	ESCAPE	Ford	2013	1FMCU 9GX3DUD80843	0.209	251	897009	GAS
10-1347N	SONATA		2013	5NPEB4AC0DH779926	0.14	177	897009	GAS
41-2321P	GRCARAVAN	Dodge	2014	2C4RDGBG7ER355274	0.19	224	897009	ETH/GAS
41-2322P	GRCARAVAN	Dodge	2014	2C4RDGBG7ER355260	0.19	224	897009	ETH/GAS
42-1683M	C1500	Chevrolet	2013	1GCNCPEX1DZ128728	0.253	164	897009	ETH/GAS
42-2267K	C1500	Chevrolet	2010	1GCSCPE06AZ265957	0.253	170	897009	ETH/GAS
62-0214R	EXPLORER	Ford	2015	1FM5K8B87FGC42510	0.238	257	897009	ETH/GAS
62-0506N	K1500	Chevrolet	2015	3GCPKPEA8DG343515	0.264	217	897009	ETH/GAS
62-1120R	1500SUBURB	Chevrolet	2009	1GNSKHEC8FR679838	0.293	344	897009	ETH/GAS
62-2109H	TAHOE	Chevrolet	2009	1GNFK130X9R196518	0.253	298	897009	ETH/GAS
62-2115H	TAHOE	Chevrolet	2009	1GNFK13029R196402	0.253	298	897009	ETH/GAS
62-2457M	EXPEDITION	Ford	2012	1FMJU1G58CEF57340	0.253	298	897009	ETH/GAS
63-0131N	K2500HD	Chevrolet	2013	1GC2KVCG0DZ314655	0.327	235	897009	ETH/GAS
63-1129N	2500	Dodge	2013	3C6TR5HT7DG578393	0.327	253	897009	ETH/GAS

63-1227H	K2500HD	Chevrolet	2009	1GCHK49K39E151553	0.327	235	897009	GAS
63-1270F	F350	Ford	2008	1FTWW31R88EA98359	0.327	253	897009	Diesel
63-1288F	K3500	Chevrolet	2007	1GBJK39U47E181403	0.331	279	897009	GAS
63-1402R	K3500	Chevrolet	2015	1GC4KYC86FF625911	0.327	253	897009	Diesel
63-1696R	K2500HD	Chevrolet	2015	1GC1KUE87FF627322	0.327	253	897009	Diesel
63-1701R	K2500HD	Chevrolet	2015	1GC2KUEG4FZ540052	0.327	235	897009	ETH/GAS
63-1868P	F350	Ford	2015	1FT8W3BT0FEA53867	0.327	253	897009	Diesel
63-2324K	F250	Ford	2011	1FT7X2B68BEA70357	0.327	235	897009	ETH/GAS
63-2325K	F250	Ford	2011	1FT7X2B6XBEA70358	0.327	235	897009	ETH/GAS
63-2326K	F250	Ford	2011	1FT7X2B61BEA70359	0.327	235	897009	ETH/GAS
71-0246P	F450	Ford	2014	1FD9W4HY1EEA35966	0.485	284	897009	GAS
41-6746H	GRCARAVAN	Dodge	2010	2D4RN4DE6AR370563	0.19	224	897009	ETH/GAS
62-1090R	1500		2015	1C6RR7KGXFS789343	0.264	217	897009	ETH/GAS
10-1341N	SONATA		2013	5NPEB4AC0DH779831	0.14	177	897009	GAS
13-1843P	CRUZE	Chevrolet	2014	1G1PK5SB6E7386211	0.13	160	897009	GAS
41-1961R	GRCARAVAN	Dodge	2016	2C4RDGBG4GR114498	0.19	224	897009	ETH/GAS
41-1964R	GRCARAVAN	Dodge	2016	2C4RDGBG4GR122246	0.19	224	897009	ETH/GAS
41-2612N	GRCARAVAN	Dodge	2013	2C4RDGBG4GR763132	0.19	224	897009	ETH/GAS
42-0302M	C1500	Chevrolet	2012	1GCNCPEX3CZ316326	0.253	164	897009	GAS

42-1328R	1500		2015	1C6RR6KG9FS789103	0.253	185	897009	ETH/GAS
42-1807G	F150	Ford	2008	1FTPW12VX8FC12943	0.253	185	897009	ETH/GAS
62-0193R	EXPLORER	Ford	2015	1FM5K8B81FGC42521	0.238	257	897009	ETH/GAS
62-1089R	1500		2015	1C6RR7KG5FS789346	0.264	217	897009	ETH/GAS
62-1095R	1500		2015	1C6RR7KG3FS789345	0.264	217	897009	ETH/GAS
62-2120H	F150	Ford	2009	1FTRW14869FA66851	0.264	217	897009	GAS
62-3720K	AVALANCHE	Chevrolet	2010	3GNVKEE01AG242371	0.264	217	897009	ETH/GAS
63-1060H	F350	Ford	2009	1FDWW37Y29EA70858	0.361	289	897009	GAS
63-1064H	K2500HD	Chevrolet	2009	1GCHK49K49E141176	0.327	235	897009	GAS
63-1520N	2500	Dodge	2013	3C6TR5CT9DG578399	0.327	253	897009	GAS
63-1522N	2500	Dodge	2013	3C6TR5CT7DG578398	0.327	253	897009	GAS
63-2448M	K2500HD	Chevrolet	2013	1GC2KVCG0DZ124800	0.327	235	897009	ETH/GAS
71-0314A	F650	Ford	2005	3FRNF75YX5V169066	0.595	346	897009	DIESEL
71-0415P	K4500	Chevrolet	2006	1GBE4E3236F434315	0.485	284	897009	DIESEL
71-0568P	5500	Dodge	2014	3C7WRMFJ7EG251708	0.487	281	897009	GAS
82-0057N	M2106	Freightliner	2014	1FVACXDT7EHFU3760	0.65	343	897009	DIESEL
82-0467D	4000	Navistar	2007	1HTMSAAR57H444746	0.683	571	897009	DIESEL
82-05517	F-SERIES	Ford	1995	1FDWF80C4SVA11280	0.595	307	897009	DIESEL
41-1966R	GRCARAVAN	Dodge	2016	2C4RDGBG8GR100264	0.19	224	897009	ETH/GAS

41-1796M	GRCARAVAN	Dodge	2012	2C4RDGBG1CR350486	0.19	224	897009	ETH/GAS
41-2331P	GRCARAVAN	Dodge	2014	2C4RDGBG4ER355264	0.19	224	897009	ETH/GAS
62-0637M	TAHOE	Chevrolet	2012	1GNSKAE02CR306397	0.253	298	897009	ETH/GAS
62-1912P	EXPED EL	Ford	2014	1FMJK1G53EEF52619	0.293	344	897009	ETH/GAS
62-2625N	EXPED EL	Ford	2013	1FMJK1G51DEF52021	0.293	344	897009	ETH/GAS
62-2883G	DURANGO	Dodge	2008	1DBHB38N08F145080	0.253	298	897009	ETH/GAS
63-2331K	F350	Ford	2011	1FT8W3B68BEA91870	0.327	253	897009	ETH/GAS
62-2883G	DURANGO	Dodge	2008	1D8HB38N08F145080	0.253	298	897009	ETH/GAS
63-2331K	F350	Ford	2011	1FT8W3B68BEA91870	0.327	253	897009	ETH/GAS
G62-2006N	EXPLORER	Ford	2013					
G62-3568K	EXPEDITION	Ford	2010					

PART III - LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS

SECTION J – LIST OF ATTACHMENTS

ATTACHMENT J-14: ACRONYM LIST

AEA	Atomic Energy Act
AIP	Agreements-In-Principle
AK	Acceptable Knowledge
ANSI	American National Standards Institute
AO	Authorizing Official
AOC	Areas of Concern
ARRA	American Recovery and Reinvestment Act of 2009
ASME	American Society of Mechanical Engineers
ATO	Authorized to Operate
BCP	Baseline Change Proposal
BDD	Buckman Direct Diversion
BDDDB	Buckman Direct Diversion Board
BGS	Below Ground Surface
BIA	Bureau of Indian Affairs
BIO	Basis of Interim Operations
CCP	Central Characterization Project
CD	Critical Decision
CEI	Compliance Evaluation Inspections
CERCLA	<i>Comprehensive Environmental Response, Compensation, and Liability Act of 1980</i>
CFR	Code of Federal Regulations
CH	Contact Handled
Ci	Curie
CLIN	Contract Line Item Number
CME	Corrective Measures Evaluation
CMI	Corrective Measure Implementation
CMIP	Corrective Measures Implementation Plan
CMP	Corrugated Metal pipe
CO	Contracting Officer
CoC	Certificate of Completion
Consent Order	Compliance Order on Consent
COR	Contracting Officer Representative

Cr	Chromium
CSR	Compliance Status Report
DAR	Document Acquisition Request
DATO	Denial of Authorization to Operate
DCRM	Document Control and Records Management
DD&D	Decontamination, Decommissioning, and Demolition
DECP	Department of Environment and Cultural Preservation (Pueblo de San Ildefonso)
DOE	United States Department of Energy
DOL	United States Department of Labor
DP	Delta Prime
DQO	Data Quality Objective
DSA	Documented Safety Analysis
DWP	Drilling Work Plan
EcoPRGs	Ecological Preliminary Remediation Goals
EDD	Electronic Data Deliverable
EDMS	Electronic Document Management System
EEOICPA	<i>Energy Employees Occupational Illness Compensation Program Act</i>
EIMS	Environmental Information Management System
EM	Office of Environmental Management (United States Department of Energy)
EM-LA	Environmental Management Los Alamos Field Office
EMS	Environmental Management System
ENS	Emergency Notification System
EPA	United States Environmental Protection Agency
ER	Environmental Restoration
ERMS	Electronic Records Management System
ES&H	Environmental, Safety, and Health
ESH&Q	Environment, Safety, Health, and Quality
ESL	Ecological Screening Level
ET	Evapo-Transpiration
ExID	Excavation Identification System
FAR	Federal Acquisition Regulation
Fe	Iron
FFCO	Federal Facility Compliance Order
FGA	Flammable Gas Analysis

FGE	Fissile Gram Equivalent
FHC	Facility Hazard Categorization
FIMS	Facilities Information Management System
FIP	Field Implementation Plan
FISMA	<i>Federal Information Security Management Act Of 2002</i>
FOD	Facility Operations Director
FOIA	<i>Freedom Of Information Act</i>
FPD	Federal Project Director
FRC	Federal Records Center
FRP	Fiberglass-Reinforced Plywood
FY	Fiscal Year
GFI	General Facility Information
GFS/I (or GFSI)	Government-Furnished Services And/Or Information
GIS	Geographic Information System
GSP	Gear-Driven Submersible Pumps
NMED-GWQB	New Mexico Environment Department - Ground Water Quality Bureau
HDP	Heat Dissipation Probe
HE	High Explosives
HE-RTR	High Energy-Real Time Radiography
HEPA	High Efficiency Particulate Air
HIR	Historical Investigation Report
HQ	Headquarters (United States Department Of Energy)
HTML	Hypertext Markup Language
NMED-HWB	New Mexico Environment Department Hazardous Waste Bureau
HWF	Hazardous Waste Facility
NMHTWA	<i>New Mexico Hazardous Waste Act</i>
ID	Identifier
IDRC	Interdepartmental Review Committee
IDW	Investigation-Derived Waste
IFGMP	Interim Facility-Wide Groundwater Monitoring Plan
IM	Interim Measures
IP	Individual Permit
IPABS	Integrated Planning, Accountability, And Budgeting System
IPL	Integrated Priority List
IPT	Integrated Project Team

IPv6	Internet Protocol Version 6
IR	Investigation Report
IS	Information Security
ISI	In-Service Inspection
ISMS	Integrated Safety Management System
IST-CySec	Information Systems Technology-Cyber Security
IT	Information Technology
IWP	Investigation Work Plan
JC3	Joint Cyber Coordination Center
LANL	Los Alamos National Laboratory
LAPP	Los Alamos Pueblo Project
LCBC	Los Alamos National Laboratory Legacy Cleanup Bridge Contract
LIDAR	Light Detection and Ranging
LLCC	Los Alamos Legacy Cleanup Contract
LFL	Lower Flammability Limit
LLW	Low-Level Waste
M/LLW	Mixed Low-Level Waste And Low-Level Waste
M&O	Management And Operations
MAR	Material-At-Risk
MDA	Material Disposal Area
MDL	Minimum Detection Limit
MLLW	Mixed Low-Level Waste
MNA	Monitored Natural Attenuation
MOA	Memorandum Of Agreement
MOU	Memorandum Of Understanding
MR	Management Reserve
MSA	Management Self-Assessment
MSC	Management Steering Committee
MSGP	Multi-Sector General Permit
N	Nitrogen
NA-LA	Department Of Energy National Nuclear Security Administration Los Alamos Field Office
NARA	National Archives And Records Administration
NEPA	<i>National Environmental Policy Act Of 1969</i>
NES	Nuclear Environmental Site
NIOSH	National Institute For Occupational Safety And Health

NIST	National Institute Of Standards And Technology
NMDOT	New Mexico Department of Transportation
NMED	New Mexico Environment Department
NMWQCC	New Mexico Water Quality Control Commission
NNMCAB	Northern New Mexico Citizen's Advisory Board
NNSS	Nevada National Security Site
NNSA	National Nuclear Security Administration (United States Department Of Energy)
NO3	Nitrate
NOD	Notice Of Disapproval
NOI	Notice Of Intent
NPDES	National Pollutant Discharge Elimination System
NQA	Nuclear Quality Assurance
NTP	Notice To Proceed
OC	Oversize Containers
OMB	Office Of Management And Budget
OPSEC	Operations Security
ORR	Operational Readiness Review
ORPS	Occurrence Reporting And Processing System
NMOSE	New Mexico Office Of The State Engineer
P	Phosphorous
P&A	Plug And Abandon
PARS	Project And Assessment Reporting System
PBS	Project Baseline Summary
PCB	Polychlorinated Biphenyl
PE	Plutonium-239 Equivalent
PII	Personally Identifiable Information
PL	Public Law
PMR	Periodic Monitoring Report
POC	Point-Of-Contact
PPE	Personal Protective Equipment
PR-ID	Project Requirements Identification System
PRS	Potential Release Site
PSR	Project Status Review
PWS	Performance Work Statement
QA	Quality Assurance
QAP	Quality Assurance Plan

QIP	Quality Implementation Plan
RA	Readiness Assessment
RANT	Radio Assay and Nondestructive Testing
RCR	Remedy Completion Report
RCRA	<i>Resource Conservation and Recovery Act of 1976</i>
RDX	Research Department explosive (hexahydro-1,3,5-trinitro-1,3,5-triazine)
RESRAD	Residual Radioactive
RH	Remote Handled
RMFO	Records Management Field Officer
ROD	Record Of Decision
RPF	Records Processing Facility
RTC	Response To Comments
SAP	Sampling And Analysis Plan
SAS	Safeguards and Security
SCWE	Safety Conscious Work Environment
SDPPP	Site Discharge Pollution Prevention Plan
SERT	Secure Electronic Records Transfer
SHPO	State Historic Preservation Officer
SIP	Sample Implementation Plan
SIR	Supplemental Investigation Report
SMA	Site Monitoring Area
SOB	Statement Of Basis
SOP	Standard Operating Procedure
SPCC	Spill Prevention and Control Countermeasures
SSHASP	Site-Specific Health and Safety Plan
SSL	Soil Screening Level
SSP	System Security Plan (SSP)
SSSR	Sort, Segregate, Size Reduction, and Repackaging
SUI	Sensitive Unclassified Information
SVE	Soil Vapor Extraction
SVOC	Semivolatile Organic Compound
SWB	Standard Waste Box
SWEIS	Site-Wide Environmental Impact Statement for the Continued Operation of the Los Alamos National Laboratory, Los Alamos, New Mexico
SWMU	Solid Waste Management Unit

SWPPP	Storm Water Pollution Prevention Plan
SWRI	Southwest Research Institute
NMED-SWQB	New Mexico Environment Department -Surface Water Quality Bureau
TA	Technical Area
TAL	Target Action Level
TD	Total Depth
TRU	Transuranic
TRUPACT	Transuranic Waste Package Transporter
TSCA	<i>Toxic Substances Control Act of 1976</i>
TSDF	Treatment, Storage, and Disposal Facility
TSR	Technical Safety Requirements
TWF	TRU Waste Storage Facility
UIC	Underground Injection Control
USACE	United States Army Corps of Engineers
USC	United States Code
USDA	United States Department of Agriculture
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
USQ	Un-Reviewed Safety Question
VOC	Volatile Organic Compound
WBS	Work Breakdown Structure
WCATS	Waste Compliance and Tracking System
WCRRF	Waste Characterization, Reduction, and Repackaging Facility
WIPP	Waste Isolation Pilot Plant
WSHP	Worker Safety and Health Program
XML	Extensible Markup Language

Los Alamos Legacy Cleanup Contract (LLCC) Community Commitment Plan

The parent companies of N3B have a strong commitment to the communities in which we work—not only with the work we do, but with our contributions of time and money. We don't just do business here. We live here. Our kids go to school here. Giving back is a part of our job. We have an opportunity to make positive change in the neighborhoods where we live.

Recognizing that the M&O contractor invests substantially in scholarships and other types of support to those heading to college, our principal focus will be on assisting those who wish to be technicians, support environmental sampling, and other blue collar skills relevant to our mission and essential to LLCC success. We, will, therefore, focus our efforts on an unreached population and prepare them for undersupplied jobs critical to EM-LA success.

We will demonstrate our commitment to the Los Alamos area by investing 5% of our earned fee over the contract life in the northern New Mexico region supporting educational initiatives, economic development, and charitable giving that will have the greatest impact on the region. In addition to our financial pledge, N3B staff will donate 4,000 hours yearly to programs that support Los Alamos area schools and youth. Our employees are encouraged to become active in local communities and to donate their time and talents to organizations or causes that are important. Our employees also serve on boards of various nonprofit organizations and provide leadership at community events.

Los Alamos and the surrounding region have unique economic challenges, and N3B is committed to partnering and integrating with organizations like the LANL Foundation, Major Consortium of Contractors, Regional Economic Development Initiative of Northern New Mexico, and United Way to maximize the impact of each dollar donated. N3B's Community Commitment Plan is organized into the following categories:

- Regional Education Outreach
- Regional/Economic Development
- Community Support



Figure L.11(l) 1. Los Alamos Vicinity Map. N3B's community commitment plan recognizes the variety of communities in the Los Alamos vicinity

N3B Community Commitments:

- 5% of earned fee over the entire contract
- 4,000 annual volunteer hours in support of community initiatives, particularly in support of education
- Coordination with Northern New Mexico College to establish an apprenticeship/mentor program modeled after The Apprentice School in Virginia, operated by N3B partner SN3
- Administrative support to local small businesses
- In-kind services (scope to be negotiated) through the LANL foundation

The following sections discuss each of these categories and the efforts that N3B will undertake in each category.

Regional Educational Outreach

N3B will build our youth for the future by investing in education.

N3B will partner with the LANL Foundation to assist local educators in their efforts to help students from kindergarten through college to grow in knowledge while learning important life lessons. Involvement in local schools will range from providing technical expertise as engineering mentors for robotics teams, to supporting STEM (Science, Technology, Engineering, and Math) programs, to individual support to classroom teachers.



Figure L.11(1) 2. Apprentice School. The LLCC apprentice school will be modeled after the school we established in Newport News, VA.

Each year we will modify our educational outreach and all other aspects of this plan to integrate new ideas and address new concerns expressed by our workforce and community leaders. Our principal educational outreach effort will be partnerships with the New Mexico Regional Development Corporation (RDC) and Northern New Mexico College aimed at supporting students enrolled in technical certificate and two-year degree programs. The program will complement and supplement the RDC's ongoing Accelerate Technical Training and Job Placement program, for which additional needed funding is being sought. In addition, we propose the following educational programs:

Apprentice School: To address attrition levels that may occur in the Los Alamos region over the next four to seven years, and to provide an educational outlet for students in northern New Mexico, N3B will partner with Northern New Mexico College and other local community colleges. Together we will develop an apprenticeship/mentor program that provides formal worker training needed to support ongoing and anticipated work at Los Alamos, thorough instruction and experience – both theoretical and practical.

This new Apprentice School will be modeled after The Apprentice School in Newport News, Virginia, operated by one of N3B's parent companies, Huntington Ingalls Industries, and tailored to the specific needs of northern New Mexico and EM-LA. Courses and fields will be developed to meet regional employment needs such as the need for radiation technicians and groundwater and surface water samplers. The Apprentice School in Virginia shows that 82% of the alumni have gainful employment in the areas for which they were trained 10 years after graduation. The Northern New Mexico Apprentice School will start with a focus on the trade skills needed by our small business subcontractors and for our own self-performed work. We also will include initial N3B familiarization training. Then, year-by-year, we will expand the school to ultimately offer tuition-free apprenticeships in 10 trades. Apprentices will work a 40 hour week and are paid for all work, including time spent in academic classes.

College Night: N3B will assist in organization of "College Night" for area high school students. Colleges and universities typically attend College Night, with an information booth.

Teacher Appreciation: Many teachers work hard with little praise or recognition, often spending their own money to enhance the learning of the students. Year after year, they teach and mentor our future leaders. N3B will recognize teachers that “go the extra mile” by sponsoring weekly space in local newspapers. Students will be able submit letters of appreciation that will be reviewed by the selection panel and then printed in the paper. A gift basket or gift card will be given to the principal to present to teacher(s) during a faculty meeting or assembly. All letters not selected will be mailed to their respective schools. N3B will also work with the Regional Economic Development Initiative and other academia leaders to discuss ways to promote and encourage youth to become future educators.



L.11(l) 3. Focus on Education. Our community commitment plan focuses on education.

Workforce Pipeline Development: N3B will partner with the LANL Foundation and with the key college and university partners (New Mexico Highlands University, Northern New Mexico College, Santa Fe Community College, and University of New Mexico-Los Alamos) to address education, workforce, and student pipeline needs of northern New Mexico by developing a cadre of effective Prekindergarten to 12th grade math teachers for our regional schools.

Scholarship Funds: We will provide scholarships to northern New Mexico students who are pursuing two- or four-year degrees in fields that will serve the region. Awards are based on academic performance, leadership potential, critical thinking skills, and career goals. We will provide scholarships supporting the regional tribal communities' workforce development goals. The scholarships are for Native American students from 16 nearby pueblos who are pursuing post-secondary education in accounting, human resources, and business information systems.

Innovative Teaching Mini-Grants Program: The lifeblood of any school system is the teachers. We look for ways to help them obtain a higher level of success. Investing in local students is also a potential investment in those who may become N3B employees. Innovator grants provide funds to teachers to develop and implement instructional projects that motivate and challenge students to learn. Proposals should be unique classroom projects that enliven and enrich the curriculum.

N3B will partner with like-minded area companies, such as Wildflower International, to provide a “mini grant” program of financial assistance to area teachers. This competitive program provides grants to public and private elementary and middle school teachers for innovative ideas. Mini Grants offer an incredible opportunity for teachers. Opportunities need to be created for cooperative learning, collaborative learning, creative thinking, and problem solving.

DOE Los Alamos Regional Science Bowl for Technicians: N3B will be an active partner and provide judges in support of a Los Alamos Regional Science Bowl aimed at technicians. The Science Bowl is an academic competition that tests students' knowledge in all areas of science and mathematics. Middle and high school student teams from diverse backgrounds include four students, one alternate, and a teacher who serves as an advisor and coach. These teams faceoff in a fast-paced question-and-answer format, being tested on a range of science disciplines that include subjects focused on technicians.



Figure L.11(l) 4. Environmental Education. We lead community organizations, teaching both teens and adults about environmental issues.

First Friday Readers: N3B employee volunteers and retirees will visit elementary schools to mentor and read stories to students. The stories will have a background in science, technology, engineering, and math fields. These topics are intended to help lay the foundation for our 21st century learners – and our community's future. Reading aloud to children is a critical component in producing successful readers and engaged learners.

Introduce a Girl to Engineering: Introduce a Girl to Engineering shows girls how creative and fulfilling engineering can be as a career and how engineers are changing our world. Often held at a local college or university, female students are given an opportunity to discover the variety of engineering careers along with speaking with top-notch engineers. Students are invited to attend motivational presentations given by female engineers, engage in hands-on engineering experiments, and compete in team challenges.

Regional/Economic Development

N3B can be a catalyst for regional development by engaging with local businesses.

Our small business partners understand firsthand the challenges local entrepreneurs face. From liability issues to financial growing pains, we will promote, encourage, and provide assistance to mentor continued success.

Our companies subcontract nearly \$2B a year while executing government contracts. More than half of these contracts go to small businesses. We have proven methods of developing our supply chain so that it serves us, our clients, and our communities, and have already identified 42 different activities that will be considered for small business subcontracting. We train our subcontractors and mentor them and their management. Our procurement processes have evolved to ensure that they are fair and cost-effective for those seeking subcontracting opportunities.

N3B will partner with the Consortium of Major Subcontractors to leverage resources to create greater economic and community impact throughout the seven county region of northern New Mexico. N3B will encourage major subcontractors, through performance goals tied to financial incentives, to subcontract in a manner to promote regional economic diversification. In summary, N3B will:

- Partner with those leading the Northern New Mexico Regional Economic Development Initiatives (REDI) to build the local economy
- Meet with economic development and community leaders, local business owners, site contractors, and union representatives to gather feedback on the economic trends affecting the region
- Collaborate and coordinate between key business leaders, Chambers of Commerce, LANL officials, school superintendents of Espanola Valley and Los Alamos, Northern New Mexico College and University of New Mexico-Los Alamos officials, and workforce and key economic development officials to work together on key issues and problems encountered in the Los Alamos area
- Develop a long-term program of enhancing youth awareness of careers and the working world
- Encourage and facilitate a regional approach to workforce development initiatives
- Attend all DOE Site-Specific Advisory Board Meetings and provide support as needed.



L.11(l) 5. N3B Volunteering. We volunteer thousands of hours annually.

Community Support

As a good neighbor, N3B provides compassion and support to better the communities where we live and work.

Employee Volunteering: The skills, expertise, and passion of our employees bring tremendous value to community organizations serving people in need. Whether tutoring students in math, contributing to a company-sponsored drive, or volunteering with a local nonprofit organization, their efforts enhance what we contribute to our communities on a corporate level.

We are committed to developing a community-based initiative and partnering with the LANL Foundation to support employees in civic participation through company-sponsored and personal volunteer initiatives, such as:

- Adopt a Classroom to provide science-related school supplies to area teachers
- Backpack program, collecting basic school supplies and backpacks to provide to local students in need.

Charitable Giving: We will actively support the revitalization and growth of the economy through nonprofits, such as United Way, 501(c)(3) charities, and organizations throughout the region, including food banks, holiday gift drives, community-based health care organizations, schools, pet shelters, and many other local charities.

This community commitment plan is submitted by:

Signed:

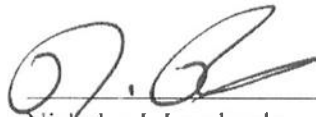
Typed Name:

Title:

Company:

Date:

Phone No.:



Nicholas J. Lombardo

Newport News Nuclear BWXT-Los Alamos, LLC

December 6, 2016

(303) 546-4403

PLAN ACCEPTED BY:

DOE Contracting Officer

Date:

PART III - LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS

SECTION J – LIST OF ATTACHMENTS

ATTACHMENT J-16: ENVIRONMENTAL PERMITS, COMPLIANCE DOCUMENTS, AND AGREEMENTS APPLICABLE TO THE EM WORK

Environmental Permits

The following list includes the current environmental permits that will be required in the performance of the work in Section C of this contract. The Contractor is expected to comply with these permits as necessary in the execution of the PWS.

1. LANL Hazardous Waste Facility Permit, EPA ID No. NM0890010515, issued by the EPA and transferred to NMED
 - a. Although this permit is currently owned at LANL by NNSA and the M&O Contractor, all EM activities under this contract shall comply with the provisions of the permit.
 - b. The NA-LA Manager, as the “principal executive officer having responsibility for the overall operations of a principal geographic unit of the agency,” will remain the principal signatory for certification of all RCRA permit applications and modifications. NA-LA will coordinate with EM-LA fully on RCRA permit actions. The EM-LA Manager shall be signatory for all RCRA Permit applications and modifications having to do with EM operational control of TSDFs, specifically TA-54, Area G.
 - c. The Contractor shall work with EM-LA, NA-LA, and the NNSA M&O Contractor to modify the RCRA Permit to include EM-LA as “Co-Owner” and the EM Contractor as parties to the permit under a “Co-Operator role.” DOE will submit a written notice to NMED in accordance with 40 CFR 270.30(1)(3) and obtain written approval from NMED. Permit Section 1.9.3. The letter will include a specified date for the transfer of permit responsibilities per 40 CFR 270.40(b).
 - d. DOE will transfer responsibility for the RCRA Permit only for those operations that support EM activities; specifically, TSDF operations at TA-54 and any TSDF-type activities at any other EM work sites.
 - e. Reports required by permits and other regulatory information required by the RCRA permit may be certified by a “duly authorized representative” as so delegated by the EM-LA Manager.
 - f. The Contractor shall conduct all necessary inspections, reporting, issue management corrective actions, and training required for performance of all contracted activities under the HWF Permit.
 - g. The Contractor shall submit all necessary records to the NNSA M&O Contractor for inclusion in the Site-Wide Administrative Records System.
2. National Pollutant Discharge Elimination System (NPDES) Individual Permit for Stormwater (IP); United State Environmental Protection Agency (US EPA), Los Alamos National Security, LLC (LANS), and the DOE NNSA, Permit No. NM0030759, September 30, 2010.

- a. Although the current IP was signed by NNSA and the previous contractor, the Contractor shall comply with the IP as a contract requirement as if the Contractor had signed up to the original agreement themselves.
 - b. EPA is the administrative authority
 - c. The Contractor shall ensure all subcontracts also have the provisions to comply with the IP terms.
 - d. If there is a conflict between this contract and the terms of the IP, the Contractor shall raise such potential conflicts to EM-LA for resolution.
 - e. The Contractor shall initiate and coordinate a Permit Modification Request to transfer the IP from the current contractor to the Contractor. Submit a 30 Day notice to EPA, including a written agreement. 40 CFR 122.61 (b) (Automatic Transfers); Section III.D.3 of the Permit
 - f. The Contractor shall submit a written agreement to NMED containing a specific date for transfer to permit responsibility, coverage and liability between them.
 - g. The Contractor shall coordinate through EM-LA the completion of site work under the IP with the transfer of sites back to the NNSA M&O Contractor and NA-LA.
3. Clean Water Act Nationwide "Dredge and Fill" (Section 404) Permits with the Army Corps of Engineers (ACOE). Dredge and Fill Permits are issued to "LANL" (LANS) and the owner of the facility, DOE. The Contractor shall comply with the provisions of the dredge and fill permits for the execution of EM work scope and any NMED certification requirements. Any jurisdictional determination documentation shall be maintained by the Contractor to prevent conflicts with site planning and NA-LA mission work.
4. LANL Floodplain (Section 401) Permits with the Army Corps of Engineers (ACOE) Floodplain Permits are issued to "LANL" (LANS) and the owner of the facility, DOE. The Contractor shall comply with the provisions of the floodplain permits for the execution of EM work scope.
5. Groundwater Discharge Permit LANL Groundwater Projects-DP-1793, is administered by the NMED Ground Water Quality Bureau to control the discharge of water contaminants from activities related to environmental remediation projects including aquifer and pumping tests, well development and rehabilitation, groundwater tracer studies and groundwater remediation activities. Daily discharge volume of treated groundwater is limited to a total of 350,000 gallons per day (cumulative across active projects).
 - a. The Contractor shall initiate the transfer of DP-1793 and the associated work plans from the NNSA M&O Contractor during the transition period. The Contractor shall include EM-LA instead of NA-LA in the change.
 - b. The Contractor shall utilize the Decision Tree for Land Application of Water to determine the disposition path.
 - c. The Contractor shall coordinate the land application of groundwater from these activities with the NNSA M&O Contractor to best utilize the water for site purposes, such as dust control.

6. Groundwater Discharge Permit (DP)/Underground Injection Control (UIC) Permit DP-1835, is issued by the NMED Ground Water Quality Bureau to control the discharge of water contaminants from the injection of treated groundwater into the regional aquifer beneath LANL. This permit is specific to the injection wells associated with the Chromium Groundwater Remediation Project.
 - a. The Contractor shall initiate the transfer of DP-1835 from the NNSA M&O Contractor during the transition period.
7. LANL NPDEP Multi-Sector General Permit (MSGP) for Industrial Activities, EPA ID No. NMR05A734. As a minimum, EM operational activities in Area G and MDA-L constitute conducting industrial activities at LANL. Additionally, there are impacts with operating a Treatment, Storage, and Disposal Facility (TSD) under Sector K.
 - a. The Contractor shall not conduct activities that interfere with the execution of the MSGP by the NNSA M&O Contractor. The NNSA M&O Contractor is the current "operator" for the MSGP.
 - b. The Contractor shall comply with the MSGP for EM activities that are required under the MSGP and shall coordinate these activities with the NNSA M&O Contractor.
8. LANL NPDES Outfall Permit, NM0028355. The Contractor shall not conduct activities that interfere with the execution of the Outfall Permit by the NNSA M&O Contractor. The Contractor shall not conduct activities that constitute an outfall discharge that would require modification to the NNSA M&O Outfall permit.
9. LANL Construction General Permit, CGP2003. The Contractor shall not conduct activities that interfere with the execution of the CGP by the NNSA M&O Contractor. The Contractor shall not conduct activities that would require modification to the NNSA M&O CGP. The Contractor shall comply with the CGP for any EM work scope activities that require compliance.
10. LANL Air Quality Compliance Programs; Title V Air Quality Operating Permit with NMED-AQB and associated Clean Air Act programs regulated by the EPA. The Contractor shall not inhibit the NNSA M&O contractor from managing the Airnet and Clean Air Act permitting activities. The Contractor shall execute the necessary air sampling activities related specifically to EM work scope activities. The Contractor shall submit information required from EM activities and impacts to NNSA/LANS for annual LANL compliance reporting in ASER, Title V certifications, emissions and monitoring reports, EPCRA, annual emissions inventory, and greenhouse gas reporting.
11. LANL Spill Prevention Control and Countermeasures Plans (SPCCs). The Contractor shall operate so as to minimize the need to apply for coverage from the EPA on the SPCC and from NMED for above-ground storage tanks. Although EM may encounter fuel spills, sample water spills, etc., it is likely that none of the EM activities will be significant. The Contractor shall report to the EM-LA Field Office when any planned activities have the potential to approach or exceed the 600-gallon release threshold.

Compliance Documents

12. Compliance Order on Consent, State of New Mexico Environment Department U.S. Department of Energy Los Alamos National Laboratory; June 2016 (2016 Consent Order).

- a. The Contractor shall implement and comply with the 2016 Consent Order as a contract requirement as if the Contractor had signed up to the original agreement itself.
- b. This contract establishes completion date requirements for the various projects and activities within this period of performance and under this contract.
- c. The work is organized by what is being called “campaigns.” A campaign generally is a discretely defined set of work scope activities that can be completed in a specified number of years. It is expected that interim milestones will be developed to measure progress towards the completion of the campaigns.
- d. EM-LA will include the Contractor in at least preparation for the annual work planning process (Section 2016 Consent Order, Section VIII.C) through identification of:
 - i. progress for the last annual period for Appendix A updates,
 - ii. identification of changes in SWMUs and AOCs with regard to inclusion in specific campaigns for Appendix A and possibly C updates,
 - iii. selection of Contractor Performance Baseline (CPB) items for milestones and targets for Appendix B for the next period proposal, and
 - iv. identification and discussion of any necessary contract changes necessary to revise the CPB for changes to satisfy NMED needs for Appendix B for the next period proposal.
- e. DOE shall make a determination of the Contractor’s responsibility under the Contract for any stipulated penalties or fines for violations as follows:
 - i. EM-LA shall evaluate the determination and assessment conditions received from the cognizant regulatory authority. EM-LA shall discuss any such assessment with both the cognizant regulatory authority and the Contractor and consider the Contractor’s involvement and discussions in the applicable annual work planning process meetings relevant to the alleged violation.
 - ii. EM-LA shall request any response from the Contractor on the allegations and any circumstances that might influence EM-LA’s decision-making regarding the Contractor’s responsibility.
 - iii. The Contractor shall provide any additional information to EM-LA that supports the Contractor’s position, recognizing that the burden of proof is the Contractor’s.
 - iv. EM-LA will consider relevant inputs; however, the EM-LA Manager will make a determination on the Contractor’s responsibility. The Contracting

Officer shall render a final determination of the Contractor's responsibility under the Contract.

- v. If EM-LA negotiates any settlement with the cognizant regulatory authority, EM-LA may include the Contractor in these discussions.

13. Federal Facility Compliance Order (FFCO) (Site Treatment Plan) NMED issued the FFCO to DOE and the University of California (UC) (later transferred to LANS); it establishes a schedule and plan to bring LANL into compliance with the land disposal restrictions for mixed waste stored for more than one year.

- a. The NNSA M&O Contractor shall retain ownership of all FFCO responsibilities.
- b. The Contractor shall comply with the FFCO STP in the execution of EM work scope for those STP wastes being managed by the Contractor (exclusively located in TA-54 Area G). The list of STP wastes is included in *FY15 Site Treatment Plan Environmental Management MTRU [Mixed Transuranic Waste] at Area G* (pdf and xls files).
- c. The Contractor shall coordinate waste management activities with the NNSA M&O Contractor and NA-LA for potential STP wastes such that the wastes are properly managed and disposed of to prevent additional STP wastes from being generated.
- d. The Contractor shall provide evidence packages for the transfer of all STP wastes to the NNSA M&O Contractor.

14. National Environmental Policy Act (NEPA)

- a. The Contractor shall provide NEPA support to EM-LA to support EM projects and activities under this contract.
- b. The Contractor shall provide specific project and activity information and reference material into the Permits Requirements Identification (PRID) system such that environmental impacts can be identified and assessed and that concludes with a preliminary NEPA review by the Contractor.
- c. The Contractor shall prepare preliminary NEPA documents including drafts of DOE documents to EM-LA for completion of the NEPA process for Contractor project activities.
- d. EM-LA will complete the NEPA process and submit any necessary documents to allow a DOE NEPA Compliance Officer to make categorical exclusions, issue supplement analyses and environmental assessments, and make determinations of significant impacts.

15. Other New Mexico Regulations

- a. Although cleanup activities are under the Consent Order, this does not alleviate the Contractor from compliance with State Hazardous Waste Regulations promulgated by the NMED Hazardous Waste Bureau that would be required in the execution of these activities.

- b. The Contractor shall comply with the State Surface and Groundwater Regulations and discharge permits promulgated by the NMED Surface Water Quality Bureau and the NMED Ground Water Quality Bureau.
- c. The Contractor shall comply with regulations promulgated by the NM Office of the State Engineer (OSE).
- d. The Contractor shall comply with the underground injection control (UIC) requirements and permitting promulgated by the NMED Ground Water Quality Bureau.

Memorandums of Understanding, Memorandums of Agreement, and Agreements

The following table includes the current Memorandums of Understanding (MOU), Memorandums of Agreement (MOA), and other agreements the Contractor must comply with in the execution of the PWS.

Subject of Agreement	Parties to Agreement	Lead
"Monitoring for Radioactive and Chemical Contamination"; MOU Among the U.S. Department of Energy and the Bureau of Indian Affairs, and the Pueblo de San Ildefonso; AL MOU # DE-GM32-96AL76832	BIA, DOE, Pueblo de San Ildefonso	EM
"Appendix A Plan for Environmental Sampling at Pueblo de San Ildefonso and Los Alamos National Laboratory for October 1, 2015 through December 31, 2016." Annual sampling plan under the above MOU.	EM-LA, Pueblo de San Ildefonso	
Accord	DOE, Pueblo de San Ildefonso	EM
Accord	DOE, Pueblo of Jemez	EM
Accord	DOE, Pueblo of Cochiti	EM
Accord	DOE, Pueblo of Santa Clara	EM
"Memorandum of Understanding between the U.S. Department of Energy and the Buckman Direct Diversion Board Water Regarding Water Quality Monitoring	DOE, BDDDB	EM
Agreement in Principle for Environmental Oversight and Monitoring	DOE, NMED	EM
Memorandum of Agreement - Natural Resource Trustee Council	DOE, USDA, New Mexico, Pueblo de San Ildefonso, Pueblo of Jemez, Santa Clara Pueblo	EM
Memorandum of Agreement regarding management of the Rendija Canyon Traditional Cultural Properties District	DOE, NA-LA, Los Alamos County, NM State Historic Preservation Office	NA
Memorandum of Agreement for Funding to Conduct Regulatory Activities at LANL	DOE, NMED	EM

Subject of Agreement	Parties to Agreement	Lead
Supplemental Fee Agreement with NMED-HWB	DOE, NMED-HWB	NA
Framework Agreement	DOE, NMED-GWQB	EM
Access Agreement for Environmental Cleanup and Remediation Work	DOE, Los Alamos County	EM
“Memorandum of Agreement between the U.S. Department of Energy and the Pueblo de San Ildefonso” and the three associated protocols: - Protocol for Access to Pueblo Lands, - Protocol for Protecting Pueblo Information, and - Protocol for Inadvertent Discovery of Native American Human Remains and Cultural Items.	DOE/NNSA, Pueblo de San Ildefonso	EM
“Limited Access Agreement for the Installation and Operation of a Regional Aquifer Well on Pueblo de San Ildefonso Land” Between the Department of Energy and the Pueblo de San Ildefonso	DOE/NNSA, Pueblo de San Ildefonso	EM
Airspace Agreement	DOE, NMDOT	EM
<i>Memorandum of Understanding between National Nuclear Security Administration (NNSA) Los Alamos Field Office (NA-LA) and Department of Energy Environmental Management Los Alamos Field Office (EM-LA) for Transition of Legacy Environmental Cleanup Work at Los Alamos from NNSA to EM, signed September 17, 2015</i>	DOE NA-LA and EM-LA	NA & EM
<i>Candidate Conservation Agreement with the U.S. Fish and Wildlife Service</i>	DOE, USFWS	USFWS
<i>Interface Agreement between the Central Characterization Project and Los Alamos National Laboratory (LANL) for the Handling of Transuranic Wastes, CCP-PO-012.</i> This required a Contractor to CCP replacement.	CCP, LANL	N/A

PART III - LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS

SECTION J – LIST OF ATTACHMENTS

ATTACHMENT J-17: CH-TRU WASTE STREAM QUANTITIES AND DETAILS

The following waste streams are applicable to this Contract:

1. Above Ground Drums Remediation

ABOVE GROUND CH-TRU WASTE INVENTORY

Description	Volume (m ³)	MAR (PE-Ci)	Count
Sludge Drums	90	380	317
Debris Drums	106	3,154	382
Drums with Cemented Monoliths	86	7,028	349
Drums with Cemented Cans	240	14,549	759
Drums with Inorganics	2	141	11
10-100 MLLW	396	200	1,269
SWBs	346	3,242	303
Fiberglass-Reinforced Plywood/Crates/Metal Boxes	8	1	1
"Bolas Grandes" Spheres	40	96	33
Off-site Source Recovery Program Pipe-Overpack Containers	9	503	43
Other Containers	12	324	51
Totals	1,335	29,618	3,518

2. Overview of Below Ground CH-TRU Wastes Categories

TABLE 1 Overview of Below-Ground CH-TRU Waste Categories					
Category	General Description	Approximate Volume (m³)	Percentage Total Volume	Approximate MAR (PS-01)	Percentage Total MAR
Trenches A-D	Approx. 710 30-gal. drums split between 4 trenches	80.6	3.7%	93,866	84.5%
Pit 9	Approx. 3,882 55-gal., 30-gal. and 85-gal. drums, 191 fiberglass-reinforced plywood boxes, and 6 other containers	1,586	73.0%	6,377	5.7%
Corrugated Metal Pipes (CMPs) above Pit 29	158 CMP, each ~ 30 in. diameter x 20 ft. long	439	20.3%	10,778	9.7%
Hot Cell Liners (RH Waste)	5 Shafts with glovebox liners from hot cells, each in a steel box 6 ft. x 6 ft. x 10 ft. long (Shafts 302-306)	51	2.4%	0.6	0.001
Tritium Packages	4 tritium packages, each containing 3 55-gal. drums, and one tritium tank that is 20 ft. long (Shafts 262-266)	6.7	0.3	8	0.01
17 th Canister	One canister containing three (3) 55-gal. drums that contain lead shielded Neptunium-237 wastes (Shaft 235)	3.4	0.15	97	0.09
Total		2,166	100%	111,127	100%

3. Trenches A-D details are in accordance with "Trenches A-D Category of Transuranic Waste Stored Below Ground within Area G," EP2013-5179, LA-UR-13-29513, November 2013.

TABLE 3
Results of Visual Examination of PU-238 Waste Packaged in 1974, 1980, and 1983

1974 Pu-238 Drums			1980 Pu-238 Drums			1983 Pu-238 Drums		
Drum No.	Package Description	Waste Form Description	Drum No.	Packaging Description	Waste Form Description	Drum No.	Packaging Description	Waste Form Description
BFB 234	Four plastic begged metal containers	Bag-out full of small sealed cans. Cans of wet material that breached can and involved two other cans. This was Pu-238 materials of pH3.	BFB B12	Double-plastic bagged metal can. Zones where rust penetrated can creating pinholes	Partially burned cheesecloth and filter paper in can. Second plastic bag contained rags, cheesecloth, drill bits, wrenches, paper, broken glass, gloves.	BFB 92	Ice-cream carton within a metal can. Carton in a plastic bag-out bag.	Al ₂ O ₃ inside one ice cream carton. Others contained cheesecloth, lead-wrapped vials, graphite solids
BFB2 35	A leverpak inside of drum	28 crushed rusty cans. 26 crushed one-gallon cans. Al foil. Two 2" pipe nipples, capped on both ends. One-gallon filled with empty cans.	BFB 14	Double plastic bagged trash from room cleanup.	Empty alcohol bottle, HF bottle, gloves, rags, cheesecloth.	BFB 96	A bucket and 3 metal containers, all in plastic bags.	Lead lined gloves, cheesecloth, plastic bag-out bags.
BFB2 37	Plastic-wrapped leverpak inside drum	Rusty vises, sieves, pipe, rods, hammers, screw-drivers, cans, hand tools, garden hose	BFB 19	Bagged metal cans.	Inside can, bagged metal can containing alundum. 2nd can gaskets, 3rd can,, hot press dies, 4th can, glassware & some red dust.	BFB 97	Metal containers holding bag-out metal containers.	Ziploc containers, Al foil, rusty cans. Deteriorated cheesecloth, hacksaw blade, small pressure vessel, paint brushes, pliers inside bagged-out cans.
BFB2 38	Leverpak inside a plastic bag-out	10 rusty containers, 5 pressure vessels, stainless door frame and gasket, empty plastic bag-out stubs, 8 transfer cans, misc. pieces of rusty metal	BFB 20	Plastic bags in 30 gal drum	two bag-out bags, each filled with plastic sleeves	BFB 101	metal cans holding inner bagged-out metal cans	Plastic Ziploc sample vials, gaskets, cheesecloth, sand paper.
BFB2 39	Plastic-wrapped metal cans with a variety of wastes.	Plastics, metals, glass tubes, glass bottles, broken glass, metal tools	BFB 26	Plastic gagged trash.	Empty nitric acid and HF bottle. Al foil, gloves, plastics, empty gallon jar, and cheesecloth.	BFB 102	Double plastic wrapped metal cans with bagged-out metal cans	Punctured WD-40 can, another empty metal can, cheesecloth, pieces of metal, crushed Al foil.
BFB 240	Double bagged leverpak with approx. 150 ml water between bags. Leverpak saturated	die, desiccator, empty glass containers, power hose for furnace, rusty cans and metal objects.	BFB 27	A single plastic bag of waste	A single plastic bag of paper, surgeon's gloves, cheesecloth, plastic.	BFB 103	Double-plastic wrapped metal containers.	Bagged-out cans with vials, glass jars, cheesecloth, Ziploc bags.

TABLE 4
Summary of Radiological Characteristics of Waste in Trenches A-D

	Number of waste packages	Number of Casks with Waste Drums	Range , PE-Ci per Cask	Number of Waste Drums	Range PE-Ci per Drum	Total PE-Ci	Range, Pu-239 FGE per Cask	Total Pu-239 FGE	Range, Radiation Dose (mR/hr)	
									Contact	1 m
Trench A	125	120	3 to 1,183	240	2 to 608	32,500	<0.1 to 9	215	1 to 19	0 to 10
Trench B	104	99	<1 to 1,247	197	<1 to 622	29,678	0.1 to ≥ 200	4,178	1 to 250*	1 to 20
Trench C	200	101**	28 to 955	200	10 to 526	26,872	0.5 to 64	628	1 to 150	0 to 11
Trench D	73	37	17 to 313	73	8 to 474	4,815	0.4 to 8	78	1 to 40	0 to 5
Total Trenches A-D	502	357	<1 to 1,247	710	<1 to 622	93,866	<0.1 to ≥200	5,099	1 to 150	1 to 11

* In Trench B, contact dose available only for packages with U-233 waste

** Both Disposal Log Book and RSWD forms show Cask 54 I Trench C filled with drums two times

4. Pit 9 Waste details are in accordance with "Pit 9 Category of Transuranic Waste Stored Below Ground within Area G," EP2013-5180, LA-UR-14-20119, December 2013.

TABLE 2 Waste Content and Types of Containers in Pit 9					
Container Type	Waste Code	Waste Material Description	Number of Containers	Gross Weight (lbs/container)	Total Volume (m ³)
TRU Waste					
55-Gallon Steel Drum	A10	Graphite	1	155	0.2
	A15	Mixed Cellulosics	219	49-71	45.6
	A16	Plastic Materials	19	80-156	4.0
	A18	Mixed Paper, Plastic, Rubber, etc.	132	85-187	27.4
	A19	Mixed Combustible / Non-Combustible Trash	68	75-185	14.1
	A20	Hydrocarbon Oils	8	265-450	1.7
	A21	Silicon Based Oils	3	501	0.6
	A25	Leached Process Residues	216	33-448	44.9
	A30	PN* Equipment	182	39-415	37.9
	A31	Non-PN Equipment	1	172	0.2
	A50	Metal Crucibles, Scrap, Dies	133	0-263	27.7
	A52	Scrap Metals	23	110-298	4.8
	A55	Filter Media	6	399	1.2
	A56	Filter Media Residues	3	90-112	0.6
	A60	Other Combustibles	863	55-386	179.5
	A61	Other Non-Combustibles	987	51-416	205.3
	A70	Chemical Waste	4	113-154	0.8
	A75	Chemical Treatment Sludge	300	260-898	62.4
	A76	Cement Paste	133	350-706	27.7
	A90	Contaminated Soil	46	150-450	9.6
	A95	Glass	11	77-185	2.3
	A99	Unidentified Material	5	97-122	1.0
Total 55-Gallon Steel Drums			3,363		700 ¹
30-Gallon Drum	A15	Mixed Cellulosics	127	23-135	12.8
	A16	Plastic Materials	8	60-108	1.0
	A18	Mixed Paper, Plastic, Rubber, etc.	10	44-143	1.1
	A19	Mixed Combustible / Non-Combustible Trash	38	48-119	4.3
	A21	Silicon Based Oils	1	273	0.1
	A25	Leached Process Residues	232	31-612	25.9
	A30	PN Equipment	10	67-164	1.0
	A46	Skull and Oxide	1	105	0.1

* PN – Properly Numbered

¹ Number is different than source 699.5. Source was incorrect.

TABLE 2, continued Waste Content and Types of Containers in Pit 9					
Container Type	Waste Code	Waste Material Description	Number of Containers	Gross Weight (lbs/container)	Total Volume (m³)
TRU Waste, continued					
30-Gallon Drum, continued	A50	Metal Crucibles, Scrap, Dies	45	42-248	4.5
	A52	Scrap Metals	1	54	0.1
	A55	Filter Media	1	47	0.1
	A60	Other Combustibles	2	70-74	0.2
	A61	Other Non-Combustibles	33	52-124	3.8
	A70	Chemical Waste	2	105-114	0.2
	A76	Cement Paste	133	350-706	15.0
	A95	Glass	2	50-117	0.2
	A99	Unidentified Material	2	85-86	0.2
Total 30-Gallon Steel Drums			517		56.0
85-Gallon Steel Drum	A60	Other Combustibles	2	86-162	0.6
Total 85-Gallon Steel Drums			2		0.6
Other (XLG Drum)	A30	PN Equipment	3	2000	5.4
	A31	Non-PN Equipment	2	2000	2.4
	A36	Non-Combustible Building debris	1	4001	2.1
Total Other Containers			6		9.9
FRP Boxes (Crates)	A19	Mixed Combustible / Non-Combustible Trash	4	403-600	13.6
	A30	PN Equipment	42	88-4001	142.7
	A31	Non-PN Equipment	112	500-5,401	515.1
	A36	Non-Combustible Building debris	1	1965	15.9
	A55	Filter Media	25	673-684	85.6
	A90	Contaminated Soil	6	2000-4001	19.0
	A99	Unidentified Material	1	732	3.6
Total FRP Boxes			191		795.4
Total TRU Waste Containers			4,079		1,581.4
Low-Level Waste					
One-Gallon Can		Cell 13 trash cans 1892-1858	1	Not Available	0.0076
Unknown Item		No Description	1	Not Available	1.4
Box		Two Section Glovebox	1	Not Available	3.4
Total Low-Level Waste Containers			3		4.8
Total All Containers			4,083		1,586.2²

² Number is different than source 1,588.5. Source was incorrect.

TABLE 3 Summary of Radiological Characteristics of Waste in Pit 9								
Type of Container	Number of Containers	Average* PE-CI per Container (Range)	Number of Containers ≥ 80 PE-CI	Total PE-CI	Average* Pu-239 FGE per Container (Range)	Number of Containers ≥ 200 Pu-239 FGE	Total Pu-239 FGE	Average* Radiation Dose at Contact, mR/hr (Range)
30-Gal Drum	517	1.6 (0 - 13.4)	0	644.7	12.6 (0 - 147.8)	0	6,839.7	3.7 (0 - 100)
55-Gal Drum	3,363	2.1 (0 - 137.7)	1	5,292.1	2.1 (0 - >200)	3	27,757.0	3.1 (0 - 250)
85-Gal Drum	2	2.6 (00.3 - 5.2)	0	5.2	18.1 (0.3 - 36.9)	0	36.2	3.6 (0 - 7)
Other (XLG Drum)	6	0 (0 - 0)	0	0	0 (0 - 0)	0	0	(0 - 0)
FRP Box	191	6.1 (0 - 234.1)	2	435.4	12.6 (0 - >200)	1	910.6	29.6 (0 - 70)
TOTALS, PIT 9	4,079	2.1 (0 - 234.1)	3	6,377.40	2.1 (0 - >200)	4	35,543.50*	3.2 (0 - 250)

*Average of containers with values above zero

5. Corrugated Metal Pipes (CMP) details are in accordance with "CMP Category of Transuranic Waste Stored Below Ground within Area G," EP2013-5171, LA-UR-13-26921, August 2013.

Radiological Characteristics of the CMPs

Package ID Number	Original GMP ID Number	Total Curies	Am-241 (Curies)	Pu-238 (Curies)	Pu-239 (Curies)	PE-Ci	Fissile Grams	Dose at Surface (mR/hr)
S863429	1150	11.12	10.16	0.06	0.90	11.31	14.33	3
S863430	1151	11.12	10.16	0.06	0.90	11.31	14.33	1
S863431	1157	10.82	10.51	0.05	0.26	11.02	4.14	2
S863432	1158	10.82	10.51	0.05	0.26	11.02	4.14	3
S863433	1159	10.82	10.51	0.05	0.26	11.02	4.14	0
S863434	1152	20.35	19.54	0.04	0.77	20.73	12.31	1
S863435	1153	33.51	32.70	0.04	0.77	34.15	12.38	1
S863436	1154	14.51	13.70	0.04	0.77	14.78	12.27	1
S863437	1155	14.51	13.70	0.04	0.77	14.78	12.27	2
S863438	1156	14.50	13.70	0.04	0.75	14.76	12.07	2
S863439	1163	10.31	9.82	0.04	0.45	10.50	7.22	2
S863440	1164	10.31	9.82	0.04	0.45	10.50	7.22	3
S863441	1165	10.31	9.82	0.04	0.45	10.50	7.22	3
S863442	1169	12.07	11.21	0.11	0.75	12.28	12.06	1
S863443	1173	16.68	16.10	0.06	0.52	16.99	8.37	1
S863444	1174	16.68	16.10	0.06	0.52	16.99	8.37	1
S863445	1160	10.82	10.51	0.05	0.26	11.02	4.14	1
S863446	1161	10.82	10.51	0.05	0.26	11.02	4.14	3
S863447	1162	10.82	10.51	0.05	0.26	11.02	4.14	2
S863448	1166	12.07	11.21	0.11	0.75	12.28	12.06	1
S863449	1167	12.07	11.21	0.11	0.75	12.28	12.06	1
S863450	1168	12.07	11.21	0.11	0.75	12.28	12.06	1
S863451	1170	12.07	11.21	0.11	0.75	12.28	12.06	1
S863452	1171	12.07	11.21	0.11	0.75	12.28	12.06	4
S863453	1175	16.68	16.10	0.06	0.52	16.99	8.37	2
S863454	1178	11.81	11.45	0.33	0.02	12.00	0.42	1
S863455	1177	11.81	11.45	0.33	0.02	12.00	0.42	1
S863456	1176	11.81	11.45	0.33	0.02	12.00	0.42	1
S863457	1179	10.36	10.03	0.03	0.30	10.56	4.81	3
S863458	1180	10.36	10.03	0.03	0.30	10.56	4.81	3
S863459	1181	10.36	10.03	0.03	0.30	10.56	4.81	4
S863460	1182	10.36	10.03	0.03	0.30	10.56	4.81	4
S863461	1183	10.36	10.03	0.03	0.30	10.56	4.81	3
S863462	1184	10.36	10.03	0.03	0.30	10.56	4.81	3
S863463	1185	10.36	10.03	0.03	0.30	10.56	4.81	3
S863464	1187	17.37	16.97	0.05	0.36	17.70	5.76	4
S863465	1188	17.37	16.97	0.05	0.36	17.70	5.76	4
S863466	1186	17.37	16.97	0.05	0.36	17.70	5.76	3
S863467	1172	16.68	16.10	0.06	0.52	16.99	8.37	1
S863468	1198	13.45	11.80	0.98	0.67	13.58	10.77	7
S863469	1189	23.12	22.21	0.36	0.55	23.51	8.82	3
S863470	1190	23.12	22.21	0.36	0.55	23.51	8.82	2
S863471	1191	23.12	22.21	0.36	0.55	23.51	8.82	12
S863472	1192	23.12	22.21	0.36	0.55	23.51	8.82	4
S863473	1193	23.12	22.21	0.36	0.55	23.51	8.82	4

Radiological Characteristics of the CMPs

Package ID Number	Original CMP ID Number	Total Curies	Am-241 (Curies)	Pu-238 (Curies)	Pu-239 (Curies)	PE-CI	Fissile Grams	Dose at Surface (mR/hr)
S863474	1194	23.12	22.21	0.36	0.55	23.51	8.82	4
S863475	1195	13.45	11.80	0.98	0.67	13.58	10.77	7
S863476	1196	13.45	11.80	0.98	0.67	13.58	10.77	7
S863477	1197	13.45	11.80	0.98	0.67	13.58	10.77	7
S863478	1199	13.45	11.80	0.98	0.67	13.58	10.77	7
S863479	1200	13.45	11.80	0.98	0.67	13.58	10.77	1
S863480	1201	13.45	11.80	0.98	0.67	13.58	10.77	1
S863481	1202	13.45	11.80	0.98	0.67	13.58	10.77	4
S863482	1203	13.45	11.80	0.98	0.67	13.58	10.77	1
S863483	1207	9.53	9.02	0.11	0.39	9.69	405.50	12
S863484	1205	9.53	9.02	0.11	0.39	9.69	405.50	1
S863485	1204	9.53	9.02	0.11	0.39	9.69	405.50	1
S863486	1206	9.53	9.02	0.11	0.39	9.69	405.50	1
S863487	1210	38.57	38.52	0.01	0.04	39.33	0.89	2
S863488	1209	38.57	38.52	0.01	0.04	39.33	0.89	7
S863489	1208	38.57	38.52	0.01	0.04	39.33	0.89	12
S863490	1211	69.28	69.05	0.03	0.18	70.62	3.27	2
S863491	1212	69.28	69.05	0.03	0.18	70.62	3.27	12
S863492	1213	69.28	69.05	0.03	0.18	70.62	3.27	12
S863493	1214	69.28	69.05	0.03	0.18	70.62	3.27	12
S863494	1257	160.65	160.00	0.45	0.20	163.74	7.90	20
S863495	1258	160.65	160.00	0.45	0.20	163.74	4.04	30
S863496	1259	160.65	160.00	0.45	0.20	163.74	4.04	30
S863497	1254	160.65	160.00	0.45	0.20	163.74	4.04	20
S863498	1255	160.65	160.00	0.45	0.20	163.74	4.04	20
S863499	1245	134.73	134.30	0.07	0.36	137.35	6.59	23
S863500	1246	134.73	134.30	0.07	0.36	137.35	6.59	20
S863501	1247	134.73	134.30	0.07	0.36	137.35	6.59	20
S863502	1248	134.73	134.30	0.07	0.36	137.35	6.59	25
S863503	1249	135.03	134.30	0.07	0.66	137.65	11.36	20
S863504	1252	93.58	93.20	0.29	0.10	95.38	2.01	18
S863505	1253	93.58	93.20	0.29	0.10	95.38	2.01	20
S863506	1250	93.58	93.20	0.29	0.10	95.38	2.01	25
S863507	1251	93.58	93.20	0.29	0.10	95.38	2.01	20
S863508	1256	160.65	160.00	0.45	0.20	163.74	4.04	20
S863509	1240	186.63	186.10	0.21	0.32	190.26	115.40	23
S863510	1239	186.63	186.10	0.21	0.32	190.26	115.40	25
S863511	1236	186.63	186.10	0.21	0.32	190.26	115.40	4
S863512	1241	134.73	134.30	0.07	0.36	137.35	6.59	35
S863513	1233	86.55	86.30	0.05	0.20	88.23	3.65	15
S863514	1231	86.55	86.30	0.05	0.20	88.23	3.65	12
S863515	1232	86.55	86.30	0.05	0.20	88.23	3.65	26
S863516	1234	97.40	96.75	0.21	0.44	99.28	265.36	20
S863517	1235	97.40	96.75	0.21	0.44	99.28	265.36	18
S863518	1237	97.40	96.75	0.21	0.44	99.28	265.36	26

Radiological Characteristics of the CMPs

Package ID Number	Original CMP ID Number	Total Curies	Am-241 (Curies)	Pu-238 (Curies)	Pu-239 (Curies)	PE-CI	Fissile Grams	Dose at Surface (mR/hr)
S863519	1238	97.40	96.75	0.21	0.44	99.28	265.36	20
S863520	1242	134.73	134.30	0.07	0.36	137.35	6.59	35
S863521	1243	134.73	134.30	0.07	0.36	137.35	6.59	23
S863522	1244	134.73	134.30	0.07	0.36	137.35	6.59	35
S863523	1225	72.48	72.00	0.17	0.30	73.87	177.80	4
S863524	1226	72.48	72.00	0.17	0.30	73.87	177.80	4
S863525	1227	72.48	72.00	0.17	0.30	73.87	177.80	10
S863526	1228	72.48	72.00	0.17	0.30	73.87	177.80	10
S863527	1229	72.48	72.00	0.17	0.30	73.87	177.80	10
S863528	1230	72.48	72.00	0.17	0.30	73.87	177.80	12
S863529	1217	69.99	69.75	0.02	0.22	71.36	518.28	15
S863530	1216	69.99	69.75	0.02	0.22	71.36	518.28	15
S863531	1215	69.99	69.75	0.02	0.22	71.36	518.28	10
S863532	1222	72.48	72.00	0.17	0.30	73.87	177.80	26
S863533	1223	72.48	72.00	0.17	0.30	73.87	177.80	15
S863534	1218	36.12	36.09	0.01	0.02	36.82	13.38	12
S863535	1219	36.12	36.09	0.01	0.02	36.82	13.38	10
S863536	1220	36.12	36.09	0.01	0.02	36.82	13.38	10
S863537	1221	72.48	72.00	0.17	0.30	73.87	177.80	15
S863538	1224	72.48	72.00	0.17	0.30	73.87	177.80	15
S863539	1262	175.37	174.30	0.64	0.42	178.72	7.64	25
S863540	1263	175.37	174.30	0.64	0.42	178.72	7.64	25
S863541	1264	175.37	174.30	0.64	0.42	178.72	7.64	25
S863542	1265	175.37	174.30	0.64	0.42	178.72	7.64	25
S863543	1266	175.37	174.30	0.64	0.42	178.72	7.64	25
S863544	1260	175.37	174.30	0.64	0.42	178.72	8.29	20
S863545	1261	175.37	174.30	0.64	0.42	178.72	7.64	25
S863546	3305	35.51	35.35	0.12	0.03	36.18	0.63	4
S863547	3306	35.51	35.35	0.12	0.03	36.18	0.63	5
S863548	3307	35.51	35.35	0.12	0.03	36.18	0.63	4
S863549	3308	35.51	35.35	0.12	0.03	36.18	0.63	5
S863550	1280	98.41	97.50	0.09	0.82	100.31	13.52	50
S863551	1281	98.41	97.50	0.09	0.82	100.31	13.52	50
S863552	1282	98.41	97.50	0.09	0.82	100.31	13.52	50
S863553	1283	91.37	90.96	0.21	0.20	93.13	6.90	100
S863554	1284	91.37	90.96	0.21	0.20	93.13	6.90	100
S863555	1285	91.37	90.96	0.21	0.20	93.13	6.90	100
S863556	1286	91.37	90.96	0.21	0.20	93.13	6.90	80
S863557	1287	91.37	90.96	0.21	0.20	93.13	6.90	30
S863558	1288	91.37	90.96	0.21	0.20	93.13	6.90	40
S863559	1289	91.37	90.96	0.21	0.20	93.13	6.90	20
S863560	1267	157.59	156.80	0.07	0.72	160.65	12.25	20
S863561	1268	157.58	156.80	0.07	0.72	160.65	12.25	18
S863562	1269	157.58	156.80	0.07	0.72	160.65	12.25	20
S863563	1270	157.58	156.80	0.07	0.72	160.65	12.25	20

Radiological Characteristics of the CMPs

Package ID Number	Original CMP ID Number	Total Curies	Am-241 (Curies)	Pu-238 (Curies)	Pu-239 (Curies)	PE-Ci	Fissile Grams	Dose at Surface (mR/hr)
S863564	1271	157.58	156.80	0.07	0.72	160.65	12.25	18
S863565	1272	157.58	156.80	0.07	0.72	160.65	12.25	30
S863566	1273	157.58	156.80	0.07	0.72	160.65	12.25	18
S863567	1274	157.58	156.80	0.07	0.72	160.65	12.25	20
S863568	1275	98.41	97.50	0.09	0.82	100.31	13.52	18
S863569	1276	98.41	97.50	0.09	0.82	100.31	13.52	20
S863570	1277	98.41	97.50	0.09	0.82	100.31	13.52	15
S863571	1278	98.41	97.50	0.09	0.82	100.31	13.52	15
S863572	1279	98.41	97.50	0.09	0.82	100.31	13.52	15
S863573	1290	37.03	36.73	0.19	0.10	37.73	9.71	50
S863574	1291	37.03	36.73	0.19	0.10	37.73	9.71	50
S863575	1292	37.03	36.73	0.19	0.10	37.73	9.71	50
S863576	1293	37.03	36.73	0.19	0.10	37.73	9.71	30
S863577	1294	37.03	36.73	0.19	0.10	37.73	9.71	80
S863578	1295	37.03	36.73	0.19	0.10	37.73	9.71	80
S863579	1296	37.03	36.73	0.19	0.10	37.73	9.71	5
S863580	1297	35.83	35.69	0.07	0.06	36.51	1.08	5
S863581	1298	35.83	35.69	0.07	0.06	36.51	1.08	30
S863582	1299	35.83	35.69	0.07	0.06	36.51	1.08	5
S863583	3301	35.83	35.69	0.07	0.06	36.51	1.08	40
S863584	3302	35.83	35.69	0.07	0.06	36.51	1.08	40
S863585	3303	35.83	35.69	0.07	0.06	36.51	1.08	4
S863586	3304	35.83	35.69	0.07	0.06	36.51	1.08	5
TOTALS		10,575.90	10,483.36	31.97	60.10	10,777.85	7,360.79	
Average (Mean)		66.94	66.35	0.20	0.38	68.21	46.59	16

6. Other Retrievals Hot Cell Liners Waste Description

This waste consists of five glovebox hot cell liners from the hot cells in Wing 9 of the Chemical and Metallurgy Research (CMR) facility. Typical liners are 1.68m by 3.35m by 4.18m long weighing approximately 1135 kilograms (kg) (2500 pounds [lb]). Operations conducted within the liners consist of nondestructive and destructive examination of irradiated fuel pins composed of mixed U-Pu oxides and carbides. The hot cells were contaminated with mixed fission products as a result of research studies of high active materials. The contamination is fixed on the surfaces of the hot cell liners making the hot cell liners themselves waste. The presence of mixed U-Pu isotopes of these materials and the results of some required examinations produced high beta-gamma and alpha contamination within the liner making them remote handled (RH) waste. Information supplied by the waste generator indicates the four of the five hot cell liners may have concentrations of TRU isotopes less than 100 nCi/g and may not be properly classified as TRU waste. Ongoing analysis indicates the Hot Cell Liners are less than 100 nCi/g and therefore, should be classified as LLW or mixed LLW and does not require excavation. The Contractor shall complete this analysis and obtain a disposition decision resolution from EM-LA.

Each hot cell liner was placed into a steel box measuring 1.83m (6ft) by 1.83m (6ft) by 3.05m (10ft). The boxes containing the hot cell liners were placed in retrievable storage in shafts 302 – 306.

Since this waste could be re-characterized as LLW or mixed LLW, (less than 100 nCi/g) the Hot Cell Liners may not be required to be removed. However, should the decision be made to excavate the hot cell liners, the excavation alternative shall consider removal of the buried waste from the shafts through a combination of conventional remote excavation techniques.

7. Tritium Packages

Five shafts containing the Tritium Packages were constructed to contain torpedo-shaped waste containers. Four of the torpedoes contain three 55-gallon drums each, and the fifth torpedo contains a 20-foot-long tritium tank. This waste was generated from a decommissioning project at TA-55 and was emplaced in the shafts between 1995 and 1997.

The waste consists primarily of scrap metal (valves, fittings, piping, vessels, pumps, and other equipment) and some combustibles. The combustibles and non-combustibles were not segregated. The waste was bagged out of the glovebox, or, in the case of the processing tank system, disassembled and bagged. The bags were sealed by the twist and tape closure method and placed inside 55-gallon drums that were painted on the inside with asphalt as a barrier to tritium permeation. The drums were also identified with a red "T." The bungs were replaced with a carbon composite filter just prior to their being loaded into the stainless steel torpedoes. Possibly, a molecular sieve material was placed in the annular void spaces between the drums and torpedo walls to absorb tritium dioxide escaping through the carbon filter. The vessel heads were welded in place. At the top of the torpedo, a penetration hole was drilled for attachment of a valve, pressure gauge, pressure relief valve, and quick connect to allow for future sampling. The torpedo was flushed with helium to leak test the closure weld.

The table below lists the reported minimum and maximum Pu-239, U-235, and tritium (H-3) activity and initial and decayed surface dose rates for all of the canisters.

Summary Data for the Tritium Torpedoes

Item	Units	Minimum	Maximum
Pu-239	Curies	8.32E-02	1.70E+00
Pu-241	Curies	2.93E-01	6.61E+00
H-3	Curies	3.20E-02	2.72E+03
Dose rate (surface) initial	mrem/hr	0.1	3.0
Hazardous Waste Codes			Constituents
Chemical codes	None		None

As expected, the dose rates for the tritium torpedoes do not qualify this waste as RH-TRU waste. The tritium torpedoes do not list any hazardous materials. The documentation reviewed indicated that hydrogen getters were to be placed inside the waste containers to absorb hydrogen generated due to alpha radiolysis for a period of 20 years. There is no indication that hydrogen getters were ever used.

8. 17th Canister

The 17th Canister is stored in vertical shaft 235 that was augured into the mesa top near the east end of Area G and lined with a corrugated metal pipe. The top of the corrugated metal pipe for Shaft 235 is surrounded by a concrete pad and the shaft has a concrete cover. The 17th Canister has a configuration that consists of a cigar-shaped outer container designed to hold three drums that are the primary containers for the waste contents. The outer container for the 17th canister was called an "RH canister".

The 17th Canister holds three lead-lined 55-gal drums that contain waste items contaminated with neptunium-237 (Np-237) that were generated at TA-55. One of the drums contains items that were previously considered RH because they have radiation levels at the exterior surface of the "item" that exceed 200 millirem per hour (mrem/hr), with one item reported as high as 2,000 mrem/hr. Because of the lead shielding, the exterior of the drums are all below 200 mrem/hr. Therefore, the 17th Canister may be able to be reevaluated as low-level radioactive waste or CH-TRU waste.

FY15/FY16 Performance Agreement

Office of Environmental Management



U.S. Department of Energy
Office of Environmental Management
7/17/2015

Office of Environmental Management FY15/16 Performance Agreement

The mission of the Office of Environmental Management (EM) is to complete the safe cleanup of the environmental legacy brought about by five decades of nuclear weapons development and government-sponsored nuclear energy research. In FY15/FY16, EM will focus efforts on becoming a more efficient and effective organization as detailed by the following goals and commitments of this FY15/FY16 Performance Agreement.

This Performance Agreement is the commitment by the EM leadership team to organizational improvements that will help us advance our mission in the most safe, efficient and effective manner possible.

Goals/Measuring Progress

EM's primary responsibility is the safe cleanup of the environmental legacy of research and materials production by the Department of Energy (DOE) and its predecessor agencies for which Congress established the EM Program. Programmatic success will be measured by *what* is accomplished (i.e., the number of sites restored, quantities of waste treated and disposed of, number of waste storage tanks closed, amounts of soil and groundwater remediated, etc.). However, overall success will also be measured by *how* the program is managed (i.e., through critical management goals such as improvement of the safety and organizational culture, increasing overall efficiency with improved performance, achieving results from programs and projects and a focus on organizational excellence). The former is primarily captured in individual performance plans of the EM Field Managers and Deputy Assistant Secretaries and should cascade through employee performance plans throughout the organization. The latter is primarily the subject of this Performance Agreement, where broad programmatic goals are outlined as well as their supporting objectives. A review of the status of these objectives will be conducted throughout the fiscal year to ensure the organization is on-track to meet these higher level goals. Further, all EM personnel are challenged to develop and maintain a “product/outcome-oriented” mindset rather than function in a predominantly “process-oriented” environment.

EM's primary near-term priorities are: resumption of operations at the Waste Isolation Pilot Plant (WIPP); the tank waste clean-up missions at the Hanford site primarily the Secretary's initiative of beginning some treatment as soon as practical; liquid tank waste processing completion at the Idaho site; and the Savannah River tank waste mission primarily in support of the Salt Waste Processing Facility which will enable significant ramp-up of tank waste treatment.

Goal 1: Improve Organizational Culture

The safety of EM workers is a core value that is incorporated into every aspect of the EM program. To best protect our workers, EM has a goal of zero accidents or incidents in the work place and to date, has maintained a strong safety record. EM has established a strong quality culture and continues to utilize the Integrated Safety Management System to ensure that all work activities are appropriately scoped, analyzed for hazards, comprehensively planned to eliminate or mitigate those hazards, and effectively performed by trained employees. In addition, EM

follows DOE Order 226.1B; *Implementation of Department of Energy Oversight Policy* that establishes the philosophy that line management is responsible for ensuring safety when work is performed. EM seeks to continue safety improvements through first performing work safely and correctly; however, when necessary, EM will institute corrective actions, promote lessons learned, and develop new or improved processes to address safety concerns/incidents.

Objectives

- Complete the development of an EM Safety Culture Sustainment Plan based on input from the field, and implementation activities to address Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 2011-1
- Complete the remaining DNFSB recommendation 2011-1 actions
- Reinvigorate and execute a robust EM Lessons Learned Program, to include findings of the Waste Isolation Pilot Plant (WIPP) Accident Investigation Board (AIB) reports, EM safety culture assessments and other relevant EM program reviews
- Finalize review of deferred maintenance reports and develop a corporate approach to ensuring deferred maintenance of safety-related systems and equipment as part of a larger Departmental effort
- Further the implementation of Safety Conscious Work Environment (SCWE) training to all EM staff; develop and implement ongoing safety culture sustainment actions based on the information from the safety culture extent of condition review and benchmarking data in accordance with DOE's Safety Culture Improvement Implementation Plan
- Develop a transparent relationship with the DNFSB that facilitates expeditious resolution of DNFSB concerns and issues maintaining a level of zero to 20 percent overdue action items resulting from DNFSB letters or recommendations, as identified in the DOE Safety Issues Management System

Goal 2: Increase Efficiency/Improve Performance

EM will seek opportunities to increase efficiency and improve performance to ensure the maximum cleanup value for every dollar appropriated and invested in the program. EM will also continue to identify opportunities to make strategic investments, including investments in technology development, that reduce the life-cycle cost of the cleanup program while shortening project and program schedules.

Objectives

- Complete in-depth analysis of work being performed by EM across the complex for other programs/organizations to ensure full cost recovery
- Complete development of a 5-year planning case to better plan for and utilize appropriated funds to more efficiently execute cleanup
- Work with stakeholders and regulators to identify risk-based priorities and achievable cleanup milestones tied to subsequent budget documents (e.g., Environmental Protection Agency dialogue/summit with regulators)

- Develop common understanding/definition of Operational Costs in the EM Program by July 31, 2015, and develop a plan by September 30, 2015, with a target for reducing overall FY16 EM Program Operational costs by 5%
- Conduct system analyses to implement efficient and integrated liquid waste operations, and to establish long-term strategic plans for tank waste construction, treatment and closure activities
- Develop an integrated optimization plan for different base operations scenarios (facility turnover, surveillance and maintenance, deactivation and demolition) to minimize overall cost and schedule
- Develop a plan to characterize the infrastructure needs, facilities and human capital required to maintain the capabilities of EM's Savannah River National Laboratory. The plan will include strategies to enable the laboratory mission to continue technical support for the EM program and the Nation
- Work with other program offices to document a strategy by July 31, 2015, for establishing a sustainable capability to accomplish the administration's nuclear mission objectives, including capabilities at Idaho and the Savannah River Site to safely store and prepare repatriated nuclear materials for disposition

Goal 3: Achieve Program/Project Results

To ensure that EM delivers the best value for the American taxpayers, the FY16 budget request reflects continued commitment to improve acquisition, contract, and project management. EM will further improve acquisition processes by obtaining early involvement and approvals on various acquisition approaches from DOE senior management, including the Office of Acquisition and Project Management, the Office of the General Counsel, and the Office of Small and Disadvantaged Business Utilization.

Objectives

- Building on the Deferred Maintenance initiative, develop capital asset upgrades/replacement priority investment program to enhance operational efficiency and reliability for critical site infrastructure systems:
 - Identify critical site infrastructure systems at field sites to include components, age, design life, and replacement costs
 - Develop prioritization evaluation criteria and funding goals
 - Develop a funding approach for incorporation in the FY18 budget guidance
- Successfully complete at least 90% of capital asset projects at the baseline Total Project Costs and Critical Decision 4 dates, that established their original performance baseline (CD-2) or a first-time revised performance baseline after FY10
- Draft a separate appendix to DOE Order 413.3B; *Program and Project Management for the Acquisition of Capital Assets*, that applies to the management of all EM program scope, except construction line-item projects and takes into consideration the equivalency of the current Resource Conservation and Recovery Act, Comprehensive Environmental Response, Compensation, and Liability Act, and the National Environmental Policy Act requirements

Goal 4: Organizational Excellence

EM's success will require a sustained commitment to management excellence from Headquarters and every site office. Management principles will be translated into action by focusing on operational and technical excellence. That excellence requires developing the most highly qualified, capable, and flexible federal workforce. Additionally, our management principles require implementation of a performance-based culture that clearly links work to agency goals, holds employees accountable for meeting our mission, and appropriately recognizes employees for their efforts.

Objectives

- Implement the plan to improve headquarters/field alignment on program and policy issues and clarify roles and responsibilities
- Establish an Organizational Culture Integrated Project Team to develop and implement strategies to strengthen the EM organization
- Develop a strategy to enhance operational efficiency for headquarters and the field by regularly assessing the number of Headquarters assessments and other activities, and determining if those activities should continue or can be executed more efficiently and effectively
- Identify opportunities to enhance relationships with EM customers and stakeholders and implement improvements through more direct communication and transparent actions

EM Assistant Secretary Support

In order to accomplish the goals herein described, EM leadership will *provide visible, high profile support to:*

- Advocate for the resources necessary to achieve these objectives
- Communicate goal achievement and progress periodically through EM Updates, Reports and other media
- Formally recognize superior efforts in achieving goals through incentive awards
- Coordinate with senior Department and private sector officials and advocate for the EM program

Terms of Agreement

This Agreement is intended to improve the management and performance of the U.S. Department of Energy's Office of Environmental Management. It represents EM's commitment to operate efficiently, effectively, with a primary focus on safety, and fulfills our duties to the American people.

Mark White 7/7/2015
Acting Assistant Secretary Date

Candice Hummel 6/30/2015
Chief of Staff Date

Carmen Spencer 7/7/15
Office of External Affairs Date

Mike Gutter 7/7/15
Deputy Assistant Secretary
Site Restoration Date

205 Parker 7/1/15
Deputy Assistant Secretary,
Tank Waste & Nuclear Material Date

Paul D. Smith 6/30/15
Deputy Assistant Secretary,
Waste Management Date

Matthew 7/6/15
Deputy Assistant Secretary,
Safety, Security & Quality Programs Date

Deborah 7/6/2015
Deputy Assistant Secretary,
Acquisition & Project Management Date

Paul Bumbant 7/1/15
Deputy Assistant Secretary,
Program Planning & Budget Date

Melinda Sel 6/30/15
Deputy Assistant Secretary,
Human Capital & Corporate Services Date

Monica Ray 7/6/15
Associate Principal Deputy Assistant Secretary Date

DC Bryson 7/1/15
Manager,
Carlsbad Field Office Date

Bob 6/29/15
Manager,
Consolidated Business Center Date

John 6/29/15
Deputy Manager,
Idaho Operations Office Date

A.M. Cunniff
Manager,
Oak Ridge Office of Environmental Management Date

K.W. Smith 6/30/15
Manager,
Office of River Protection Date

W.E. May 7/13/15
Manager,
Portsmouth/Paducah Project Office Date

Stacy Charbonneau 7/1/15
Manager,
Richland Operations Office Date

Julie 7/17/15
Manager,
Savannah River Site Date

Jim 29 June 2015
Manager,
EM Los Alamos Field Office Date

SMALL BUSINESS SUBCONTRACTING PLAN – NEWPORT NEWS NUCLEAR BWXT-LOS ALAMOS, LLC

In compliance with Section L.11(k) of the Request for Proposal, Newport News Nuclear BWXT Los Alamos, LLC (N3B) submits this individual small business subcontracting plan (SB plan). N3B has developed this SB plan following the criteria prescribed in FAR 52.219.9 (Nov 2016), including other applicable requirements as stated in the clause.

For the purposes of this SB plan, N3B uses the term “subcontract” to mean any agreement (other than one involving an employer-employee relationship) entered into by a government prime contractor or subcontractor that calls for supplies or services required in the performance of the subject prime contract, a contract modification thereto, or a subcontract thereunder.

As a single purpose operating affiliate of Stoller Newport News Nuclear, Inc. and BWXT Technical Services Group, Inc., N3B is committed to increasing small business participation as part of the operation’s efforts and implementation of cost-savings initiatives, with focus on local and regional communities including substantive preferences to northern New Mexico businesses and local Native American pueblos and tribes. N3B’s core values include a commitment to ensure SB participation in significant and complex aspects of the site’s mission. We believe that such SB participation will support project goals, positively affect the local and regional communities, and provide a foundation for growth and expansion. Our objective to recruit, mentor, and develop local SBs will benefit the northern New Mexico Community (which includes Taos, Santa Fe, Rio Arriba, Sandoval, Mora, San Miguel, and Los Alamos Counties, and the eight regional Pueblos of Nambe, Picuris, Pojoaque, San Ildefonso, San Juan, Santa Clara, Taos, and Tesuque).

N3B’s approach is built on the belief that SBs should receive a durable benefit from participating in meaningful aspects of the project. These types of scopes lead to enhanced capabilities that provide a solid experience/performance base and ensure stability for project performance. We mentor our SBs to help them strengthen their core competencies; improve financial, administrative, and other functions/systems; and qualify them for additional work. N3B also ensures that, if local SB concerns are not readily available, action is taken to provide additional assistance to help SBs develop into reliable suppliers. This will allow them to compete for and perform subcontract work. We utilize a variety of tools to locate and use SB entities from all categories with a focus in Northern New Mexico as well as across the state and nationwide. N3B leverages the corporate-wide resources of its parent companies, including contacts, databases, protégés, special SB programs, and experienced personnel to ensure that we meet or exceed the goals established in this SB plan. Through implementation of this plan, N3B will aggressively pursue subcontracting opportunities with small business concerns comprised of small businesses (SB), veteran-owned small businesses (VOSB), service-disabled veteran-owned small businesses (SDVOSB), HUBZone small businesses (HUBZone); small disadvantaged businesses (SDB) (which include Alaskan Native Corporations (ANC) and Indian tribes); and women-owned small businesses (WOSB).

Contractor: Newport News Nuclear BWXT-Los Alamos, LLC (N3B)

Address: 105 Technology Drive, Suite 190
Broomfield, CO 80021

Main Phone No.: (303)546-4300

Facsimile No.: 303-443-1408

Date Prepared: December 6, 2016

Solicitation No: DE-SOL-0008109

Item/Service: Los Alamos National Laboratory Legacy Cleanup Contract

Total Amount of Contract: \$ 1,390,086,635

Period of Performance 10/01/2017 - 9/30/2022 (within base)
11/01/2022 - 9/20/2027 (all options)

Type of Plan (Check One)

☒ Individual Plan (Program elements are developed specifically for this Contract and applicable for the full term of this Contract, including options.)

☐ Master Plan (Contains all required elements of individual plan, except goals.) (See FAR 52.219-9(f) (1)-(3)).

☐ Commercial Plan (Contractor sells large quantities of off-the-shelf commercial items to many Government agencies. Plans/goals are negotiated by a lead agency on a company- wide basis rather than for individual Contracts. Plan effective only during the year for which it is approved. The Contractor must provide a copy of the lead agency approval). (See FAR 19.704(d) and 52.219-9(g)).

Through implementation of this plan, N3B will aggressively pursue subcontracting opportunities with small business concerns comprised of small business (SB), veteran-owned small business (VOSB), service-disabled veteran-owned small business (SDVOSB), HUBZone small business (HUBZone); small disadvantaged businesses (SDB), which include Alaskan Native Corporations (ANC) and Indian tribe; and women-owned small business (WOSB).

1. Goals

N3B proposes the SB subcontracting goals shown in Figure L.11(k) 1 for each specified SB category. Goals are expressed in terms of percentage of total planned subcontracting dollars.

Figure L.11(k) 1. N3B FY17 SB Subcontracting Goals.

SB Concern	Percent of Total Subcontract Dollars
SB	65%
VOSB	3%
SDVOSB	3%
HUBZone	3%
SDB	5%
WOSB	5%

Our goals are based on historical data and the estimated value of the contract. Upon assuming contract responsibility and regularly during the normal course of business, N3B plans scope execution and includes SB plan goals as one of our performance indicators. We will also remain aware of opportunities that may arise where these percentage goals and the real dollar value of SB subcontracts can be increased by providing SB meaningful work scope. We focus efforts and resources on SB outreach, which includes mentoring to allow SB suppliers to build capacity and sustainability to better operate a successful business and ensure that subcontracting in each designated category increases in volume as the overall subcontract volume expands.

2. Subcontract Goals - Dollars and Percent by Subcontract Category

The following goals (expressed in terms of dollars and percentage of total planned subcontracting dollars) are applicable for the duration of the Contract.

Within Base Period

- (1) The total estimated dollar value of all planned subcontracting (to all types of business concerns) under this Contract is \$210,660,383, which is 100% of all planned subcontracts.
 - (i) LB Concerns: Total estimated dollar value and percent of planned subcontracting with large businesses (all business concerns classified as “other than small”): \$73,731,134, which is 35% of (1) above.
 - (ii) SB Concerns: Total estimated dollar value and percent of planned subcontracting with small businesses (including Alaskan Native Corporation (ANC) and Indian tribes (IT)) concerns: \$ 136,929,249, which is 65% of (1) above.
 - (iii) VOSB Concerns. Total estimated dollar value and percent of planned subcontracting with veteran-owned small businesses: \$ 6,319,811, which is 3% of (1) above. This amount is included in the amount shown under (1) (ii), above.
 - (iv) SDVOSB Concerns. Total estimated dollar value and percent of planned subcontracting with service-disabled veteran-owned small businesses: \$ 6,319,811, which is 3% of (1) above. This amount is included in the amount shown under (1) (ii), above.

(v) HUBZone Concerns. Total estimated dollar value and percent of planned subcontracting with HUBZone small businesses: \$ 6,319,811, which is 3% of (1) above. This amount is included in the amount shown under (1) (ii), above.

(vi) SDB Concerns. Total estimated dollar value and percent of planned subcontracting with small disadvantaged businesses (including Alaskan Native Corporation (ANC) and Indian tribes): \$ 10,533,019, which is 5% of (1) above. This amount is included in the amount shown under (1) (ii), above.

(vii) WOSB Concerns. Total estimated dollar value and percent of planned subcontracting with small women-owned businesses: \$ 10,533,019, which is 5% of (1) above. This amount is included in the amount shown under (1) (ii), above.

Option Period 1

(2) The total estimated dollar value of all planned subcontracting (to all types of business concerns) under this Contract is \$ 113,510,581, which is 100% of all planned subcontracts.

(i) LB Concerns: Total estimated dollar value and percent of planned subcontracting with large businesses (all business concerns classified as “other than small”) \$39,728,704, which is 35% of (2) above.

(ii) SB Concerns: Total estimated dollar value and percent of planned subcontracting with small businesses (including Alaskan Native Corporation (ANC) and Indian tribes (IT)) concerns: \$ 73,781,878, which is 65% of (2) above.

(iii) VOSB Concerns. Total estimated dollar value and percent of planned subcontracting with veteran-owned small businesses: \$ 3,405,317, which is 3% of (2) above. This amount is included in the amount shown under (2) (ii), above.

(iv) SDVOSB Concerns. Total estimated dollar value and percent of planned subcontracting with service-disabled veteran-owned small businesses: \$ 3,405,317, which is 3% of (2) above. This amount is included in the amount shown under (2) (ii), above.

(v) HUBZone Concerns. Total estimated dollar value and percent of planned subcontracting with HUBZone small businesses: \$ 3,405,317, which is 3% of (2) above. This amount is included in the amount shown under (2) (ii), above.

(vi) SDB Concerns. Total estimated dollar value and percent of planned subcontracting with small disadvantaged businesses (including Alaskan Native Corporation (ANC) and Indian tribes): \$ 5,675,529, which is 5% of (2) above. This amount is included in the amount shown under (2) (ii), above.

(vii) WOSB Concerns. Total estimated dollar value and percent of planned subcontracting with small women-owned businesses: \$ 5,675,529, which is 5% of (2) above. This amount is included in the amount shown under (2) (ii), above.

Option Period 2

(3) The total estimated dollar value of all planned subcontracting (to all types of business concerns) under this Contract is \$ 63,382,018, which is 100% of all planned subcontracts.

(i) LB Concerns: Total estimated dollar value and percent of planned subcontracting with large businesses (all business concerns classified as “other than small”) \$22,183,706, which is 35% of (3) above.

(ii) SB Concerns: Total estimated dollar value and percent of planned subcontracting with small businesses (including Alaskan Native Corporation (ANC) and Indian tribes (IT)) concerns: \$ 41,198,312, which is 65% of (3) above.

(iii) VOSB Concerns. Total estimated dollar value and percent of planned subcontracting with veteran-owned small businesses: \$ 1,901,461, which is 3% of (3) above. This amount is included in the amount shown under (3) (ii), above.

(iv) SDVOSB Concerns. Total estimated dollar value and percent of planned subcontracting with service-disabled veteran-owned small businesses: \$ 1,901,461, which is 3% of (3) above. This amount is included in the amount shown under (3) (ii), above.

(v) HUBZone Concerns. Total estimated dollar value and percent of planned subcontracting with HUBZone small businesses: \$ 1,901,461, which is 3% of (3) above. This amount is included in the amount shown under (3) (ii), above.

(vi) SDB Concerns. Total estimated dollar value and percent of planned subcontracting with small disadvantaged businesses (including Alaskan Native Corporation (ANC) and Indian tribes): \$ 3,169,101, which is 5% of (3) above. This amount is included in the amount shown under (3) (ii), above.

(vii) WOSB Concerns. Total estimated dollar value and percent of planned subcontracting with small women-owned businesses: \$ 3,169,101, which is 5% of (3) above. This amount is included in the amount shown under (3) (ii), above.

3. Description of the Principal Types of Supplies and/or Services to be Subcontracted

Figure L.11(k) 2 presents target opportunities and principal supplies and services we will subcontract under this contract and the socioeconomic status of businesses providing them.

Figure L.11(k) 2. Initial Small Business Subcontracting Opportunities.

Subcontracted Products/Services	SB	VOSB	SDVOSB	HUBZone	SDB	WOSB
Admin support	√			√	√	√
Records Management	√				√	√
Well drilling	√				√	
Payroll	√				√	√
Radiation protection	√				√	√
Waste transportation	√				√	
Heavy equipment maintenance	√					
Equipment rental	√				√	√
Escorts	√			√	√	√
Computer equipment and supplies	√			√	√	√
Facility parts and maintenance	√					
Training	√	√	√	√	√	√
PPE and other supplies	√				√	√
Professional services	√	√			√	√
Industrial supplies	√	√	√		√	√
Solid waste collection	√				√	√
Engineering support	√	√			√	√
Construction services	√	√	√	√	√	√
Analytical laboratories	√	√			√	√
Providing sampling crews	√					
Field support	√	√	√	√	√	√
GIS support	√	√	√	√	√	√
Geophysics	√				√	√
D&D of non-nuclear facilities	√	√	√	√	√	√
Weather station relocation	√					
Providing, operating, and maintaining robotic tools	√					
Petroleum products	√					
Site preparation	√				√	
Asbestos abatement and removal	√	√	√		√	
Building cleanout	√	√	√	√	√	√
MDA sampling	√				√	√
Cover design installation	√		√	√	√	√
Vadose zone investigation	√					
Ecological Surveys	√			√	√	√

Subcontracted Products/Services	SB	VOSB	SDVOSB	HUBZone	SDB	WOSB
Cultural Resource Surveys	√			√	√	√
Maintenance services	√	√	√	√	√	√
Janitorial services	√	√	√	√	√	√
Quality Assurance programs	√				√	√

4. Method Used to Develop Subcontracting Goals

We will meet or exceed the SB subcontracting goals set forth in this SB plan for each of the specified SB concerns. N3B expects to novate the current SB subcontracts in place at the site. For on-site support subcontractors, we will require offerors to submit technical and cost proposals that will maximize the stability of the workforce and assure continuity in operations.

We will extend new contracts to our two preselected SB subcontractors. Their skills and capabilities will provide a programmatic advantage while supporting our efforts to meet DOE's SB and subcontracting expectations.

Longenecker & Associates Inc. (L&A) – Woman Owned SB

L&A will support and provide expertise to N3B in the following areas:

- Quality Assurance Program development and implementation
- Rigorous quality assessment and audit program and corrective actions
- Quality training and qualifications
- Software quality assurance
- Certification of NQA-1 requirements, using a graded approach.

This is a comprehensive quality assurance function with additional focus on Work Package compliance and consistency with established Work Authorization Basis documents.

Tech2 Solutions- SB

Tech2 will support and provide expertise to N3B in the following areas:

- Groundwater Monitoring Program
- Drilling
- Surface Water Monitoring
- Individual Permit Surface Water Corrective Action
- RDX Groundwater Remediation
- Chromium Groundwater Remediation
- Aggregate Areas
- Material Disposal Areas.

The list of supplies and services to be subcontracted to SB entities was developed through:

- Review and evaluation of the PWS
- Analysis of procurement historical data and experience
- Consideration of local, state, and federal regulations, and guidelines
- Analysis of current and past experience in SB subcontracting at other DOE locations
- Knowledge of local small business

Our method and quantitative basis (in dollars) used to establish the percentage goals and the areas to be subcontracted to all SB concerns (VOSB, SDVOSB, HUBZone, SDB, and WOSB) are based on:

- Contract PWS and expected funding
- Data from N3B's parent companies, including past experience with the development and implementation of SB subcontracting programs
- Information on SBs that N3B affiliates have successfully used at other locations
- Procurement historical data
- Anticipated program requirements for identified SB scope areas
- Published SB databases with accurate company size, capability, and experience information in order to expand upon our list of qualified SB concerns to be considered for future subcontracting opportunities.

5. Identification of Potential Sources for Solicitation

We continually identify and review potential sources of supplies and services through:

- SAM.gov
- State and regional Small Business Administration (SBA) resources
- National Minority Purchasing Council vendor information service
- Research and Information Division of Minority Business Development Agency in the Department of Commerce
- SDVOSB councils and directory
- Trade associations for SB, VOSB, SDVOSB, HUBZone, SDB, and WOSB concerns
- Sponsorship and/or participation in various local, regional, and national SB trade fairs and conferences
- Membership in and coordination and cooperation with SB organizations, economic development organizations, and commercial and government organizations at the local, state, and national levels
- Partnering with the New Mexico Small Business and Minority Business Development Centers
- Use of vendors that have successful past performance
- Interface with the Northern New Mexico Supplier Alliance
- Work with the New Mexico 8(a) and Minority Business Association
- Work with the Regional Development Corporation and regional Chambers of Commerce to attract new businesses to northern New Mexico.

6. Indirect Costs

Indirect costs have have not X been included in the dollar and percentage subcontracting goals in this SB plan.

Since indirect costs have not been included in allocation of costs to subcontracting, a method is not described.

7. Administrator of the Offeror's Subcontracting Program and Their Duties

The N3B senior management representative for the SB Plan is—

Name	Sharon Brady
Title	Business Manager
Address	105 Technology Drive, Suite 190 Broomfield, CO 80021
Telephone No.	303.903.1173
Facsimile No.	303.443.1408
E-Mail	sbrady@hii-sn3.com

The senior management representative assisted by the small business advocate, is responsible for the N3B subcontracting program, i.e., developing, preparing, and executing individual subcontracting plans, and monitoring performance relative to the requirements of this SB plan. Her duties include:

- Develop and maintain bidders' list developed from all possible sources for SB, VOSB, SDVOSB, HUBZone, SDB, and WOSB concerns
- Ensure periodic update of all categories of potential subcontractors on N3B's bidders' list
- Ensure that procurement packages are structured to maximize participation of SB, VOSB, SDVOSB, HUBZone, SDB, and WOSB concerns
- Oversee the establishment and maintenance of contract and subcontract award records
- Develop and maintain bidders' lists of SB, VOSB, SDVOSB, HUBZone, SDB, and WOSB concerns from as many sources as possible
- Review solicitations to identify and remove any statements or clauses that may restrict or prohibit participation of SB, VOSB, SDVOSB, HUBZone, SDB, or WOSB concerns
- Review large business subcontracting plans for utilization of SB, VOSB, SDVOSB, HUBZone, SDB, or WOSBs in connection with supply and/or service subcontract awards exceeding the thresholds specified in FAR 52.219-9 Small Business Subcontracting Plan
- Ensure proper documentation if selection is not made to a SB, VOSB, SDVOSB, HUBZone, SDB, or WOSB concern that provided the low bid
- Ensure establishment and maintenance of records of solicitations and subcontract awards
- Attend or arrange for attendance of company counselors at business opportunity workshops, minority business enterprise seminars, trade fairs, etc.
- Name a small business advocate
- Develop and oversee the mentor program
- Develop and promote company-wide policy initiatives that demonstrate our support for awarding subcontracts to SB, VOSB, SDVOSB, HUBZone, SDB, and WOSB concerns
- Coordinate activities prior to and during federal agency compliance reviews
- Ensure that SB, VOSB, SDVOSB, HUBZone, SDB, and WOSB concerns are made aware of subcontracting opportunities and how to prepare responsive bids to N3B
- Monitor N3B's performance at least quarterly and make adjustments necessary to achieve SB plan goals
- Ensure that SB subcontracting plans are required for large businesses who receive subcontracts exceeding \$700,000 (\$1,500,000 for construction). Review these plans and monitor progress to ensure SB goals are achieved. Any deviations must be justified and fully explained

- Monitor and, as necessary, modify procurement procedures to ensure they encourage maximum participation for all SB categories
- Develop a program to educate and train N3B personnel on how to use SBs and how their involvement can be expanded to meet the mission needs of N3B
- Create and maintain an N3B web page for SB informational purposes
- Establish and maintain contact and communication with our parent organizations and network with other SB program advocates within these organizations to support, implement, and enhance our SB program
- Submit the Individual Subcontract Report (ISR) and the Summary Subcontract Report (SSR) using the electronic subcontracting system (eSRS) at <http://www.esrs.gov> in accordance with the prime contract and instructions provided by the contracting officer.

8. Equitable Opportunities and Outreach Efforts

N3B undertakes the following efforts to ensure that SB, VOSB, SDVOSB, HUBZone, SDB, and WOSB concerns have an equitable opportunity to compete for and secure subcontracts. The purpose of these efforts is to provide information and assistance to socioeconomic businesses and individuals who may be interested in becoming subcontractors to N3B. These efforts include:

A. Outreach efforts to obtain sources

- Contacting minority and small business trade associations including the New Mexico 8(a) and Minority Business Association
- Contacting economic development organizations, such as the Regional Development Corporation and regional Chambers of Commerce
- Attending small and minority business procurement conferences and trade fairs
- Requesting sources from the SAM (System for Award Management) and DSBS (Dynamic Small Business Search)
- Using newspapers and magazine ads to encourage new sources
- Participating in other efforts to expand the socioeconomic database for this contract
- Using book references, catalogs, source lists, or other reference material to identify SB, VOSB, SDVOSB, HUBZone, SDB, and WOSB sources before acquisitions are placed by buying activities
- Providing a full-time on-site SB advocate who serves as a liaison between the SB community, internal acquisition personnel, and the customer
- Planning solicitations (including time for preparation and development of SOW, quantities, specifications, and delivery schedules) to facilitate SB participation in subcontracting opportunities
- Conducting external workshops, seminars, and training programs to ensure SBs are familiar with the requirements for doing business at N3B
- Implementing and maintaining in-reach programs that provide SBs access and exposure to key project planners and managers
- Developing a comprehensive list of past and present SB service providers that includes past performance and is easily accessible to acquisition personnel
- Selecting and qualifying SB concerns to perform specific scopes of work
- Structuring the program to help develop the capabilities and quality of services provided by SB suppliers and subcontractors

- Participating as an exhibitor in the DOE Annual Small Business Conference
- Establishing a relationship with the DOE/NNSA supply chain management center (SCMC)
- Training SB concerns on how to use and maximize participation in the DOE SCMC and the NNSA Strategic Sourcing tools, including commodity concepts, reverse auction approaches, and e-Sourcing application processes
- Assisting regional suppliers to compete for contracts in other markets
- Providing aid in obtaining SBA certifications and GSA contracts
- Focusing on local subcontractors and providing a 5% pricing preference
- Engaging the Consortium of Major LANL Subcontractors and the Regional Development Corporation.

B. Internal efforts to guide and encourage purchasing personnel

- Establishing and maintaining N3B SB policy and procedures
- Conducting internal workshops, seminars, and training programs to ensure that internal customers and acquisition personnel are acquainted with the SB plan, our policies, and prime contract requirements
- Establishing, maintaining, and using SB, VOSB, SDVOSB, HUBZone, SDB, and WOSB source lists, guides, and other data for soliciting subcontracts
- Monitoring activities to achieve continuous improvement in SB subcontracting and verify compliance with the subcontracting plan
- Using the 7-step systematic approach to subcontracting
- Using BOAs and ID/IQ structures to the maximum extent possible
- Engaging New Mexico colleges and universities in research efforts to support EM programs
- Partnering with New Mexico Small Business and Minority Business Development Centers
- Interfacing with the Northern New Mexico Supplier Alliance
- Working with the Regional Development Corporation and regional Chambers of Commerce to attract new businesses to northern New Mexico.

9. Subcontracting Plan Flowdown

We incorporate the flowdown clause requirements of FAR 52.219-8 wherein SB, VOSB, SDVOSB, HUBZone, SDB, and WOSB concerns shall have the maximum practicable opportunity to participate in performing contracts as defined by this plan. Additionally, we will require all subcontractors (except SB concerns) who receive subcontracts in excess of \$700,000 (\$1,500,000 for construction) to adopt similar plans. Our Business Manager is responsible for implementing and monitoring this aspect of the SB plan.

N3B agrees to include the contract's Section I clause FAR 52.219-8, Utilization of Small Business Concerns, in all subcontracts that offer further subcontracting opportunities. All subcontractors, except SB concerns, which receive subcontracts in excess of the thresholds identified in FAR 52.219-9, Small Business Subcontracting Plan, must adopt and comply with a plan similar to the plan required by FAR 52.219-9. The acceptability of percentage and dollar goals shall be determined on a case-by-case basis depending on the supplies/services involved, the availability of potential SB, SDB, WOSB, HUBZone, VOSB, and SDVOSB, and prior

experience. Once approved and implemented, plans will be monitored through the submission of periodic reports, including those submitted via eSRS, and, as time and availability of funds permit, periodic visits to subcontractors' facilities to review applicable records and subcontracting program progress.

10. Reports and Surveys

N3B will:

- Cooperate in studies or surveys that may be required by the contracting agency or the Small Business Administration
- Provide periodic reports to the contracting agency, in an agreed upon format, that show compliance with the subcontracting plan
- Submit Individual Subcontracting Reports (ISR) and Summary Subcontract Reports (SSR), using the Electronic Subcontracting Reporting System (eSRS) at <http://www.esrs.gov>. N3B will input accurate and complete reports into the eSRS and will ensure that our subcontractors with subcontracting plans agree to submit the ISR and/or the SSR using eSRS.

The following are the reporting periods and due dates for the ISR and SSR:

Reporting Period	Report Due	Due Date
October 1 - March 31	ISR	Apr 30th
April 1 - September 30	ISR	Oct 30th
October 1 - September 30	SSR	Oct 30 th

- Provide our prime contract number, DUNS number, and the e-mail address of our official responsible for acknowledging receipt of (or rejecting) the ISRs to all first-tier subcontractors with subcontracting plans so they can enter this information into the eSRS when submitting their ISRs
- Require subcontractors with a subcontracting plan provide our prime contract number, their DUNS number, and the e-mail address of their official responsible for acknowledging receipt of ISRs to their subcontractors with subcontracting plans.

11. Records and Procedures

N3B will maintain the following types of records and procedures to demonstrate compliance with the requirements and goals in the subcontracting plan. These records will include:

- List of the names of guides and other data identifying vendors other than SAM as a source for SB, VOSB, SDVOSB, HUBZone, SDB, and WOSB concerns
- Records of organizations contacted in an attempt to locate SB, VOSB, SDVOSB, HUBZone, SDB, and WOSB sources
- On a contract-by-contract basis, records of each subcontract solicitation resulting in an award of more than \$150,000 indicating whether SB, VOSB, SDVOSB, SDB, or WOSB concerns were solicited, and if not, why not, and if applicable, the reason that the award was not made to a small business concern
- Records to support outreach efforts, e.g., contacts with minority and SB associations, attendance at SB and minority business procurement conferences and trade fairs

- Records to support internal guidance and encouragement provided to buyers through (1) workshops, seminars, training programs, incentive awards, and (2) monitoring of subcontract award data including the name, address, and business size of each subcontractor
- On a contract-by-contract basis, records to support subcontract award data including the name, address, and business size (by NAICS code) of each subcontractor
- Procurement data, which is tracked by an automated system that provides historical data related to each subcontract.

In order to effectively implement this plan to the extent consistent with efficient contract performance, N3B will perform the following functions:

- Assist SB, VOSB, SDVOSB, HUBZone, SDB, and WOSB by arranging solicitations, quantities, specifications, and delivery schedules to facilitate the participation by such concerns. Where the lists of potential SB, VOSB, SDVOSB, HUBZone, SDB, and WOSB subcontractors are excessively long, reasonable effort shall be made to give all such small business concerns an opportunity to compete over a period of time
- Provide adequate and timely consideration of the potential for using SB, VOSB, SDVOSB, HUBZone, SDB, and WOSB concerns in all make-or-buy decisions
- Counsel and discuss subcontracting opportunities with representatives of SB, VOSB, SDVOSB, HUBZone, SDB, and WOSB firms
- Confirm that a subcontractor representing itself as a HUBZone small business concern is identified as a certified HUBZone small business concern by accessing the SAM database or by contacting SBA
- Provide notice to subcontractors concerning penalties and remedies for misrepresentations of business status as SB, VOSB, HUBZone, SDB, or WOSB for the purpose of obtaining a subcontract
- For all competitive subcontracts over the simplified acquisition threshold in which a small business concern received a small business preference, upon determination of the successful subcontract offeror, we will inform each unsuccessful small business subcontract offeror in writing of the name and location of the apparent successful offeror prior to award of the subcontract
- Give preference to northern New Mexico small business for acquisitions exceeding the competitive threshold by adding a 5% adjustment factor to non-northern New Mexico business concerns.

12. SBs used in Bid Preparation

N3B will make a good faith effort to acquire articles, equipment, supplies, services, and materials, and obtain the performance of construction work from the small business concerns that, in the same or greater scope amount, and quality used in submitting bids or proposals.

13. Performance of Construction Work

N3B will provide the Contracting Officer with a written explanation if we fail to acquire articles, equipment, supplies, services, and materials or obtain the performance of construction work as described in (d)(12) of FAR 52.219-9 (NOV 2016) within 30 days of contract completion.

14. Subcontractor Communication with DOE

N3B will not prohibit a subcontractor from discussing with the Contracting Officer any material matter pertaining to or utilization of a subcontractor.

This subcontracting plan was submitted by:

Nicholas J. Lombardo
President



Nicholas J. Lombardo

Signed:

Typed Name:

Title:

Company: Newport News Nuclear BWXT-Los Alamos, LLC

Date: December 6, 2016

Phone No.: (303) 546-4403

PLAN ACCEPTED BY:



DOE Contracting Officer

Date: 12/19/17

U.S. Department of Energy CONTRACT SECURITY CLASSIFICATION SPECIFICATION (CSCS)

-1-

1. CSCS No.:		2. Previous CSCS No.:		3a. Reason for Action: (Check one) ☒ Add ☐ Change ☐ Terminate b. Item Numbers Modified _____	
4. This Specification is for: (Complete as applicable)				5. Specification is: (Complete as applicable)	
(Check one) a. ☒ Contract or Other Number ☐ Solicitation Contract Type <u>Cost Plus Award Fee</u> b. Contract Number <u>89303318CEM000007</u> End Date: <u>1/25/29</u> (estimated) c. Contract Number of Prime _____ (Complete if registering or soliciting a subcontract) End Date: _____ (estimated)				a. Original (Complete date in all cases) Date: _____	
				b. Revised (Supersedes all previous specifications) Date: _____	
				c. Certificate of Possession Date: _____	
				Retention of Classified Matter is Authorized Until Date: _____	
				d. Final Date: _____	
				Certificate of Non-Possession or Equivalent Date: _____	
6. General Identification of this Procurement Legacy Los Alamos Cleanup Contract (LLCC)					
7. Contractor					
a. Facility Code 6748		b. Name, Address, and Zip Code Newport News Nuclear BWXT-Los Alamos, LLC 105 Technology Drive Broomfield, CO 80021		c. Cognizant Security Office (Name, Address, and Zip Code) DOE-SR P.O. Box A Aiken, SC 29808	
8. Prime Contractor (Complete if registering or soliciting a subcontract)					
a. Facility Code		b. Name, Address, and Zip Code		c. Cognizant Security Office (Name, Address, and Zip Code)	
9. Actual Place of Performance (DOE Facilities) (Attach additional entries as necessary)					
a. Facility Code		b. Name, Address, and Zip Code Los Alamos National Laboratory Los Alamos County, New Mexico		c. Cognizant Security Office (Name, Address, and Zip Code)	
Actual Place of Performance (NON-DOE Facilities) (Attach additional entries as necessary)					
a. ID Code		b. Name, Address, and Zip Code		c. Cognizant Security Office (Name, Address, and Zip Code)	
10. Clearance and Storage				11. This Contract Will Require Access To:	
a. Classification of Matter to be Accessed: ☐ TSRD ☐ TSFRD ☐ TSNSI ☒ SRD ☐ SFRD ☐ SNSI ☐ CRD ☐ CFRD ☐ CNSI ☐ U b. Level of Storage Required at Contractor Facility in Block 7a: ☐ TSRD ☐ TSFRD ☐ TSNSI ☐ SRD ☐ SFRD ☐ SNSI ☐ CRD ☐ CFRD ☐ CNSI ☒ U c. Level of Storage for the Performance of this Contract: ☐ TSRD ☐ TSFRD ☐ TSNSI ☐ SRD ☐ SFRD ☐ SNSI ☐ CRD ☐ CFRD ☐ CNSI ☒ U d. Access Authorization/Security Clearance: ☒ Q ☐ L ☐ T ☐ S ☐ C				☐ OTHER DCI CAVEATS ☐ COMSEC ☐ FGI ☐ NATO ☐ SCI ☐ CNWDI ☐ WD/SIGMAS: _____ ☐ OTHER: _____	
12. In Performing This Contract, The Contractor Will:					
☒ Have Access to Classified Information Only at Another Contractor's Facility or a Government Activity ☐ Generate Classified Matter ☒ Perform Services That Require Unescorted Access to Security Areas ☐ Have Access to U.S. Classified Information Outside the U.S., Puerto Rico, U.S. Possessions and Trust Territories ☐ Other (Specify) _____				☐ Receive Classified Matter ☐ Fabricate, Modify or Store Classified Items (e.g., Hardware or Substances) ☐ Be Authorized to Use the Services of the Office of Scientific and Technical Information to Receive Classified Matter ☐ Require a COMSEC Account ☐ Be Authorized to Use the Defense Courier Service	

13. Classification Guidance The classification guidance needed for this classified effort is identified below. NOTE: Guidance which is in itself classified should be referenced here and provided under separate cover. CG-SS-5, Classification and UCNI Guide for Safeguards and Security Information, (July 22, 2016 or successor document) or contact the EMCBC Classification Officer at 303-236-3637 for further guidance.		
14. Security Requirements Security requirements are established for this contract and are identified in the following contract clauses. ☒ DEAR 952.204-2 Security Requirements ☐ DEAR 952.204-70 Classification/Declassification ☒ DEAR 952.204-73 Facility Clearance (Solicitation) ☐ DEAR 970.5204.1 Counterintelligence (for management contracts ONLY)		
15. Surveys DOE Surveying Office is <u>DOE-SR</u> Elements of this contract are outside the survey responsibility of the Cognizant Security Office and/or the Surveying Office. ☐ No ☒ Yes (Identify specific areas and provide explanation/justification for each) Los Alamos National Laboratory (LANL) security is provided through the National Nuclear Security Administration contractors. Some of the security measures will be under NNSA control and survey requirements and not under the oversight of this contract.		
16. Certification and Signature. Security requirements stated herein are complete and adequate for safeguarding the classified information to be released or generated under this classified contract. All questions shall be referred to the official named below.		
a. Typed Name of Procurement Request Originator David S. Rhodes	b. Title and Organization Director, EM-LA Office of Quality and Regulatory Compliance	c. Telephone (include Area Code) 505-665-5325
d. Address (include Zip Code) U.S. Department of Energy Environmental Management Los Alamos Field Office 1900 Diamond Drive, MS-M982 Los Alamos, NM 87544	 Signature <u>David S. Rhodes</u> Digitally signed by David S. Rhodes Date: 2017.12.13 12:03:59 -0700 Date <u>12/13/2017</u>	
17. Typed Name of Contracting Official Kimberly A. Tate, Contracting Officer	 Signature <u>Kimberly A. Tate</u> Date <u>12/19/17</u>	
18. Other Approvals a. Typed Name of Classification Officer (Approval of Block 13) Jill McLaughlin, EMCBC Classification Officer b. Typed Name of Special Security Officer, Office of Intelligence & Counterintelligence (Approval of Block 11 (SCI)) N/A	 Signature <u>Jill McLaughlin</u> Date <u>12/15/17</u> Signature _____ Date _____	
19a. Typed Name of Local Security Officer Douglas E. Hintze	 Signature <u>Douglas E. Hintze</u> Digitally signed by DOUGLAS HINTZE Date: 2017.12.18 10:22:07 -0700 Date <u>18 Dec 2017</u>	
20. Required Distribution ☐ Contractor ☐ Subcontractor ☐ Cognizant Security Office ☐ Administering Contracting Officer ☐ Surveying Office if Different than Cognizant Security Office ☐ Others, as Necessary		
21. General Comments: 		

9. Actual Place of Performance (DOE Facilities)		
a. Facility Code	b. Name, Address, and Zip Code	c. Cognizant Security Office (Name, Address, and Zip Code)
a. Facility Code	b. Name, Address, and Zip Code	c. Cognizant Security Office (Name, Address, and Zip Code)
a. Facility Code	b. Name, Address, and Zip Code	c. Cognizant Security Office (Name, Address, and Zip Code)

9. Actual Place of Performance (NON-DOE Facilities)		
a. ID Code	b. Name, Address, and Zip Code	c. Cognizant Security Office (Name, Address, and Zip Code)
a. ID Code	b. Name, Address, and Zip Code	c. Cognizant Security Office (Name, Address, and Zip Code)
a. ID Code	b. Name, Address, and Zip Code	c. Cognizant Security Office (Name, Address, and Zip Code)

For value received, and in consideration of, and to induce the United States (the Government) to enter into Contract No. 89303318CEM000007 for the Los Alamos Legacy Cleanup Contract (Contract) dated 12/19/17, by and between the Government and Newport News Nuclear BWXT-Los Alamos, LLC (contractor), the undersigned, Stoller Newport News Nuclear, Inc. (Guarantor), a corporation incorporated in the State of Delaware with its principal place of business at 105 Technology Dr, Suite 190, Broomfield, CO, 80021 hereby unconditionally guarantees to the Government (a) the full and prompt payment and performance of all obligations, accrued and executory, which contractor presently or hereafter may have to the Government under the contract; and (b) the full and prompt payment and performance by contractor of all obligations and liabilities of contractor to the Government, fixed or contingent, due or to become due, direct or indirect, now existing or hereafter and howsoever arising or incurred under the contract, and (c) Guarantor further agrees to indemnify the Government against any losses the Government may sustain and expenses it may incur as a result of the enforcement or attempted enforcement by the Government of any of its rights and remedies under the contract, in the event of a default by contractor hereunder, and/or as a result of the enforcement or attempted enforcement by the Government of any of its rights against Guarantor hereunder.

Guarantor has read and consents to the signing of the contract. Guarantor further agrees that contractor shall have the full right, without any notice to or consent from Guarantor, to make any and all modifications or amendments to the contract without affecting, impairing, or discharging, in whole or in part, the liability of Guarantor hereunder.

Guarantor hereby expressly waives all defenses which might constitute a legal or equitable discharge of a surety or guarantor, and agrees that this Performance Guarantee Agreement shall be valid and unconditionally binding upon Guarantor regardless of: (i) the reorganization, merger, or consolidation of contractor into or with another entity, corporate or otherwise, or the liquidation or dissolution of contractor, or the sale or other disposition of all or substantially all of the capital stock, business or assets of contractor to any other person or party; or (ii) the institution of any bankruptcy, reorganization, insolvency, debt agreement, or receivership proceedings by or against contractor, or adjudication of contractor as a bankrupt; or (iii) the assertion by the Government against the contractor of any of the Government's rights and remedies provided for under the contract, including any modifications or amendments thereto, or under any other document(s) or instrument(s) executed by contractor, or existing in the Government's favor in law, equity, or bankruptcy.

Guarantor further agrees that its liability under this Performance Guarantee Agreement shall be continuing, absolute, primary, and direct, and that the Government shall not be required to pursue any right or remedy it may have against contractor or other Guarantors under the contract, or any modifications or amendments thereto, or any other document(s) or instrument(s) executed by contractor, or otherwise. Guarantor affirms that the Government shall not be required to first commence any action or obtain any judgment against contractor before enforcing this Performance Guarantee Agreement against Guarantor, and that Guarantor will, upon demand, pay the Government any amount, the payment of which is guaranteed hereunder and the payment of which by contractor is in default under the contract or under any other

document(s) or instrument(s) executed by contractor as aforesaid, and that Guarantor will, upon demand, perform all other obligations of contractor, the performance of which by contractor is guaranteed hereunder. Guarantor agrees to ensure that it shall cause this Performance Guarantee Agreement to be unconditionally binding upon any successor(s) to its interests regardless of: (i) the reorganization, merger, or consolidation of Guarantor into or with another entity, corporate or otherwise, or the liquidation or dissolution of Guarantor, or the sale or other disposition of all or substantially all of the capital stock, business, or assets of Guarantor to any other person or party; or (ii) the institution of any bankruptcy, reorganization, insolvency, debt agreement, or receivership proceedings by or against Guarantor, or adjudication of Guarantor as a bankrupt.

Guarantor further warrants and represents to the Government that the execution and delivery of this Performance Guarantee Agreement is not in contravention of Guarantor's Articles of Organization, Charter, bylaws, and applicable law; that the execution and delivery of this Performance Guarantee Agreement, and the performance thereof, has been duly authorized by the Guarantor's Board of Directors, Trustees, or any other management board which is required to participate in such decisions; and that the execution, delivery, and performance of this Performance Guarantee Agreement will not result in a breach of, or constitute a default under, any loan agreement, indenture, or contract to which Guarantor is a party or by or under which it is bound.

No express or implied provision, warranty, representation or term of this Performance Guarantee Agreement is intended, or is to be construed, to confer upon any third person(s) any rights or remedies whatsoever, except as expressly provided in this Performance Guarantee Agreement.

In witness thereof, Guarantor has caused this Performance Guarantee Agreement to be executed by its duly authorized officer, and its corporate seal to be affixed hereto on

November 30, 2016
Date

Stoller Newport News Nuclear, Inc.

Name of Corporation

Name and Position of Official Executing Performance Guarantee Agreement on Behalf of
Guarantor: D. R. Wvatt Treasurer,

D. R. Wvatt

Performance Guarantee Agreement on Behalf of

Attestation Including Application of Seal by an Official of Guarantor Authorized to Affix
Corporate Seal

Betty S. Quinn

Attestation Including
Corporate Seal

For value received, and in consideration of, and to induce the United States (the Government) to enter into Contract No. 89303318CEM000007 for the Los Alamos Legacy Cleanup Contract (Contract) dated 12/19/17, by and between the Government and Newport News Nuclear BWXT-Los Alamos, LLC (contractor), the undersigned, BWXT Technical Services Group, Inc. (Guarantor), a corporation incorporated in the State of Delaware with its principal place of business at 2016 Mt. Athos Road Lynchburg, VA 24504 hereby unconditionally guarantees to the Government (a) the full and prompt payment and performance of all obligations, accrued and executory, which contractor presently or hereafter may have to the Government under the contract; and (b) the full and prompt payment and performance by contractor of all obligations and liabilities of contractor to the Government, fixed or contingent, due or to become due, direct or indirect, now existing or hereafter and howsoever arising or incurred under the contract, and (c) Guarantor further agrees to indemnify the Government against any losses the Government may sustain and expenses it may incur as a result of the enforcement or attempted enforcement by the Government of any of its rights and remedies under the contract, in the event of a default by contractor hereunder, and/or as a result of the enforcement or attempted enforcement by the Government of any of its rights against Guarantor hereunder.

Guarantor has read and consents to the signing of the contract. Guarantor further agrees that contractor shall have the full right, without any notice to or consent from Guarantor, to make any and all modifications or amendments to the contract without affecting, impairing, or discharging, in whole or in part, the liability of Guarantor hereunder.

Guarantor hereby expressly waives all defenses which might constitute a legal or equitable discharge of a surety or guarantor, and agrees that this Performance Guarantee Agreement shall be valid and unconditionally binding upon Guarantor regardless of: (i) the reorganization, merger, or consolidation of contractor into or with another entity, corporate or otherwise, or the liquidation or dissolution of contractor, or the sale or other disposition of all or substantially all of the capital stock, business or assets of contractor to any other person or party; or (ii) the institution of any bankruptcy, reorganization, insolvency, debt agreement, or receivership proceedings by or against contractor, or adjudication of contractor as a bankrupt; or (iii) the assertion by the Government against the contractor of any of the Government's rights and remedies provided for under the contract, including any modifications or amendments thereto, or under any other document(s) or instrument(s) executed by contractor, or existing in the Government's favor in law, equity, or bankruptcy.

Guarantor further agrees that its liability under this Performance Guarantee Agreement shall be continuing, absolute, primary, and direct, and that the Government shall not be required to pursue any right or remedy it may have against contractor or other Guarantors under the contract, or any modifications or amendments thereto, or any other document(s) or instrument(s) executed by contractor, or otherwise. Guarantor affirms that the Government shall not be required to first commence any action or obtain any judgment against contractor before enforcing this Performance Guarantee Agreement against Guarantor, and that Guarantor will, upon demand, pay the Government any amount, the payment of

which is guaranteed hereunder and the payment of which by contractor is in default under the contract or under any other document(s) or instrument(s) executed by contractor as aforesaid, and that Guarantor will, upon demand, perform all other obligations of contractor, the performance of which by contractor is guaranteed hereunder.

Guarantor agrees to ensure that it shall cause this Performance Guarantee Agreement to be unconditionally binding upon any successor(s) to its interests regardless of: (i) the reorganization, merger, or consolidation of Guarantor into or with another entity, corporate or otherwise, or the liquidation or dissolution of Guarantor, or the sale or other disposition of all or substantially all of the capital stock, business, or assets of Guarantor to any other person or party; or (ii) the institution of any bankruptcy, reorganization, insolvency, debt agreement, or receivership proceedings by or against Guarantor, or adjudication of Guarantor as a bankrupt.

Guarantor further warrants and represents to the Government that the execution and delivery of this Performance Guarantee Agreement is not in contravention of Guarantor's Articles of Organization, Charter, bylaws, and applicable law; that the execution and delivery of this Performance Guarantee Agreement, and the performance thereof, has been duly authorized by the Guarantor's Board of Directors, Trustees, or any other management board which is required to participate in such decisions; and that the execution, delivery, and performance of this Performance Guarantee Agreement will not result in a breach of, or constitute a default under, any loan agreement, indenture, or contract to which Guarantor is a party or by or under which it is bound.

No express or implied provision, warranty, representation or term of this Performance Guarantee Agreement is intended, or is to be construed, to confer upon any third person(s) any rights or remedies whatsoever, except as expressly provided in this Performance Guarantee Agreement.

In witness thereof, Guarantor has caused this Performance Guarantee Agreement to be executed by its duly authorized officer, and its corporate seal to be affixed hereto on

December 6, 2016

Date

BWXT Technical Services Group, Inc.

Name of Corporation

Signature, Name, and Position of Official Executing Performance Guarantee Agreement on
Behalf of Guarantor- Rich J. Rademacher, Assistant Treasurer

Richard V. [Signature] Secretary

Attestation Including Application of Seal by an Official of Guarantor Authorized to Affix Corporate Seal