

SOLICITATION, OFFER AND AWARD 1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 700) RATING PAGE OF PAGES 1 446

2. CONTRACT NUMBER DE-AC30-10CC40020 3. SOLICITATION NUMBER DE-RP30-09CC40020 4. TYPE OF SOLICITATION SEALED BID (IFB) NEGOTIATED (RFP) 5. DATE ISSUED See Block 28 6. REQUISITION/PURCHASE NUMBER

7. ISSUED BY U.S. Department of Energy Environmental Management Consolidated Business Center 250 E. 5th Street, Suite 500 Cincinnati, OH 45202 CODE 8. ADDRESS OFFER TO (If other than Item 7) U.S. Department of Energy Paducah Source Evaluation Board (SEB) Office, Suite B Attn: William Hensley, Contracting Officer 175 Tri County Parkway, Springdale OH 45246

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

SOLICITATION

9. Sealed offers in original and See L.2 copies for furnishing the supplies or services in the Schedule will be received at the place specified in Item 8, or if handcarried, in the depository located in See L.6 until 4:00pm local time See L.6 (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 William Hensley, Contracting Officer B. TELEPHONE (NO COLLECT CALLS) AREA CODE NUMBER EXT. 513 246-0061 C. E-MAIL ADDRESS bill.hensley@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 360 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 10 CALENDAR DAYS (%) 20 CALENDAR DAYS (%) 30 CALENDAR DAYS (%) Net 30 Days CALENDAR DAYS (%)

14. ACKNOWLEDGMENT 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
001, dated 02/09/09		003, dated 03/06/09	005, dated 05/05/09
002, dated 02/27/09		004, dated 03/19/09	006, dated 12/17/09

15A. NAME AND ADDRESS OF OFFEROR: CODE 5CFU7 FACILITY LATA Environmental Services of Kentucky, LLC 2424 Louisiana Blvd NE, Suite 400 Albuquerque, NM 87110 16. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER (Type or print) Robert J. Kingsbury President, Member

15B. TELEPHONE NUMBER AREA CODE NUMBER EXT. 505 884-3800 15C. CHECK IF REMITTANCE ADDRESS IS DIFFERENT FROM ABOVE - ENTER SUCH ADDRESS IN SCHEDULE. 17. SIGNATURE [Signature] 18. OFFER DATE January 20, 2010

AWARD (To be completed by Government)

19. ACCEPTED AS TO ITEMS NUMBERED 001 20. AMOUNT \$268,503,631 21. ACCOUNTING AND APPROPRIATION See Section B

22. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION: 10 U.S.C. 2304(d) () 41 U.S.C. 253(e) () 23. SUBMIT INVOICES TO ADDRESS SHOWN IN 4 copies unless otherwise ITEM 24

24. ADMINISTERED BY (If other than Item 7) CODE See Section G 25. PAYMENT WILL BE MADE BY CODE See Section G

26. NAME OF CONTRACTING OFFICER (Type or print) William Hensley 27. UNITED STATES OF AMERICA [Signature] 28. AWARD DATE APR 22 2010

**PART I – THE SCHEDULE
SECTION B
SUPPLIES OR SERVICES AND PRICES/COSTS
REVISION 42
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B.1 TYPE OF CONTRACT – ITEMS BEING ACQUIRED

This is a cost-plus-award-fee (CPAF) type contract for the environmental remediation of the Paducah Gaseous Diffusion Plant Site. The Contractor shall furnish all personnel, facilities, equipment, material, supplies, and services (except as may be expressly set forth in this contract as furnished by the Government) and otherwise do all things necessary for, or incident to, the performance and provision of the following items in Section C, Performance Work Statement (PWS):

Item 001 – Environmental Remediation – See Section C Performance Work Statement. The period of performance is for five years from the date the Contractor completes transition and assumes full responsibility for the PWS.

Item 002 – Option Item to support the Transition of De-leased Facilities – See Section C Performance Work Statement (Section C.1.3.5.b)).

Item 003 – Option Item to provide Surveillance and Maintenance (S&M) of De-leased Facilities – See Section C Performance Work Statement (Section C.1.3.5.c)).

Item 004 American Recovery and Reinvestment Act – See Section C Performance Work Statement. (Mod 002)

B.2 ESTIMATED COST, BASE, AND AWARD FEE

- (a) Pursuant to the FAR clause 52.216-7, entitled "Allowable Cost and Payment," the total estimated cost of this contract for Item 001 and CLIN 004 is \$432,277,414.04

This amount includes:

- (1) Estimated cost for the contract transition period (as defined in B.3) of \$2,381,770.00; and

(2) Estimated cost for Environmental Remediation, including Cost Growth (2(a)) (not including contract transition period (1) or contract closeout) of \$426,951,530.04.

(a) The Total Estimated Cost for Environmental Remediation (not including contract transition period (1) or contract closeout) is specified as follows:

\$318,510,213.17 in Total Fee Bearing Cost

\$0.00 in Total Non-Fee Bearing Cost (No previously negotiated Non-Fee Bearing Cost)

\$318,510,213.17 Total Estimated Cost without Contractor Overrun

\$63,628,828 in Total Incurred Cost Overrun

\$44,812,488 in Total Anticipated Cost Overrun

\$426,951,530.04 Estimated Cost

(a) The Total Fee Bearing Cost is defined as the estimated cost to complete the contract requirements, as initially awarded, plus previously negotiated fee-bearing changes, e.g. additions or deletions.

(b) The Total Non-Fee Bearing Cost is defined as the estimated cost to complete the contract requirements, as initially awarded, plus previously negotiated non-fee-bearing changes.

(c) The Total Estimated Cost without Contractor Overrun is defined as the estimated cost to complete the contract requirements, as initially awarded, plus previously negotiated fee bearing and non-fee bearing changes.

(d) The Total Incurred Cost Overrun is defined as the additional incurred cost **caused by the contractor** required to complete the contract requirements, that is **NOT** attributable to previously negotiated fee-bearing changes or non-fee bearing, e.g. DOE additions or deletions.

(e) The Total Anticipated Cost Overrun is defined as the estimated anticipated additional cost **caused by the contractor** required to complete the contract requirements, that is **NOT** attributable to previously negotiated fee-bearing changes or non-fee bearing, e.g. DOE additions or deletions.

(f) As this is a cost reimbursement contract, DOE agrees to reimburse the contractor for reasonable; allowable and allocable costs the contractor incurs in the performance of the contract work scope. **However, the contractor agrees to make its best efforts to complete the contract work scope within Total Estimated Cost without contract overrun and the contractor's cost performance will be evaluated on this basis.**

- (b) No fee is payable for the contract transition period.
- (c) The base fee is \$6,338,266.00, (Approximately 2% of the total estimated cost in B.2.(a)(2)).
- (d) The award fee for this contract line item shall be awarded upon the unilateral determination of DOE's fee determination official (FDO) that an award fee has been earned. The unilateral decision is made solely at the discretion of the Government. This determination shall be based upon the FDO's evaluation of the Contractor's performance, as measured against the evaluation criteria set forth in the award fee plan. Provisional payment of a proportional quarterly amount equivalent of an amount up to 75% of the available award fee for the period may be permitted.
- (e) Immediately upon the FDO's final determination of the award fee for the evaluation period, the Contractor may invoice any fee amount not previously paid or must repay any excess amount paid.

Any unearned award fee from each evaluation period shall not be eligible to be earned in any future period(s). The total available award fee for this contract line item is \$13,369,929.00 (not more than 5.5% of the total estimated cost in B.2.(a)(2)). Award fee available for each period is as set forth in the award fee plan. The Contractor and Government will enter into good faith negotiations to revise the fee pool if significant changes to the work scope occur.

- (f) Fixed Fee associated with Definitizations \$1,181,560.68.

B.3 AUTHORIZATION OF TRANSITION COSTS UNDER THE CONTRACT

- (a) Contract transition is a ninety (90) day period of time prior to the date the Contractor assumes full responsibility for the PWS. During the contract transition period, the Contractor shall perform those activities necessary to be prepared to assume full responsibility for the contract requirements. The Contractor shall also bring to the site its management team and other staff necessary to plan and conduct those activities that provide for an orderly transfer of responsibilities and accountability. The Contractor shall coordinate its activities with DOE and the incumbent Contractor so as to accomplish these activities in a manner that will provide an effective transition of personnel and work activities while minimizing the cost of this effort.
- (b) The Contractor shall put in place any agreements it deems necessary between it and other site contractors/subcontractors for provision of services. Any agreement that requires DOE consent will be subject to a 30-day review and approval period. The Contractor shall obtain all necessary permits and licenses. Available government furnished facilities, property, services and items are identified in Section H and Section J.
- (c) All contract transition costs shall be included in the total estimated cost of this contract

B.4 OPTION FOR ADDITIONAL SERVICES

- (a) The Government may require the delivery of the numbered line items, identified in the Schedule as an Option Item, to support the transition of the Gaseous Diffusion Plant (GDP) to Decontamination and Decommissioning (D&D) during performance of this contract at the prices stated in the Schedule. The Contracting Officer may exercise the option items by written notice to the Contractor at any time during the basic term of the contract in Section F.2(a).

- (1) ITEM 002 (Transition of De-leased Facilities) – Option Item to support the implementation of the GDP transition plan to D&D as defined in Section C.1.3.5.b):
- (i) The total estimated cost for Option Item 002, to support the implementation of the GDP transition plan to D&D is \$3,000,000.00.
 - (ii) The base fee is \$60,000.00 (2% of the total estimated cost in B.4.(a)(1)(i)).
 - (iii) The award fee for this contract line item shall be awarded upon the unilateral determination of DOE's fee determination official (FDO) that an award fee has been earned. The unilateral decision is made solely at the discretion of the Government. This determination shall be based upon the FDO's evaluation of the Contractor's performance, as measured against the evaluation criteria set forth in the award fee plan. Provisional payment of a proportional quarterly amount equivalent of an amount up to 75% of the available award fee for the period may be permitted.
 - (iv) Immediately upon the FDO's final determination of the award fee for the evaluation period, the Contractor may invoice any fee amount not previously paid or must repay any excess amount paid. Any unearned award fee from each evaluation period shall not be eligible to be earned in any future period(s). The total available award fee for this contract line item is \$165,000.00 (not more than 8% of the total estimated cost in B.4.(a)(1)(i)). Award fee available for each period is as set forth in the award fee plan. The Contractor and Government will enter into good faith negotiations to revise the fee pool if significant changes to the work scope occur.
 - (v) The total estimated cost/fee will be based on a monthly basis with an estimated quantity of twenty-four (24) months. The Government will determine the estimated number of months at the time the option is exercised. The following is a breakdown of the estimated unit cost, total estimated cost, base fee and award fee by month/evaluation period:

Description	Unit of Measure	Estimated Quantity	Estimated Unit Cost	Total Estimated Cost/Fee

Item 002 – Support Transition of De-leased GDP Facilities – Section C.1.3.5.b).	Month	24	\$134,375	\$3,225,000
Item 002 – Estimated Unit Cost/Total Estimated Cost/Fee Breakdown				
Monthly Estimated Cost			\$125,000	
Contractor Monthly Estimated Markup Cost			\$0	
Total/Monthly Estimated Cost – Section B.4.(a)(1)(i)		24	\$125,000	\$3,000,000
Total/Monthly Base Fee – Section B.4.(a)(1)(ii)		24	\$2,500	\$60,000
Total/Monthly Award Fee – Section B.4.(a)(1)(iv)		24	\$6,875	\$165,000
Estimated Unit Cost			\$134,375	

(2) ITEM 003 (S&M of De-leased Facilities) – Option Item for surveillance and maintenance of GDP facilities as defined in Section C.1.3.5.c):

(i) The total estimated cost of Option Item 003 is \$12,600,000.

(ii) The base fee is \$252,000 (2% of the total estimated cost in B.4.(a)(2)(i)).

(iii) The award fee for this contract line item shall be awarded upon the unilateral determination of DOE's fee determination official (FDO) that an award fee has been earned. The unilateral decision is made solely at the discretion of the Government. This determination shall be based upon the FDO's evaluation of the Contractor's performance, as measured against the evaluation criteria set forth in the award fee plan. Provisional payment of a proportional

quarterly amount equivalent of an amount up to 75% of the available award fee for the period may be permitted.

- (iv) Immediately upon the FDO's final determination of the award fee for the evaluation period, the Contractor may invoice any fee amount not previously paid or must repay any excess amount paid. Any unearned award fee from each evaluation period shall not be eligible to be earned in any future period(s). The total available award fee for this contract line item is \$693,000 (not more than 8% of the total estimated cost in B.4.(a)(2)(i)). Award fee available for each period is as set forth in the award fee plan. The Contractor and Government will enter into good faith negotiations to revise the fee pool if significant changes to the work scope occur.
- (v) The total estimated cost/fee will be based on a monthly basis with an estimated quantity of twelve (12) months. The Government will determine the estimated number of month(s) at the time the option is exercised. The following is a breakdown of the estimated unit cost, total estimated cost, base fee and award fee by month/evaluation period:

Description	Unit of Measure	Estimated Quantity	Estimated Unit Cost	Total Estimated Cost
Item 003 - S&M of De-leased GDP Facilities – Section C.1.3.5.c).	Month	12	\$1,128,750	\$13,545,000
Item 003 – Estimated Unit Cost/Total Estimated Cost/Fee Breakdown				
Monthly Estimated Cost			\$1,050,000	
Contractor Monthly Estimated Markup Cost			\$0	

Total Estimated Monthly Cost – Section B.4.(a)(2)(i)		12	\$1,050,000	\$12,600,000
Total/Monthly Base Fee – Section B.4.(a)(2)(ii)		12	\$21,000	\$252,000
Total/Monthly Award Fee – Section B.4.(a)(2)(iv)		12	\$57,750	\$693,000
Estimated Unit Cost			\$1,128,750	

B.5 OBLIGATION OF FUNDS

- (a) Pursuant to the clause in Section I, FAR 52.232-22 entitled "Limitation of Funds," total funds in the amount of \$351,693,987.83 are obligated herewith and made available for payment of allowable costs and maximum fee to be incurred from the effective date of this contract through the period estimated to end July 21, 2015.
- (b) In addition to the limitations provided for in this clause, DOE may, through financial plans or other directives issued to the Contractor, establish controls on the costs to be incurred and encumbrances to be made in the performance of the contract work. Such plans and directives may be amended or supplemented from time to time by DOE. The Contractor agrees: (1) To comply with the specific limitations (ceilings on costs and encumbrances) set forth in such plans and directives; (2) To comply with other requirements of such plans and directives; and (3) To notify DOE promptly, in writing, whenever it has reason to believe that any limitation on costs and encumbrances will be exceeded or substantially underrun.

B.6 ACCOUNTING AND APPROPRIATION DATA

3. All other terms and conditions not expressly modified by this modification remain unchanged.

**SECTION C – PADUCAH ENVIRONMENTAL REMEDIATION
PERFORMANCE WORK STATEMENT
Revision 2-3**

Style Definition: Heading 1: Font color: Red

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Acronyms

ACO	Administrative Consent Order
AEA	Atomic Energy Act
ARRA	American Recovery and Reinvestment Act
BGOU	Burial Grounds Operable Unit
CAAS	Criticality Accident Alarm System
CAB	Citizens Advisory Board
CD	Critical Decision
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CO	Contracting Officer
CSA	Cognizant Security Authority
CSCS	Contract Security Classification Specification
CSOU	Comprehensive Site-Wide Operable Unit
D1	First Draft to Regulators (See Federal Facility Agreement)
D2	Second Draft Responding to Regulatory Comments (See Federal Facility Agreement)
D&D	Decontamination and Decommissioning
D&DOU	Decontamination and Decommissioning Operable Unit
DMSAs	Department of Energy Material Storage Areas
DNAPL	Dense Non-Aqueous Phase Liquid
DOE	United States Department of Energy
DOECAP	Department of Energy Consolidated Audit Program
DUF ₆	Depleted Uranium Hexafluoride
EALs	Emergency Action Levels
EE/CA	Engineering Evaluation/Cost Analysis
EPA	United States Environmental Protection Agency
ERAP	Emergency Readiness Assurance Plan
ERH	Electrical Resistance Heating
ES&H	Environment, Safety and Health
FCC	Federal Communications Commission
FFA	Federal Facility Agreement
FIMS	Facilities Information Management System
FOIA	Freedom of Information Act
FS	Feasibility Study
FY	Fiscal Year
GDP	Gaseous Diffusion Plant
GIS	Geographical Information System
GWOU	Groundwater Operable Unit
HW	Hazardous Waste
ISMS	Integrated Safety Management System
KRCEE	Kentucky Research Consortium for Energy and Environment
LAN	Local Area Network

C-i

LEED	Leadership in Energy and Environmental Design
LLW	Low-Level Waste
LTS	Long-Term Stewardship
LUCIP	Land Use Control Implementation Plan
µg/kg	Micrograms Per Kilogram
µg/l	Micrograms Per Liter
MLLW	Mixed Low-Level Waste
MTRU	Mixed Transuranic Waste
MOA	Memorandum of Agreement
NCS	Nuclear Criticality Safety
NEPA	National Environmental Policy Act
NMC&A	Nuclear Materials Control and Accountability
NOV	Notice of Violation
NRC	Nuclear Regulatory Commission
NSDD	North/South Diversion Ditch
OECM	Office of Engineering and Construction Management
OPSEC	Operations Security
OREIS	Oak Ridge Environmental Information System
OSF	other structures and facilities
OSHA	Occupational Safety and Health Administration
OU	Operable Unit
OUO	Official Use Only
O&M	Operations and Maintenance
PBS	Performance Baseline Summary
PC	Personal Computer
PCBs	Polychlorinated Biphenyls
PEMS	Project Environmental Management System
PGDP	Paducah Gaseous Diffusion Plant
PIDS	Property Information Database System
PNAD	Personal Nuclear Accident Dosimeter
PPE	Personal Protective Equipment
PPL	Personal Property Letter
PPPO	Portsmouth/Paducah Project Office
PRA	Probabilistic Risk Analysis
PRAP	Proposed Remedial Action Plan
PWS	Performance Work Statement
QAP	Quality Assurance Plan
RACR	Removal Action Completion Report or Remedial Action Completion Report
RAR	Removal Action Report or Remedial Action Report
RAWP	Removal Action Work Plan or Remedial Action Work Plan
RCRA	Resource Conservation and Recovery Act
RDR	Remedial Design Report
RDSI	Remedial Design Support Investigation
RDWP	Remedial Design Work Plan
RI	Remedial Investigation
RI/FS	Remedial Investigation/Feasibility Study

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ROD	Record of Decision
S&M	Surveillance and Maintenance
SER	Site Evaluation Report
SI/RA	Site Investigation/Remedial Action
SMP	Site Management Plan
SOU	Soils Operable Unit
SSCs	Systems, Structures and Components
STP	Site Treatment Plan
SWMU	Solid Waste Management Unit
SWOU	Surface Water Operable Unit
⁹⁹ Tc	Technetium-99
TCE	Trichloroethene
TEAM	Transformation Energy Action Management
TLD	Thermoluminescent Dosimeter
TRU	Transuranic
TSCA	Toxic Substances Control Act
TSDF	Treatment, Storage, and Disposal Facility
UCNI	Unclassified Controlled Nuclear Information
UDS	Uranium Disposition Services, LLC
UE	Uranium Enrichment
UF ₄	Uranium Tetrafluoride
UF ₆	Uranium Hexafluoride
USEC	United States Enrichment Corporation
UST	Underground Storage Tank
VOC	Volatile Organic Compounds
WAN	Wide Area Network
WP	Work Plan

Note: Other definitions include:

DUF ₆ Contractor	Department of Energy contractor responsible for management and operation of the DUF ₆ conversion facility at the Paducah site
Infrastructure Contractor	Department of Energy contractor responsible for Paducah site infrastructure services.

SECTION C – PADUCAH ENVIRONMENTAL REMEDIATION PERFORMANCE WORK STATEMENT (PWS)

Paducah Environmental Remediation Project

Introduction

The Paducah Gaseous Diffusion Plant (PGDP or Paducah Site) is located on a Federal reservation in Western Kentucky, approximately 10 miles west of Paducah, Kentucky, and 3.5 miles south of the Ohio River. The plant is sited on 3,556 acres divided as follows:

- 748-acres within a fenced security area;
- Approximately 822 acres of uninhabited buffer zone surrounding the plant area; and
- 1,986 acres licensed to the Kentucky Department of Fish and Wildlife as part of the West Kentucky Wildlife Management Area.

Bordering the Paducah Site to the northeast, between the plant and the Ohio River, is the Tennessee Valley Authority Reservation where the Shawnee Steam Plant is located.

The PGDP is a Government owned uranium enrichment plant that was constructed in the early 1950's and operated by the Department of Energy (DOE) and its predecessor agencies for the purpose of manufacturing enriched uranium for the fabrication of fuel assemblies to support commercial and military nuclear reactors and to support weapons development activities. The PGDP is still in use and is currently leased and operated by the United States Enrichment Corporation (USEC).

The uranium enrichment program utilizing the gaseous diffusion process resulted in various wastes and contaminants, including those regulated under the Resource Conservation and Recovery Act (RCRA), the Toxic Substances Control Act (TSCA), and the Atomic Energy Act (AEA) such as construction debris; sanitary waste; Hazardous Waste (HW); radioactive Low-Level Waste (LLW); Mixed Low-Level Waste (MLLW); Transuranic Waste (TRU); and Mixed TRU (MTRU) Waste. Many of these wastes were stockpiled or disposed on-site, which resulted in the site being placed on the National Priorities List in 1994. The most significant contaminants are Trichloroethene (TCE) and Polychlorinated Biphenyls (PCBs). Approximately 575 Solid Waste Management Units (SWMUs) have been identified and details may be found in the Paducah Federal Facility Agreement Site Management Plan and the RCRA Permit. (See also reference PPPO-02-297-07, Notification of Soil and Rubble Areas at the Paducah Gaseous Diffusion Plant, February 16, 2007.)

The approach to site cleanup is outlined in the Paducah Federal Facility Agreement (FFA), where the cleanup is divided into Operable Units (OUs). These OUs are the Comprehensive Site-Wide OU (CSOU), the Decontamination and Decommissioning OU

(D&DOU), the Groundwater OU (GWOU), the Surface Water OU (SWOU), the Soils OU (SOU), and the Burial Grounds OU (BGOU).

Contract Purpose and Scope

The primary objectives of this contract are to remediate and disposition of specific areas on the site, perform facility D&D, and operate the site waste storage facilities to include waste disposition. This contract reflects the application of performance-based contracting approaches and techniques that emphasize results/outcomes and minimize "how to" performance descriptions. The Remediation Contractor, herein referred to as the Contractor, has the responsibility for total performance under this contract, including determining the specific methods for accomplishing the work. However, the Contractor is required to comply with all applicable Federal, State, and local laws and regulations, Executive Orders, DOE Orders (and other types of Directives), Regulatory Permits, Agreements and Orders and Milestones with the regulators (both State and Federal) (See Section J, Attachments J1 and J2). The Contractor shall provide all deliverables to DOE in accordance with Section J, Attachment J4 "Paducah List of Deliverables." These deliverables shall not be separately priced. Failure by the Contractor to perform scope adequately, meet regulatory milestones or provide documents of sufficient quality on the first draft may result in negative Contractor performance rating and further action by the Contracting Officer (CO) as allowed for by Section B and other provisions of this contract.

The following sections describe the scope of work. This includes Groundwater Environmental Actions (C.1.1), Material Disposition (C.1.2), Facilities Disposition (includes American Recovery and Reinvestment Act (ARRA) scope)(C.1.3), Soils Operable Unit (C.1.4), Surface Water Remediation (C.1.5), Waste Disposition Options Project (C.1.6), Polychlorinated Biphenyl Activities (C.1.7), Environmental Monitoring and Reporting (C.1.8), Burial Ground Operable Unit (C.1.9), and Project Support (C.1.10). The Contractor is responsible for implementation of the overall OU strategy in accordance with the Site Management Plan (SMP) and the Paducah FFA. Regulatory milestone dates reflect agreement among DOE and the regulators [i.e., the Kentucky Environmental and Public Protection Cabinet (Kentucky) and the United States Environmental Protection Agency Region 4 (EPA)]. While the Contractor has the flexibility to implement a project structure and to sequence the work to optimize the project schedule to achieve safe, cost-effective work/cleanup of the site, the Contractor shall meet all regulatory milestone dates. The Contractor is expected to seek ways to reduce cost through negotiated agreements with the regulators and innovative approaches to site clean-up and waste minimization. No negotiation or agreement shall be made without DOE notification and consent. There may be additional Paducah remediation work identified during performance of this contract which may be considered to be within the scope of this contract as determined by the Contracting Officer.

General End State Requirements

The Contractor shall perform all activities, including all PWS requirements, to:

- a) 1) Complete C-400 Phase I operations, including post-operations sampling, installation, and operation of Phase IIa selected remedial system; removal of and site restoration associated with Phase IIa borings, including waste disposition; and installation of the Phase IIb selected remedial ~~steam treatability study~~ system. 2) Investigate potential sources of groundwater contamination and identify mitigation strategies consistent with CERCLA decisions, building upon existing documentation and data collected. 3) Remediate the Southwest Plume sources in accordance with the ROD through completion of soil mixing activities for SWMU 1, including submittal of the RACR, and design and construction start for the selected source term removal system conducting "additional work" sampling at SWMU 211 A&B. 4) Complete Support Northeast Plume Optimization activities and site restoration. (Section C.1.1)
- b) Disposition all waste, before contract completion, including all TRU/MTRU waste and waste generated prior to 90 days before contract completion. (Section C.1.2)
- c) Properly service all facilities. The Inactive Facilities C-615-T01-T05, C-720-N, the C-340 Complex and the C-410/420 Complex shall be demolished or decommissioned; the remaining identified facilities shall undergo surveillance and maintenance. (Section C.1.3)
- d) Submit a D1 Remedial Investigation Report for Soils Operable Unit and a Removal Action Completion Report for Soils Inactive Facilities. (Section C.1.4)
- e) Complete the Removal Action and obtain approval of a Removal Action Completion Report for effluent ditches and storm sewers (on-site). Submit an RI Work Plan for the effluent ditches and site creeks (off-site). (Section C.1.5)
- f) Complete and initiate implementation of a ROD for the Waste Disposition Options project determining whether waste resulting from remediation and D&D activities will be disposed on-site, off-site, or some combination thereof. This includes design up to submittal of a 60% Remedial Design Report (Section C.1.6)
- g) Complete and initiate implementation of a ROD for the Burial Grounds Operable Unit project SWMUs 5 and 6, up to and including mobilization activities and procurement activities for the fencing and remedial action, and submit a Feasibility Study evaluating remedy alternatives for SWMUs 2, 3, 7, and 30. Note that the assumption is that the remedy selected for SWMUs 5 and 6 will be a Kentucky Subtitle D Cap. Complete implementation of sampling field work for

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SWMU 4, along with development of an RI Report Addendum and FS. (Section C.1.9)

Contractor Performance and Key Requirements

The Contractor shall furnish all personnel, facilities, equipment, material, services and supplies (except as set forth in this contract to be furnished by the Government), and otherwise do all things necessary to accomplish work in a safe, integrated, effective and efficient manner. The Contractor shall operate and perform S&M activities for the facilities, buildings, trailers, and other structures and facilities (OSF) as assigned in the Facilities Information Management System (FIMS) and Section J, Attachment J8. The Contractor shall be responsible for planning, integrating, managing and executing the programs, projects, operations and other activities as described in this PWS. The Contractor shall develop, implement and maintain a comprehensive, resource-loaded baseline as required in Section H and DOE Order 413.3A. The Contractor shall update and maintain the existing Probabilistic Risk Analysis (PRA) baseline. The Contractor shall be prepared for and support any External Independent Review by the DOE Office of Engineering and Construction Management (OECM) of the lifecycle baseline and all supporting documents.

The Contractor shall provide general operations oversight and project management functions to enable the safe operation of the site. In addition, the Contractor is responsible for the operations, environment, safety, health and quality assurance within its own organization and its subcontractors. The Contractor shall provide site health and safety oversight for remediation activities and for other activities in support of the DOE mission on DOE-owned property (e.g., Kentucky Research Consortium for Energy and Environment (KRCEE) activities). Other DOE contractors will provide health and safety oversight for their activities.

The Contractor shall ensure that its technical approach and execution of work is compliant with the applicable statutory and regulatory requirements and shall annually certify to DOE its compliance with environmental requirements. The Contractor shall be responsible for all work necessary to obtain regulatory acceptance including legal/regulatory reviews and comment resolution. The Contractor shall recognize and work within the constraints imposed by the contracts and other regulatory agreements between DOE and other site contractors, Kentucky, and the EPA. Regulatory documents include, but are not limited to, all applicable laws, regulations, permits, plans, orders, and agreements. For performance of work under this contract, the Contractor shall integrate all activities with ongoing USEC operations and other DOE contractors in areas of joint interface, such as in coordination of utility lock outs or establishment of work exclusion areas, and shall support DOE with respect to the Lease Agreement between DOE and USEC. The Contractor shall comply with, and provide DOE with services necessary for its compliance with, all applicable federal, state, and

local requirements and agreements respecting the protection and preservation of cultural, historic, or archeological resources.

The Contractor shall comply with all site permits, all State and Federal requirements, and all compliance documents contained in Section J, Attachment J1 (List A). The FFA milestones may be modified only by agreement among DOE and the regulators. The Contractor shall comply with all regulatory documents whether they are included in the contract, including any amendments to those listed. Additionally, the Paducah Site Risk Methods Document is used to perform baseline risk assessments and screening.

The Contractor shall use commercial modeling techniques, such as 4D Geographical Information System (GIS) that incorporates a time factor along with the three spatial dimensions and decision consequence modeling, to assess contamination in performing general investigatory activities and developing, analyzing, and selecting alternatives for activities such as the surface water remediation, groundwater environmental actions, and BGOU under this contract. For all projects the Contractor shall maximize use of recycling excess materials and equipment to reduce project costs. The Contractor shall support DOE's reindustrialization and asset utilization activities at the site.

The applicable contract milestones, dates and reference documents for the PWS are provided within each section and/or Section J, Attachments J1, J2 and J4. The Contractor shall comply with all contract milestone dates and all regulatory milestone dates. Regulatory milestone dates can be found in documents such as FFA SMP, Agreed Orders, Uranium Enrichment (UE) TCSA, and FFCA (see Section J, Attachments J1, J2, and J4). Deliverables without specific dates identified shall be established by the Contractor during baseline development and throughout the contract term as appropriate for approval by DOE. The Contractor shall comply with all milestone dates, once approved. Changes to regulatory milestones do not alleviate Contractor responsibility to meet contractual or baseline milestone dates without specific approval by DOE.

Reference Documents*

*Table is not comprehensive of all regulatory documents.

General Project Reference Documents	
Document Number	Title
DOE/OR/07-1707	PGDP Federal Facility Agreement
DOE/OR/07-2099&D2R5	Community Relations Plan, April 2007
DOE/OR/07-2099&D2R7	Community Relations Plan, July 2011
DOE/OR/07-1595&D2	Data and Documents Management and Quality Assurance Plan for Paducah Environmental Management and Enrichment Facilities, September 1998

General Project Reference Documents	
Document Number	Title
DOE/OR/07-1506/V1&D2	Methods for Conducting Risk Assessments and Risk Evaluations at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Volume 1. Human Health and Volume 2. Ecological, December 2001
DOE/OR/07-0107&D2/R1/V1	Methods for Conducting Risk Assessments and Risk Evaluations at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Volume 1. Human Health and Volume 2. Ecological, February 2011
DOE/LX/07-0009&D2	Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision-FY 2007, October 2007
DOE/LX/07-0105&D2	Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision-FY 2008, June 2008
DOE/LX/07-1284&D2	Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision-FY-13, January 2013
No document number (Previously issued as POEF-090-95-050 GDP Lease)	Lease Agreement Between The U.S. Department of Energy And The United States Enrichment Corporation, July 1, 1993

C.1.1 Groundwater Environmental Actions

TCE was discovered in residential wells north of the Paducah Site in 1988. DOE, the EPA and Kentucky entered into an Administrative Consent Order (ACO) under Sections 104 and 106 of CERCLA that requires: 1) monitoring residential wells potentially affected by contamination; 2) providing alternative drinking water to residents with contaminated wells as specified by the DOE Action Memorandum for the Water Policy at the Paducah Gaseous Diffusion Plant (DOE/OR/06-1201&D2); and 3) investigation of the nature and extent of off-site contamination.

The ACO site investigation delineated two off-site groundwater contamination plumes, referred to as the Northwest and Northeast Plumes, and identified several potential on and off-site source areas requiring additional investigation and action. An additional on-site plume has been found to the southwest. In addition, a series of Remedial Investigation/Feasibility Studies (RI/FS) were conducted under the FFA, including the evaluation of all potential major contaminant sources impacting groundwater and surface water. The project continues to evaluate on-going potential sources of contamination. In accordance with these investigations, DOE implemented interim actions that focused on reducing potential risks associated with off-site contamination.

The three primary areas associated with the groundwater remediation initial response project are: C-400 Source Remediation (C.1.1.1); Southwest Plume Sources Remediation (C.1.1.2); and Dissolved Phase Plumes Remediation (C.1.1.3).

C.1.1.1 C-400 Source Remediation

This work scope shall be considered complete following the completion of Phase I operations and performance of Phase I post-operations sampling; the installation and operation of Phase IIa of the C-400 Interim Remedial Action (IRA), as described in the approved design and work plan documents; the dismantlement, plugging, and abandonment of Phase I and Phase IIa borings and site restoration in accordance with approved work plans; the disposition of waste generated during Phase I and Phase IIa installation, operations, and decommissioning activities; and the installation of Phase IIb of the C-400 IRA, as described in the D1 Proposed Plan.

General Information

The C-400 Cleaning Building has been found to be a major source of TCE in the Northwest and Northeast Plumes. TCE and other related Volatile Organic Compounds (VOC) have been found in the vadose zone from the surface down to the water table. Concentrations of TCE up to 11,055,000 µg/kg in the soil have been found to date. Concentrations of TCE in groundwater in the C-400 area are as high as 1,400,000 ppb. Significant quantities of TCE have been released to the environment.

An interim Record of Decision selecting Electrical Resistance Heating (ERH) was signed in August 2005. Additionally, a Remedial Design Support Investigation (RDSI) was completed in August 2006 further defining the location of TCE Dense Non-Aqueous Phase Liquid (DNAPL) source material near C-400. Additional remedial actions may be necessary to complete removal of TCE sources. This may include utilization of other technologies and the development and submittal of additional CERCLA documents.

The C-400 IRA was divided into two Phases. Phase I focused on two treatment areas; one on the southwest corner of the C-400 area and one in 11th Street east of C-400. Phase II focuses on a treatment area in the southeast corner of the C-400 area. As a result of lessons learned during Phase I operations, specifically the inability to adequately heat the deep RGA, Phase II was further divided into two subphases; Phase IIa and Phase IIb. Phase IIa will implement electrical resistance heating (ERH) in the Upper Continental Recharge System (UCRS) and upper Regional Gravel Aquifer (RGA). The target depth of treatment for ERH in Phase IIa is 20 to 60 feet below ground surface (bgs). Phase IIb will implement an alternate treatment method to be approved by the FFA parties through appropriate CERCLA documentation. For estimating purposes, *in situ* chemical treatment to remove TCE from the RGA in the Phase IIb treatment area will be the assumed alternative. The target treatment depth for *in situ* chemical treatment is approximately 55 to 95 feet bgs in the Phase IIb treatment area.

Phase I systems were installed, and operations were initiated by the previous remediation contractor.

Work to be Performed

The Contractor shall perform all activities to:

- a) Complete Phase I operations and postoperations sampling.
- b) Perform necessary redesign of the Phase II systems to optimize operations.
- c) Complete Phase IIa installation, startup and acceptance testing, operations and maintenance, post-operational sampling, dismantle, and remove, the selected source term removal system in accordance with the Record of Decision. This includes completion of revised remedial action design documents (including additional field work, analysis, and related documentation).
- d) Restore the Phase I and Phase IIa treatment area to preconstruction conditions including abandonment of subsurface equipment in accordance with the approved work plan.
- e) Complete disposal of wastes generated during installation, operation, and site restoration activities from Phase IIa of the project.
- f) ~~Develop CERCLA decision, design, and work plan documents necessary to implement the Phase IIb remedy.~~
- g) ~~Complete Phase IIb installation in accordance with the approved CERCLA decision documents, approved remedial design, and remedial action work plan.~~
- f) Implement post-remedial O&M monitoring of the C-400 TCE source (Phase I and Phase IIa).
- g) ~~Develop all CERCLA documents associated with implementation of a Phase IIb Steam Injection Treatability Study, including a Treatability Study Work Plan and Treatability Study Design that are sufficient in quality such that DOE and regulators can approve it without further modification or correction.~~
- h) ~~Construct and implement the C-400 Phase IIb Steam Injection Treatability Study, including and perform data collection, evaluation, modeling, etc. to complete the required activities necessary to develop the Treatability Study Report~~
- i) ~~Develop the Draft D1 Treatability Study Report that is sufficient in quality such that DOE PPPO and DOE-HQ can approve it without further modification or correction.~~

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Milestones/Schedule/Reference Documents*

*Milestone tables are not comprehensive of all regulatory documents.

Table C.1.1.1(a) C-400 Source Remediation Milestones/Schedule	
Milestone	Date
C-400 Phase IIa Fieldwork Start	09/30/2012
C-400 Phase IIa Fieldwork Complete	05/30/2013

C-400 Phase IIa O&M Plan Addendum to Regulators	03/04/2013
C-400 Phase IIa Operations Start	06/25/2013
C-400 Phase IIa Operations Finish	01/31/2014
C-400 Phase IIb D1 Steam Injection Treatability Study Work Plan	Briefing Date: 10/17/13 Certification or Contract Due Date: 10/21/13
C-400 Phase IIb D1 Steam Injection Treatability Design	Briefing Date: 2/27/14 Certification or Contract Due Date: 3/3/14
C-400 Phase IIb Treatability Study Construction Start	09/29/12/19/2014
C-400 Phase IIb Draft D1-Treatability Study Report	07/20/2015
C-400 Phase IIb D1 ROD Amendment to Regulators	08/08/2013
C-400 Phase IIb D1 RDWP to Regulators	09/06/2013
C-400 Phase IIb D1 RDR to Regulators	09/08/2014
C-400 Phase IIb D1 RAWP to Regulators	10/07/2014
C-400 Phase IIb Fieldwork Start	01/07/2015
C-400 Phase IIb Fieldwork Complete	05/07/2015
The first draft (D1) of a report or work plan that is transmitted to EPA and Kentucky for review and comment under Section XX (Review/Comment on Draft/Primary Documents) of the Paducah FFA is referred to as a D1 document.	

Table C.1.1.1(b) C-400 Source Remediation Reference Documents	
Document Number	Title
DOE/OR/06-1201&D2	Action Memorandum for the Water Policy at the Paducah Gaseous Diffusion Plant Paducah, Kentucky, June 1994
DOE/OR/06-1143&D4	Record of Decision for Interim Remedial Action of the Northwest Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, July 1993
DOE/OR/07-1727&D2	Remedial Investigation Report for Waste Area Grouping 6 at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, May 1999
DOE/OR/07-1857&D2	Feasibility Study for the Groundwater Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, August 2001
DOE/OR/07-2113&D2	Final Report Six-Phase Heating Treatability Study at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, March 2004

DOE/OR/07-2150&D2/R2	Record of Decision for Interim Remedial Action for the Groundwater Operable Unit for the Volatile Organic Compound Contamination at the C-400 Cleaning Building at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, July 2005
DOE/OR/07-2211&D2	Remedial Design Support Investigation Characterization Plan for Interim Remedial Action for the Volatile Organic Compound Contamination at the C-400 Cleaning Building at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, December 2005
DOE/OR/07-2214&D2	Remedial Design Work Plan for the Interim Remedial Action for the Volatile Organic Compound Contamination at the C-400 Cleaning Building at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, December 2005
DOE/LX/07-0004&D2/R1	Remedial Action Work Plan for the Interim Remedial Action Design Report, Certified for Construction, Drawings and Technical for the Volatile Organic Compound Contamination at the C-400 Cleaning Building at the Paducah Gaseous Diffusion Plant Paducah, Kentucky, September 2008
DOE/LX/07-0031&D2/R1	Construction Quality Control Plan for the Interim Remedial Action for the Volatile Organic Compound Contamination at the C-400 Cleaning Building at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, October 2008
DOE/LX/07-0005&D2/R1	Remedial Design Report, Certified for Construction Drawings and Specifications Package, for the Groundwater Operable Unit for the Volatile Organic Compound Contamination at the C-400 Cleaning Building at the Paducah Gaseous Diffusion Plant Paducah, Kentucky, July 2008
PPPO-02-392-08, dated March 24, 2008	Resolution of the Environmental Protection Agency Letter of Non-concurrence for the Site Investigation Report for the Southwest Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, (DOE/OR/07-2180&D2) and Notice of Informal Dispute, dated November 30, 2007
DOE/OR/07-2151&D2	Land Use Control Implementation Plan: Interim Remedial Action for the Groundwater Operable Unit for the Volatile Organic Compound Contamination at the C-400 Cleaning Building at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, September 2006

DOE/LX/07-1271&D2/R1	Remedial Action Work Plan for Phase IIa of the Interim Remedial Action for the Volatile Organic Compound Contamination at the C-400 Cleaning Building at the Gaseous Diffusion Plant, Paducah, Kentucky, August 2012
DOE/LX/07-1272&D2/R1	Remedial Design Report, Certified for Construction Design Drawings and Technical Specifications Package, for the Groundwater Operable Unit for the Phase IIa Volatile Organic Compound Contamination at the C-400 Cleaning Building at the Gaseous Diffusion Plant, Paducah, Kentucky, August 2012

C.1.1.2 Southwest Plume Sources Remediation

This work scope shall be considered complete following the operation, dismantlement, site restoration of the selected remedial system, submittal of a Remedial Action Completion Report that is of sufficient quality such that DOE and the regulators without further modification or correction can approve it, and implementation of post-remedial monitoring. Additional fieldwork may be necessary to measure system performance and demonstrate compliance with the ROD, and subsequent preparation, completion, and submittal of regulatory documents, prior to system shut down.

General Information

C-720 Area, Oil Landfarm (SWMU 1), groundwater releases located near the C-747/C-748-B burial grounds (SWMU 4), and the storm sewer system (SWMU 102) leading from the C-400 building to Outfall Ditch 008 (SWMU 63) have been identified as potential contributors to the Southwest Plume. The C-747/C-748-B burial grounds will be addressed within the burial ground operable unit.

Work to be Performed

The Contractor shall perform all activities to:

- a) Complete, as follows, the ongoing Southwest Plume Sources Remediation, including investigation of other potential sources of groundwater contamination, preparation of all CERCLA documents for remedy identification and implementation, implementation of the remedy (including installation and operation of any selected treatment systems) to cleanup the TCE and other related VOC source(s) of the Southwest Plume. Includes all applicable field work and analytical work necessary to support CERCLA documents. Prepare all CERCLA documents, including a ROD and subsequent CERCLA documents that are sufficient in quality such that DOE and regulators can approve them without further modification or correction. Actively assist in obtaining regulatory approval.
- b) For SWMU 1:

- Design, construct, operate, and maintain, dismantle, and remove, the selected source term removal system in accordance with the ROD and all future remedial action design documents. This may include additional field work, analysis, and related documentation to demonstrate compliance with the ROD prior to system shut down.
 - Continue Complete remediation of all identified soil associated with the Southwest Plume SWMU 1 Soil Mixing, excluding waste disposal and demobilization. 121 borings will be completed.
 - Restore the construction area to pre-construction conditions.
 - Complete disposal of all generated wastes, contaminants and materials excavated or generated during this project and all site restoration and demobilization activities.
 - Monitor and report on the remedy in compliance with CERCLA.
 - Prepare, complete, and submit a Remedial Action Completion Report of sufficient quality such that DOE and regulators can approve it without further modification or correction. Actively assist in obtaining regulatory approval.
- c) For SWMU 211 A&B:
- Design and begin construction of the selected source term removal system in accordance with the ROD and all future remedial action design documents.
 - Complete Addendum to the Remedial Design Work Plan for Solid Waste Management Units 1, 211-A, and 211-B Volatile Organic Compound Sources for the Southwest Groundwater Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Sampling and Analysis Plan, DOE/LX/07-1268&D2/R2/A1 (RDWP Addendum) to address the "additional work" for SWMUs 211A and 211B. The document submitted should be of sufficient quality such that DOE can approve it without further modification or correction.
 - Provide project planning, scoping, and perform the fieldwork for the "additional work" referenced in RDWP Addendum. The "additional work" to characterize the groundwater upgradient and downgradient of the areas of SWMU 211-A and SWMU 211-B will be considered complete upon completion of drilling, sampling, shipping samples in 6 DPT borings, and demobilization of the subcontractor, excluding waste disposal.
- d) Prepare, complete, and submit an Remedial Action Work Plan Addendum for SWMU 1 anomaly areas that is of sufficient quality such that DOE and regulators can approve it without further modification or correction. Actively assist in obtaining regulatory approval of documents. Includes all applicable field work and analytical work necessary to support CERCLA documents. The work to be addressed is the SWMU 1 anomaly areas sampling to 60 feet;
- e) Execute and complete the SWMU 1 anomaly areas sampling.
- f) Prepare, complete and submit a Memorandum to File for the Administrative Record to document the sampling results associated with SWMU 1 anomaly areas sampling to 60 feet. This Memorandum should be of sufficient quality such that DOE can approve it without further modification or correction.

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Milestones/Schedule/Reference Documents*

*Milestone tables are not comprehensive of all regulatory documents.

Table C.1.1.2(a) Southwest Plume Sources Remediation Milestones/Schedule	
Milestone	Date
Submittal of D1 ROD	As specified in the latest approved version of the FFA SMP
Submittal of D1 Remedial Design Work Plan (RDWP)	As established in the Contractor's baseline and approved by DOE. Dates must be within the period of performance of this contract and as specified in the latest approved version of the FFA SMP
Submittal of D1 Land Use Control Implementation Plan (LUCIP)	As established in the Contractor's baseline and approved by DOE. Dates must be within the period of performance of this contract and as specified in the latest approved version of the FFA SMP
SWMU 1 D1 Remedial Design Report (RDR) to Regulators	02/16/13
SWMU 1 D1 Remedial Action Work Plan (RAWP) to Regulators	04/26/2013 07/21/2013
SWMU 211 A&B D1 Characterization Report to Regulators	06/26/13
SWMU 211 A&B Letter Notification to Regulators	07/10/13
SWMU 1 Soil Mixing Fieldwork Start	05/12/14 03/01/2015
Continue SWMU 1 Soil Mixing for up to 121 borings. Completion (excluding demobilization and waste disposition)	07/15/2015 07/17/2015
SWMU 1 Fieldwork Completion	03/02/15
SWMU 211 A&B D1 RDR to Regulators	12/21/14
SWMU 211 A&B D1 RAWP to Regulators	04/12/15
SWMU 1 D1 Remedial Action Completion Report to Regulators	05/30/15
SWMU 211 A&B Fieldwork Start	07/01/15
Complete Addendum to the RDWP for SWMUs 1, 211-A and 211-B VOC Sources for the SW Groundwater Plume Sampling and Analysis Plan	2/23/15

<u>Complete Fieldwork for SWMUs 211 A&B for "Additional Work" Sampling. Drill, sample, and ship groundwater samples in 6 DPT borings. Demobilize the subcontractor but exclude waste disposal.</u>	<u>07/5/15</u>
<u>Submit Remedial Action Work Plan Addendum (D2/A1) to the regulators for SWMU 1 anomaly areas sampling to 60 feet</u>	<u>05/08/2014</u>
<u>Field Sampling Start for SWMU 1 anomaly areas sampling to 60 feet</u>	<u>06/09/2014</u>
<u>Field Sampling Complete for SWMU 1 anomaly areas sampling to 60 feet</u>	<u>06/20/2014</u>
<u>Submit the draft Memorandum to File to DOE for the sampling results associated with SWMU 1 anomaly areas sampling to 60 feet</u>	<u>10/06/2014 11/29/2014</u>
<u>Submit the Final Memorandum to File to DOE for the sampling results associated with SWMU 1 anomaly areas sampling to 60 feet</u>	<u>11/25/2014 1/18/2015</u>

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Table C.1.1.2(b) Southwest Plume Sources Remediation Reference Documents	
Document Number	Title
KY/ER-4	Results of the Site Investigation Phase I, at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, CH2M HILL, Southeast, Inc., Oak Ridge, TN, March 1991
KY/SUB/13B-97777CP-03/1991/1	Results of the Site Investigation, Phase II, at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, April 1992
DOE/OR/07-1737&D0	Final Remedial Action Report for Waste Area Grouping (WAG) 23 and Solid Waste Management Unit 1 of WAG 27 at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, June 1998
DOE/OR/07-1777&D2	Remedial Investigation Report for Waste Area Grouping 27 at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, June 1999
DOE/OR-07-1727&D2	Remedial Investigation Report for Waste Area Grouping 6 at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, May 1999

Table C.1.1.2(b) Southwest Plume Sources Remediation Reference Documents	
Document Number	Title
DOE/OR/07-2180&D2/R1	Redlined Site Investigation Report for the Southwest Groundwater Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, June 2007

C.1.1.3 Dissolved Phase Plumes Remediation

This work scope shall include the continued operation of the pump-and-treat facilities and shall be considered complete following the site restoration at completion of Northeast Plume Optimization activities.

General Information

The Southwest, Northwest and Northeast Plumes all have TCE and ⁹⁹Tc contaminants. Interim remedial actions were developed to mitigate and control the spread of highest concentration portion of the Northwest and Northeast plumes. To implement these two interim remedial actions, two pump-and-treat facilities have been installed. The Northwest Interim Record of Decision was signed in 1993, and the Northeast Interim Record of Decision was signed in 1995.

A preliminary study has been completed on the viability of utilizing natural attenuation as a final remedy. The preliminary study showed that aerobic degradation is occurring in the Regional Gravel Aquifer.

Work to be Performed

The Contractor shall perform all activities to:

- a) Operate and maintain the two installed groundwater pump-and-treat facilities in accordance with the approved operations and maintenance plans to control the highest concentration portion of the Northeast and Northwest Groundwater Plumes until regulatory approval is attained to cease operations, including preparation, completion and submittal of any applicable regulatory documents.
- b) Sample and monitor the three plumes, and conduct analyses to determine the effectiveness of and the need for continued operation of the pump-and-treat system.
- c) For the NE Plume Pump & Treat (P&T) System Optimization:
 - Prepare, complete, and submit all CERCLA documents (e.g., ESD, RAWP, O&M Plan, Post Construction Report with As-Built drawings, etc) that are sufficient in quality such that DOE and regulators can approve the documents without further modification or correction, and actively assist in obtaining regulatory approval. Submittals shall be consistent with the latest approved version of the FFA SMP.

Includes all applicable field work and analytical work necessary to support development and approval of CERCLA documents.

- Implement the optimization of the NE Plume P&T System as delineated within applicable CERCLA document, including, but not limited to complete relocation of extraction wells for NE Plume P&T System to improve system efficiency, electrical connections, piping changes, air stripper replacement, and field documentation, as appropriate.
- Remove existing NE Plume P&T System extraction wells from service. Wells may be placed in stand-by or abandoned.
- Complete any monitoring well installation, if necessary, associated with the NE Plume P&T System Optimization.

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Milestones/Schedule/Reference Documents*

*Milestone tables are not comprehensive of all regulatory documents.

Table C.1.1.3(a) Dissolved Phase Plumes Remediation Milestones/Schedule	
Milestone	Date
NE Plume Optimization D1 Remedial Action Work Plan to Regulators	03/28/13
NE Plume Optimization Fieldwork Complete for Treatment System	05/31/13
NE Plume Optimization Fieldwork Start for Extraction Wells	11/01/13
NE Plume Optimization Fieldwork Completion for Extraction Wells	09/30/14
NE Plume Optimization Site Demob/Site Restoration Complete	11/30/14

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Table C.1.1.3(b) Dissolved Phase Plumes Remediation Documents	
Document Number	Title
DOE/OR/06-1143&D4	Record of Decision for Interim Remedial Action of the Northwest Plume, July 1993
DOE/OR/06-1356&D2	Record of Decision for Interim Remedial Action of the Northeast Plume, June 1995
DOE/OR/07-1253&D4	Operation and Maintenance Plan for the Northwest Plume Groundwater System Interim Remedial Action at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, January 1998

Table C.1.1.3(b) Dissolved Phase Plumes Remediation Documents	
Document Number	Title
DOE/OR/07-1535&D3	Operation and Maintenance Plan for the Northeast Plume Containment System Interim Remedial Action at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, January 1998

C.1.1.3.1 C-612 Northwest Plume Groundwater Modernization [MOD 0163]

The Contractor shall upgrade and modernize the C-612 facility. The Contractor shall evaluate the facility to identify and prioritize items that are reaching the end of service life, no longer have replacement parts available, or are long lead items.

Deliverables and Milestones include:

- Complete installation and testing of the installed equipment for the C-612 facility – Milestone Date: June 30, 2015.

C.1.2 Material Disposition

The primary area associated with Materials Disposition is waste disposition and waste facility operations and maintenance. This work scope shall be considered complete upon successful execution of the work to be performed that is identified below and disposition of waste identified in Tables C.1.2(a) and C.1.2(b) below. Waste is considered disposed of when it has been shipped to, and accepted for final disposition at, a properly licensed and permitted disposal site. The Contractor shall avoid generating waste with no pathway for disposal. The contractor shall assist DOE in evaluating disposal site alternatives (e.g., cost/benefit analyses, NEPA documentation). Department of Energy Material Storage Areas (DMSAs) are to be periodically inspected to ensure no material is inadvertently stored in them and access to the DMSAs by non-contractor personnel is to be controlled.

General Information

A large quantity of waste and other nuclear materials has been generated and stored at the Paducah Site over its lifetime. This waste includes, but is not limited to, waste such as TSCA, MLLW, LLW, TRU, and MTRU generated by the previous contractors. The Contractor shall take all reasonable actions to minimize waste generation and to preclude the generation of TRU and MTRU wastes. The Contractor shall obtain DOE approval prior to generation of TRU or MTRU waste. The Contractor must also address newly generated waste such as runoff from waste facilities, LLW, TSCA, MLLW, and other waste received from USEC.

Building C-746-Q is a Hazard Category 2 Nuclear Facility in accordance with 10 CFR 830 for potential criticality concerns, and the other waste management facilities are radiological or standard industrial facilities.

There is approximately 9,700 tons of volumetrically contaminated classified nickel stored on the C-746-H4 pad. A small sub-population (~50 tons) also contains asbestos that could not be abated.

The Paducah Site has one 60-acre RCRA Subtitle D landfill (approximately 22 acres are permitted for disposal) that is currently operational and is designated as the C-746-U landfill. The landfill waste acceptance criteria prohibits the disposal of classified, hazardous, or LLW. However, waste with residual radioactive material within authorized limits may be disposed in the C-746-U landfill. The location of the landfill is outside the security fence. Five of 23 cells within the C-746-U landfill are currently active. The landfill has a capacity to accept an estimated 1.96 million cubic yards of waste, and currently contains an estimated 300,000 cubic yards.

Work to be Performed

The Contractor shall perform all activities to:

- a) Store, characterize, process, package, and ship all of the waste identified in Tables C.1.2(a) and C.1.2(b) below.
- b) Store, characterize, process, package, and ship TRU/MTRU waste. The waste shall be disposed as MLLW/LLW by 9/30/11 if processed and packaged waste is less than 100 nCi/gram transuranics, otherwise if it remains as TRU/MTRU it shall be disposed at the Waste Isolation Pilot Plant by the end of the contract period of performance. TRU/MTRU waste disposition and shipping schedules shall be coordinated with the Carlsbad Field Office and the Advanced Mixed Waste Treatment Facility in Idaho.
- c) Provide programmatic support, as requested, for management of the 9,700 tons of classified nickel and other recyclable metals and materials stored at Paducah.
- d) Comply with all container certificate requirements and other policy requirements for off-site shipments.
- e) Disposition all of the waste identified by the dates set forth in Table C.1.2(c) (milestone/schedule) below and in accordance with the latest Site Treatment Plan as applicable.
- f) Store, characterize, process, package, and ship all of the newly generated waste (generated prior to 90 days before this contract completion) and other nuclear materials to an approved storage, treatment, or disposal site. This includes final characterization, packaging, labeling, and final disposition of all acceptable waste (e.g. not sanitary waste) from the Infrastructure Contractor and Deactivation Contractor. The Contractor shall ensure costs are segregated appropriately and

shall require the Deactivation Contractor to pay the fully burdened cost for performance of the waste management services.

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- g) Operate and maintain the waste storage facilities identified in Exhibit C.1.2.
- h) Operate and maintain the three landfills (C-746-U, C-746-S, and C-746-T) in accordance with Kentucky regulations, DOE requirements (e.g., authorized limits), closure and post-closure requirements, and the operating permit, to include but not limited to, the following:
 1. Accept waste (including waste from the Infrastructure Contractor and Deactivation Contractor) that meets the requirements of the permit.
 2. Operate and maintain the leachate collection systems at C-746-U and C-746-S. Collect, characterize, transport, treat as necessary, and discharge an estimated 405,000 gallons of leachate from the C-746-U (365,000 gallons) and C-746-S (40,000 gallons) landfills annually at an approved wastewater treatment facility. (NOTE: When phases 4 and 5 are attached to the leachate collection system in calendar year 2009, an average rainfall year will produce approximately an additional 120,000 gallons of leachate.) C-746-U leachate is collected via underground pipes and pumped into leachate storage tanks. Leachate from C-746-S is collected in a sump and transferred into tanker trucks where it can be transferred to the leachate storage tanks. Leachate is treated either in the C-746-U leachate treatment system or transferred to USEC via tanker trucks for treatment at C-615 when the C-746-U treatment system is unavailable or leachate treatment demands exceeds the C-746-U treatment system capacity such as during maintenance or discharges into outfall 19 from the sediment basin when the treatment system is not allowed to simultaneously discharge into the outfall.
 3. Be named as the operator on the permit for the C-746-U, C-746-S and C-746-T landfills, the RCRA permit, and the KPDES permit. If this work is subcontracted out, the Contractor will remain named as the operator. Additionally, the Contractor shall be designated as the waste generator and responsible for making waste determinations at the site. The Contractor shall enter into a RCRA co-generator agreement with DOE consistent with the existing agreement at the Paducah Site.
 4. Operate the C-746-U on-site leachate treatment facility.
 - i. The Contractor shall evaluate multiple treatment alternatives (i.e. at least two) for reduction of radiological constituents possible in the C-746-U Landfill leachate while implementing the Authorized Limits at the C-746-U Landfill
 - ii. The Contractor shall design a treatment system and implement a systematic process that identifies and treats leachate when levels of radiological constituents are increasing and warrant concern for meeting As-Low-As

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Reasonably Achievable requirements and Derived Concentration Standards. This includes completing any and all required permit modifications and documentation required by the Kentucky Division of Waste Management. The design shall not have any negative impacts on the surrounding wildlife.

- iii. The Contractor shall develop, document, and implement procedures to identify changes and trends in radiological constituents' levels in the C-746-U Landfill effluent to more effectively manage the landfill in accordance with DOE and regulatory requirements.
- i) Submit annual revisions to Part A of the RCRA permit to include identification of additional areas identified as storing hazardous waste.
 - j) Submit annual revisions of the SWMU Assessment Reports for areas where hazardous waste has been discovered.
 - k) Submit annual revisions of the Site Treatment Plan in accordance with the September 10, 1997, Agreed Order.
 - l) Disposition, process and/or package waste and nuclear materials to meet receiver site acceptance criteria. The Contractor shall sign all manifests/shipping documents and RCRA land disposal restriction notifications.
 - m) The Contractor shall continue any waste determination efforts regarding De-Listing Waste and as described within the 2003 Agreed Order Site-Wide Contained-In determinations.
 - n) Perform regulatory activities as identified in the 2003 Agreed Order associated with no further action determinations for SWMUs for DMSAs.
 - o) Provide support for the turnover of DMSAs to USEC.
 - p) Complete DMSA Closure Plan activities.
 - q) Comply with the agreement with the Tennessee Valley Authority Shawnee Fossil Plant for DOE to accept certain ⁹⁹Tc contaminated waste associated with the PDGP ⁹⁹Tc groundwater plume.
 - r) Maintain approximately 19 DMSAs still in existence in five facilities at the PGDP. These DMSAs consist almost exclusively of in-place equipment awaiting final D&D and have little to no available floor space.
 - s) No more than annually, purchase clean resin, deliver it to USEC, and dispose of the spent resin to/from the USEC treatment facility located within the C-400 building at the Paducah Gaseous Diffusion Plant in Paducah, Kentucky. Coordination with USEC is required to determine the correct operational date to supply the resin during each fiscal year. The Contractor shall dispose of the spent resin after USEC completes the resin exchange.
 - t) Characterize, repackage and dispose of 54,000 cubic feet of in-situ waste currently stored in C-746-B (Doors 1 & 2). This element excludes the UF6 pipe currently stored in C-746-B (Doors 1 & 2).
 - u) Relocate UF6 pipe currently stored in C-746-B (Doors 1 & 2) to an appropriate existing storage area. The UF6 pipe should not be stored in an area that is

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exposed to the weather. This activity includes all necessary actions (e.g. documentation and characterization) needed to complete this relocation.

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v) Perform Class 1 asbestos abatement on two cold traps currently stored in C-746-B (Doors 1 & 2)

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w) Characterize the two cold traps currently stored in C-746-B (Doors 1 & 2) by historical review and/or non-destructive assay to establish recommendation for disposition.

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x) Characterize, size reduce, package and dispose of up to one thousand (1,000) tons of excess material and equipment currently located in outside areas around the plant. The contractor should evaluate all materials to determine if the materials can be recycled or reused before disposal. The excess material and equipment should be dispositioned at the C-746-U landfill or shipped to an approved off-site disposal facility. For materials sent off-site, the Contractor shall maximize the use of existing DOE disposal contract rates. Potential areas for clean-up include, but are not limited to:

- C-752-C (6 sealands and 5 carts)
- Parking lot across from C-755 (3 sealands)
- C-206-B (trailer form fire training area and contents)
- Area west of C-745-B (crane and attachments)
- C-759 (Case backhoe)
- C-760 (Case backhoe and tires)
- Area south of C-746-B door 5 (sealand with legacy IH equipment and materials)
- B-1 Pad (cut up sealands and trailer)
- C-417 (materials from legacy projects)
- C-416 (materials from legacy projects)
- C-416-E (materials from legacy projects)
- C-747-F (legacy trailer and material)
- Approximately 900 metal pallets currently stored outside of the NW corner of C-746-A (determine potential for reuse and relocation, or disposition)
- Metal plates in C-746-A

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The following table provides estimated quantities of waste to be dispositioned:

Table C.1.2(a) Waste Disposition and Waste Facility Operations Waste Estimates

Waste Type	TSCA* Mixed	LLW*	MTRU*	TRU*
Quantity	350 ft3	7,100 ft3	200 ft3	16 ft3

NOTE: The quantities identified in this PWS are based upon current approximations; actual quantities may vary.

*Generated by the previous contractor.

The following table provides estimated quantities of newly generated waste to be dispositioned:

Table C.1.2(b) Waste Disposition and Waste Facility Operations Newly Generated Waste Estimates

Waste Type	Runoff from Waste facilities	LLW	TSCA	MLLW	Other*
Quantity	28,500 ft3 per year	26,000 ft3 per year	300 ft3 per year	325 ft3 per year	350 ft3 per year

NOTE: The quantities identified in this PWS are based upon current approximations; actual quantities may vary.

* Received from USEC, and may contain asbestos, PCB, chromium, TCE, arsenic, TRU, etc. An estimated 1% of the total USEC waste generated will be characterized as TRU. The Contractor shall be required to dispose of these wastes in accordance with applicable laws and regulations.

Milestones/Schedule/Reference Documents*

*Milestone tables are not comprehensive of all regulatory documents.

Table C.1.2(c) Waste Disposition and Waste Facility Operations Milestones/Schedule	
Milestone	Date
Submit Permit Modification to the Commonwealth	08/22/14
Start Construction of Leachate Treatment System	11/03/2014
Implement C-746-U Landfill Leachate Radiological Constituent Treatment	02/03/2015
Complete characterization of 54,000 cubic feet of waste located in C-746-B (Doors 1&2). This element excludes the UF6 pipe currently stored in C-746-B (Doors 1 & 2).	10/15/2014
Complete repackaging and disposal of 54,000 cubic feet of waste located in C-746-B (Doors 1&2). This element excludes the UF6 pipe currently stored in C-746-B (Doors 1 & 2).	12/30/2014
Relocate UF6 pipe currently stored in C-746-B (Doors 1 & 2) to an appropriate existing storage area.	12/20/2014
Disposition all waste in accordance with the Site Treatment Plan except as noted below for TRU and MTRU waste	As required by the Site Treatment Plan And as established in the Contractor's baseline and approved by DOE

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Place two cold traps into a safe configuration, containerize, and transport to an approved on-site storage location.	6/30/2015
Disposition all TRU and MTRU Waste	9/30/11
Complete characterization, size reduction, packaging and disposal of up to one thousand (1,000) tons of excess material and equipment currently located in outside areas around the plant.	07/01/2015
Site Treatment Plan/Federal Facility Compliance Act Waste Minimization Progress Report	Annually by March 31
Submit revisions to the Part A of the RCRA Hazardous Waste Permit	By 1/15 of each year of this contract
Submit revisions to the Part B of the RCRA Hazardous Waste Permit	As required
Submit revisions of the DMSA SWMU Assessment Reports to Kentucky	Annually until 1/1/10
Submit revisions of the SWMU Assessment Reports to Kentucky	Annually
Complete disposition of all newly generated waste generated up to 90 days prior to this contract completion	Within 1 year of generation and no later than the contract completion date

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Table C.1.2(d) Waste Disposition and Waste Facility Operations Reference Documents	
Document Number	Title
Commonwealth of Kentucky Permit Number 073-00045, 073-00014, 073-00015	C-746-U, C-746-S, and C-746-T Landfills Solid Waste Permits
Permit Number KY8-890-008-982	Kentucky Division of Waste Management Hazardous Waste Management Facilities Permit
Commonwealth of Kentucky File Numbers DWM-31434-042, DAQ-31740-030 and DOW-26141-042	Agreed Order between DOE and Commonwealth of Kentucky, filed 10/03/03
UE-TSCA-FFCA	Uranium Enrichment Toxic Substances Control Act Federal Facilities Compliance Agreement, February 1992
Commonwealth of Kentucky File Numbers DOW-28187-045, 28193-039, 28194-039, 28195-039 and 28196-039	Agreed Order between Commonwealth of Kentucky and DOE for KPDES Permit Number KY00004049, December 2007
Commonwealth of Kentucky File Number DWM-30039-042	Site Treatment Plan Agreed Order, dated 9/10/97

PRS-WSD-0278	The Site Treatment Plan Annual Update for the United States Department of Energy Paducah Gaseous Diffusion Plant, Paducah, Kentucky, March 2008
USEC Letter dated May 6, 1998	DOE Legacy Waste Agreement between DOE and USEC
DOE/OR/07-2041&D1	Risk and Performance Evaluation of the C-746-U Landfill
No document number. Issued by U.S. DOE, Oak Ridge Operations Office, Oak Ridge, TN	Authorized Limit Request for Solid Waste at Landfill C-746-U at the Paducah Gaseous Diffusion Plant, November 2002, revised January 2003
PRS-WSD-0011	Waste Acceptance Criteria for the Treatment, Storage, and Disposal Facilities at the U.S. Department of Energy Paducah Site, April 2008
No document number (Previously issued as POEF-090-95-050 GDP Lease)	Lease Agreement Between The U.S. Department of Energy And The United States Enrichment Corporation, July 1, 1993
Letter from Tennessee Valley Authority dated March 13, 2006 and signed by DOE May 9, 2006	The Tennessee Valley Authority Shawnee Fossil Plant – Paducah Gaseous Diffusion Plant Letter of Agreement
No document number	RCRA Co-generator Agreement dated April 2007

C.1.3 Facilities Disposition

The three groups of facilities to be dispositioned are: the C-410/420 Complex (C.1.3.1); Inactive Facilities (C.1.3.2); and the C-340 Complex (C.1.3.3); work also includes facility Surveillance and Maintenance (C.1.3.4), and Preparation for Transition to GDP D&D (C.1.3.5).

The Contractor shall perform rodent and pest control at facilities assigned to their responsibility in Section J, Attachment J8. Although the Contractor shall perform Surveillance and Maintenance (S&M) of facilities assigned to their responsibility, the Infrastructure Contractor will collect sanitary waste. The Contractor (remediation) shall accumulate sanitary waste that is generated within D&D facilities at a central location for collection. To accomplish this, the Contractor shall provide and locate a container at each D&D facility that can accommodate a weekly waste collection schedule.

C.1.3.1 D&D of the C-410/420 Complex

This work scope shall be considered complete following deactivation, decontamination, demolition and disposition of all material associated with the D&D of the C-410/420 Complex; site restoration; and submittal of a final Removal Action Completion Report.

ARRA: ARRA funds accelerate the C-410 project one year, including facilitating the demolition of the C-411 facility and Sector IV of the C-410/420 Complex and disposal of generated materials.

General Information

The C-410/420 Complex consists of a grouping of single-story and multi-story steel and transit facilities with approximately 194,000 square feet of floor space that were constructed in the 1950's. The C-410/420 Complex houses process equipment and various support systems. It was used for converting uranium oxide to uranium hexafluoride through a series of reactions involving gaseous hydrogen, hydrogen fluoride, and F₂, along with the production of fluorine to support the gaseous diffusion of uranium-235. The Complex was shutdown in 1977 and utilized for storage. The Complex is contaminated with uranium oxides, uranium hexafluoride, heavy metals, asbestos, PCBs, refrigerants, hydrogen fluoride, transuranics, and other contaminants.

Uranium contamination (greater than one percent by weight of uranium-235) and traces of transuranics (from reactor returns) and beryllium were discovered in the Complex. The C-410/420 Complex is currently classified as a Hazard Category 2 Nuclear Facility in accordance with 10 CFR 830 for internal inventory and external criticality concerns.

There are no known Nuclear Criticality Safety (NCS) items within the C-410/420 Complex; however, NCS concerns could emerge as D&D progresses. Full personal protective equipment, including respirators is currently required for entry into the facility. A portion of the C-410/420 Complex requires Criticality Accident Alarm System (CAAS) coverage as a result of a nearby USEC fissile material operation. CAAS coverage is provided by a portable CAAS.

Work to be Performed

The Contractor shall perform all activities necessary to remove, decontaminate, decommission, demolish and disposition all infrastructure components that contain asbestos or other hazardous materials and perform structural demolition of remaining structures down to the slab for Sectors I through VIII within the C-410/420 Complex. Currently only equipment/facility infrastructure removal is approved in the Removal Action Work Plan for C-410 DOE/OR/07-2012&D2 and the Action Memorandum DOE/OR/07-2002&D1 Rev 1. After demolition, the Contractor shall then restore the site and submit a final Removal Action Completion Report to the regulators and assist in obtaining regulatory approval. This work is being accelerated by using both program and ARRA funding.

The Contractor shall perform all activities to:

- a) Prepare, complete, and submit all required CERCLA documentation (some actions may be done as DOE maintenance actions) for demolition of the facilities identified in Table C.1.3.1(a.), and assist in obtaining regulator approval.

Includes all applicable field work and analytical work necessary to support CERCLA documents.

- b) Plan and conduct the response action in accordance with the CERCLA process for all structures listed in Table C.1.3.1(a). If selected within the Action Memorandum, then demolish all facilities to slab, if applicable, or at grade components. If selected within the Action Memorandum, sub-grade areas, including but not limited to basements, depressions, sumps, etc., shall be backfilled with an approved material suitable to prevent surface water accumulation and groundwater infiltration. Removal may include, but not be limited to, the facility equipment, personal property/fixtures, utility service components (including components leading up to the inactive facilities not maintained/utilized by USEC), tanks, sumps, asbestos, LLW, and PCB contaminated items. The C-410/420 Complex facilities are identified in Table C.1.3.1(a).
- c) Perform all S&M activities associated with the C-410/420 Complex. This will include, but not be limited to, routine inspections, rodent and pest control, and facility repairs necessary to maintain the integrity of the facility.
- d) Complete disposal of all wastes excavated or generated during this project, all site restoration, and demobilization activities. Complete and submit a final Removal Action Completion Report that is of sufficient quality such that the DOE and the regulators can approve it without further modification or correction. Actively assist in obtaining regulatory approval.

Work to be Performed - ARRA

- e) The Contractor shall be responsible for preparation and submittal of all reporting as required by the American Recovery and Reinvestment Act including required weekly and monthly financial and technical progress reports; input for web-based reporting; presentations; and any and all other reports required by direction from DOE.
- f) Perform all planning activities necessary to effectively prepare for and to ensure completion of infrastructure removal and structural demolition of the C-410/420 Complex to slab. Activities include, but are not limited to: baseline management activities; hiring and training of work force; preparation of new and/or modification of existing work planning (e.g. work packages, technical specifications to support procurements, etc.); acquisition of equipment, materials, services, and supplies; coordination planning with other site entities (e.g. USEC); et al.
- g) Complete infrastructure removal, which includes but is not limited to, loose material removal, asbestos abatement, dismantlement of process equipment and support systems, etc.

Table C.1.3.1(a) C-410/C-420 Complex Facilities

Building Number	Title	Approximate Floor Area (ft ²)	Description	Comments
C-410	Original Feed Plant & East and West Expansion	123,000	Structural steel frame with walls of reinforced concrete, corrugated transite (asbestos), steel sash, tar and slag roofing	Converted UO ₃ to UO ₂ then to UF ₄
C-410-A	Second East Expansion of Feed Plant	6,000	Structural steel frame with concrete block walls, corrugated transite (asbestos), steel sash, tar and slag roofing	Converted UO ₃ to UO ₂ then to UF ₄
C-410-C	HF Neutralization Building	1,088	Steel-framed with corrugated transite (asbestos) siding	Contains a slurry tank for mixing lime or soda ash
C-410-F	HF Storage (North)	1,222	Prefabricated metal structure built over an open concrete pit	Contain two HF storage tanks
C-410-G	HF Storage (Center)	1,222	Prefabricated metal structure built over an open concrete pit	Contain two HF storage tanks
C-410-H	HF Storage (South)	1,222	Prefabricated metal structure built over an open concrete pit	Contain two HF storage tanks
C-410-I	Ash Receiver Site	2,000	Structural steel and corrugated transite (asbestos) sides	Used to store ash from the UF ₄ fluorination process
C-410-J	HF Storage (East)	2,024	Prefabricated metal structure built over an open concrete pit	Contain three HF storage tanks
C-411	Cell Maintenance Building	6,262	Steel framed with concrete blocked exterior walls	Performed maintenance work on F2 generating cells
C-420	Green Salt Plant	51,778	Four-story, structural steel and corrugated transite (asbestos) siding	Converted UO ₃ to UF ₄ . A PCB spill occurred in 1967

The following table provides estimated quantities of material to be dispositioned:

Table C.1.3.1(b) C-410/C-420 Complex Facilities Waste Estimates

Waste Type	TSCA	Sanitary	MLLW	LLW*
Quantity	71,000 ft ³	867,000 ft ³	1,500 ft ³	1,051,000 ft ³

NOTE: The quantities identified in this PWS are based upon current approximations; actual quantities may vary.

* Asbestos, heavy metals, and TRU waste may likely be generated, estimated to be 1% of the total waste generated. The Contractor shall be required to dispose of these wastes in accordance with applicable laws and regulations.

Due to potential of higher radiological contamination above authorized limits, the project should plan for the waste (up to 429,489 ft³) from demolition of the C-410/420 structure to be disposed at off-site disposal facilities.

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Milestones/Schedule/Reference Documents*

*Milestone tables are not comprehensive of all regulatory documents.

Table C.1.3.1(c) D&D of C-410/420 Complex Milestones	
Milestone	Schedule
C-410 Demolition Ready*	09/30/2013
C-410 East Demolition to Slab	03/31/2014
C-410 East Waste Disposal Complete	12/31/2014
C-410 Demolition and Waste Disposal Complete	03/31/2015
D&D OU D1 Completion Notification Letter (for C-340 and C-410) to Regulators	04/30/2015

*Demolition Ready Definition:

- Includes removal of loose system, structural, and equipment waste from building (including loose debris from basement and pits);
- Perform gross decontamination (i.e., vacuuming), and applying fixative to locations to meet the definition of a Contamination Area (CA) (i.e., less than a High CA);
- Placement of flowable fill in basement;
- Interior demolition of building to get access to asbestos and systems components. Structural components that do not have to be taken out to access systems material/waste and have been surveyed to be at or below CA levels may be left in place.
- All asbestos containing material will be removed to support the definition of demolition ready except as defined as "inaccessible".
- Waste is out of the building and in storage but not all will be shipped of dispositioned. Waste to be dispositioned are high alpha/plutonium systems waste, asbestos waste in rented IMs, and regulated (e.g., RCRA) waste that had been in storage for greater than nine months.
- Will be able to walk through the building without a respirator.

Table C.1.3.1(d) D&D of C-410/420 Complex Reference Documents	
Document Number	Title
DOE/OR/07-2002&D1/R1	Action Memorandum for the C-410 Infrastructure Removal at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, May 2002
DOE/OR/07-1952&D2/R1	Engineering Evaluation/Cost Analysis for the C-410 Complex Infrastructure at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, December, 2001
DOE/OR/07-2012&D2	Removal Action Work Plan for the C-410 Complex Infrastructure D&D Project at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, October, 2002
DOE/LX/07-0304&D2/R1	Removal Action Work Plan Addendum for the C-410 Complex Infrastructure D&D Project at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, September 2010
No document number (Previously issued as POEF-090-95-050 GDP Lease)	Lease Agreement Between The U.S. Department of Energy And The United States Enrichment Corporation, July 1, 1993
DOE/LX/07-0273&D1	Action Memorandum Addendum for the C-410 Infrastructure Removal at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, September 2009
No document number	Comparison of Recovery Act Program and Original Base Program (ARRA Paducah Seeded Template, Rev. 7), September 24, 2009
No document number	Approval of Critical Decision-2 Performance Baseline for the Cleanup Projects at the Paducah Gaseous Diffusion Plant, January 11, 2008

C.1.3.2 D&D of Inactive Facilities

This work scope shall be considered complete following deactivation, decontamination, demolition, and disposition of all material associated with the D&D of C-746-A, which also includes mobilization, demobilization, removal and disposal of any loose material filling of sumps or low areas of the slab and sealing of the slab. And demobilization activities. C-615-T01 through T05, and C-720-N, all site restoration, and demobilization activities. Additional facilities may be transferred into the inactive facilities work scope. Contractor must evaluate contents of the building for reuse or excessing before disposal.

The Contractor will report all scope, cost, schedule, and risk associated with this contract modification as a separate level 6 WBS element of the Contractor's performance baseline. The Contractor shall develop and submit a baseline change proposal to the Interim Baseline at the time the contractor submits its proposal. The contractor shall report performance on a monthly basis against the proposed level 6 WBS element, including EVMS reporting consistent with existing contract requirements upon submittal to DOE.

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Inactive Facilities - ARRA

This work scope shall be considered complete following deactivation, decontamination, demolition, and disposition of all material associated with D&D C-615-T01 through T05, and C-720-N, all site restoration and demobilization activities. Additional facilities may be transferred into the inactive facilities work scope. This work scope shall be considered complete following completion of activities to accelerate D&D of the C-746-A East End Smelter in accordance with the ARRA as described below

General Information

The facilities have been maintained to a minimal level to ensure integrity of the structure safety envelope. The facilities exist in various states of repair; asbestos, uranium, heavy metals, and PCBs are the hazards of most concern. Facilities have historically been used to store excess items and equipment that must be dispositioned as part of D&D activities. Some facilities may have classified material in them.

The C-746-A Hazardous Waste Storage and Treatment Facility is one of three functions sections that made up the C-746-A North Warehouse facility. Two of the areas, the C-746-A East End Smelter and the C-746-A West End Smelter have been removed. The remaining center building structure covers approximately 43,000-sq ft. This area is subdivided into nine areas, seven of which having secondary containment structures. The building structure consists of structural steel framing with corrugated steel siding and roof, concrete block partition walls and a concrete slab floor. The secondary containment structure consists of 3/8 inch welded steel plate with a 12 inch lip around the outer edge of each containment area. The containment structures are lying directly on the concrete slab and are anchored to the concrete slab around the outer edge of the containment structure. The facility also includes an old break room with tables, chairs, cabinets and old appliances. The only other equipment located in the structure is two drum crusher units. Utilities associated with the facility include an air conditioning unit, 2 electrical transformers, lighting and steam heater units. The C-746-A Hazardous Waste Storage and Treatment Facility underwent RCRA closure in 2011. Prior to the facility being used as hazardous waste storage and treatment facility it was used to support other site work activities. Based on process knowledge it is anticipated that PCB stains will be found on concrete under the secondary containment structure as well as miscellaneous materials and waste associated with the previous work activities.

General Information - ARRA

The C-746-A East End Smelter is one of three sections of the C-746-A North Warehouse facility located in the northwest corner of the Paducah Gaseous Diffusion Plant. The C-746-A East End Smelter is a 21,000 square foot one-story prefabricated metal building with a high bay area that was erected in 1954. It has a concrete foundation, three attached sections with gable roofs of steel panels, and exterior walls of steel panels. The East End Smelter was originally utilized to smelt nickel metal that came from process equipment used by the gaseous diffusion plant (GDP) operations and for gold recovery. Operations were shut down in the 1980s and since that time, the East End Smelter section of the C-746-A facility has been inactive, used only for storage of nickel and miscellaneous materials and wastes. Operations resulted in contamination within the facility and in the surrounding soils, primarily from uranium and metal compounds.

Work to be Performed

The Contractor shall perform all activities to:

- a) Prepare, complete, and submit all required CERCLA documentation (some actions may be done as DOE maintenance actions) for demolition of the facilities and assist in obtaining regulatory approval. Includes all applicable field work and analytical work necessary to support CERCLA documents. Other than ARRA work specified below, the Contractor shall gain written CO approval prior to initiating this activity for each of the facilities listed in Table C.1.3.2(a).
- b) As directed, plan and conduct the response action in accordance with the CERCLA process for structures in Table C.1.3.2(a). If selected within the Action Memorandum, then demolish all facilities to slab, if applicable, or at grade components. If selected within the Action Memorandum, sub-grade areas, including but not limited to basements, depressions, sumps, etc., shall be backfilled with an approved material suitable to prevent surface water accumulation and groundwater infiltration. Removal may include, but not be limited to, the facility equipment, personal property/fixtures, utility service components (including components leading up to the inactive facilities not maintained/utilized by USEC), tanks, sumps, asbestos, LLW, and PCB contaminated items. Other than ARRA work specified below, the Contractor shall gain written CO approval prior to initiating this activity for each of the facilities listed in Table C.1.3.2(a).
- c) Perform all S&M activities associated with the facilities identified in Table C.1.3.2(a) until their final demolition. This will include, but not be limited to,

routine inspections, rodent and pest control, and facility repairs necessary to maintain the integrity of the facility.

- d) Complete disposal of all wastes excavated or generated, all site restoration, demobilization activities, submit a final Removal Action Completion Report that is of sufficient quality such that the DOE and regulator can approve it without further modification or correction, and complete RCRA closure of the RCRA storage facilities. Actively assist in obtaining regulatory approval.

Work to be Performed - ARRA

- e) Perform all planning activities necessary to effectively prepare for and to ensure completion of infrastructure removal and structural demolition of the C-746-A East End Smelter to slab by April 30, 2011. Activities include, but are not limited to: baseline management activities; hiring and training of work force; preparation of infrastructure to support additional work force; preparation of new and/or modification of existing work planning and authorization documents (e.g. work packages, safety documents, technical specifications to support procurements, etc.); acquisition of equipment, materials, services, and supplies; coordination planning with other site entities (e.g. USEC); et al.
- f) The Contractor shall be responsible for preparation and submittal of all reporting as required by the ARRA including required weekly and monthly financial and technical progress reports; input for web-based reporting; presentations; and any and all other reports required by direction from DOE.
- g) Remove and store (with DOE approval) high value items or items to be used in future DOE activities at the site or for future use, including recycling. This includes the nickel buttons.
- h) Complete infrastructure removal, which includes but is not limited to, loose material removal, accessible asbestos abatement removal, smelter and auxiliary equipment removal, process piping and systems removal, etc.
- i) Complete disposal of all infrastructure waste by April 30, 2011.

Work to be Performed – D&D of C-746-A

- i) Perform all planning activities necessary to effectively prepare for and to ensure completion of infrastructure removal and structural demolition of the C-746-A Hazardous Waste Storage and Treatment Facility to slab. Activities include, but are not limited to: baseline management activities; preparation of new and/or modification of existing work planning and authorization documents (e.g. work packages, safety documents, technical specifications to support procurements, security plans, PCB abatement plan, etc.); acquisition of equipment, materials, services, and supplies; coordination planning with other site contractors.

k) Complete deactivation, decontamination, demolition, and disposition of all materials and waste associated with the D&D of C-746-A Hazardous Waste Storage and Treatment Facility. This work also includes mobilization, demobilization, removal and disposal of any loose material, filling of sumps or low areas of the slab and sealing of the slab.. Contractor must evaluate contents of the building for reuse or excessing before disposal.

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Table C.1.3.2(a) Inactive Facilities

DOE reserves the right to update this table as facilities are de-leased from USEC.

Building Number	Title	Approximate Floor Area (ft ²)	Description	Comments
C-746-A	North Warehouse	63,100	Prefabricated metal building	Provided hazardous/flammable storage
C-746-B	South Warehouse	71,100	Prefabricated metal building	Provided hazardous/flammable storage
C-728	Motor Cleaning Facility	1,597	Steel Light Frame	Used for maintenance shops and general motor cleaning
C-615-T01	Storage Trailer	800	Steel braced frame building	Used for general storage
C-615-T02	Storage Trailer	800	Steel braced frame building	Used for general storage
C-615-T03	Storage Trailer	800	Steel braced frame building	Used for general storage
C-615-T04	Storage Trailer	800	Steel braced frame building	Used for general storage
C-615-T05	Storage Trailer	800	Steel braced frame building	Used for general storage
C-415	Feed Plant Storage	3,672	Steel light frame building	Used for tool cribs/dispensing/control

Building Number	Title	Approximate Floor Area (ft ²)	Description	Comments
C-746-M	Waste Askarel Storage Facility	560	Prefabricated metal building	Used for general storage
C-720-N	Scale House	192	Steel light frame building	Abandoned

The following table provides estimated quantities of material to be dispositioned:

Table C.1.3.2(b) Inactive Facilities Waste Estimates (C-720-N and C-615 trailers)

Waste Type	TSCA	Sanitary	MLLW	LLW
Quantity	Included in MLLW	589 ft ³	118 ft ³	7,593 ft ³

NOTE: The quantities identified in this PWS are based upon current approximations; actual quantities may vary.

Milestones/Schedule/Reference Documents*

*Milestone tables are not comprehensive of all regulatory documents.

Table C.1.3.2(c) Inactive Facilities Milestones	
Milestone	Schedule
Complete demolition to slab of the C-746-A East End Smelter and all infrastructure waste disposal	4/30/11
Submittal of the C-746-A East End Smelter D1 Removal Action Completion Report	7/31/11
Complete demolition to slab of the C-746-A Hazardous Waste Storage and Treatment Facility and disposition of all associated waste	07/15/15
Complete demolition of identified inactive facilities	As established in the Contractor's baseline and approved by DOE.
Submittal of remaining D1 Removal Action Completion Reports, if required	As established in the Contractor's baseline and approved by DOE.

Table C.1.3.2(d) Inactive Facilities Reference Documents	
Document Number	Title
DOE/LX/07-0184&D2	Removal Notification for Decommissioning of the C-340 Metals Reduction Plant Complex and the C-746-A East End Smelter at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, August 2009
DOE/LX/07-0131&D1	Engineering Evaluation/Cost Analysis for the C-340 Metals Reduction Plant Complex and the C-746-A East End Smelter at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, September 2009
No document number (Previously issued as POEF-090-95-050 GDP Lease)	Lease Agreement Between The U.S. Department of Energy And The United States Enrichment Corporation, July 1, 1993
No document number	Comparison of Recovery Act Program and Original Base Program (ARRA Paducah Seeded Template, Rev. 7), September 24, 2009
No document number	Approval of Performance Baseline Critical Decision-2 and Start of Construction Critical Decision-3 for the C-746-A East End Smelter D&D, PA-0040.R1.3, Paducah Site Office, September 30, 2009
<u>LATA Kentucky Letter PAD-REG-11-1158</u>	<u>Final Closure Certification for C-746-A in Accordance with Hazardous Waste Facility Permit, KY8-890-008-982, Agency Interest No. 3059</u>

C.1.3.3 D&D of the C-340 Complex

This work scope shall be considered complete following deactivation, decontamination, demolition and disposition of all material associated with the D&D of the C-340 Complex, all site restoration, demobilization activities, and submittal of a final Removal Action Completion Report.

ARRA: ARRA funds accelerate the C-340 project. This work scope shall be considered complete following stabilization of infrastructure components within the C-340 Complex, demolition of buildings as described below, and staging and disposal of wastes as described below.

General Information

The C-340 Complex was previously used to convert UF₆ to UF₄, uranium oxides, and uranium metal. It has been shutdown and placed in the DOE D&D program. The complex has been undergoing routine S&M activities awaiting D&D. The C-340 Complex is classified as a radiological facility. The C-340-A, -B, and -C buildings are all physically connected, residing under a single roof. The facilities are metal frame structures, with transite exterior walls and built-up roofs. The C-340-A and -B facilities are single level or single level with operating platforms. The C-340-C includes four different floors. The C-340-D is a prefabricated metal building that was used for the receipt and storage of drums of magnesium for use in C-340 operations. The C-340-D building is connected to the C-340-A, -B, and -C facilities by a sloped conveyer system that was used to transport magnesium from the ground floor warehouse to the third floor of C-340. The conveyer is enclosed in a protective housing. The C-340-E Emergency Power Building is a prefabricated metal building. This facility houses the emergency propane generator that provided backup electrical power for the criticality alarms when the C-340 complex was in operation.

Work to be Performed

The Contractor shall perform all activities to:

- a) Prepare, complete, and submit all required CERCLA documentation for demolition of the facilities. Actively assist in obtaining regulatory approval. Includes all applicable field work and analytical work necessary to support CERCLA documents.
- b) Plan and conduct the response action in accordance with the CERCLA process for all structures listed in Table C.1.3.3(a). If selected within the Action Memorandum, then demolish all facilities to slab, if applicable, or at grade components. If selected within the Action Memorandum, sub-grade areas, including but not limited to basements, depressions, sumps, etc., shall be backfilled with an approved material suitable to prevent surface water accumulation and groundwater infiltration. Removal may include, but not be limited to, the facility equipment, personal property/fixtures, utility service components (including components leading up to the inactive facilities not maintained/utilized by USEC), tanks, sumps, asbestos, LLW, and PCB contaminated items.
- c) Perform all S&M activities associated with the facilities until their final demolition. This will include, but not be limited to, routine inspections, rodent and pest control, and facility repairs necessary to maintain the integrity of the facility.
- d) Complete disposal of all wastes excavated or generated during this project, all site restoration, and demobilization activities. Submit a Removal Action Completion Report that is of sufficient quality such that DOE and regulators can approve it without further modification or correction. Actively assist in obtaining regulatory approval.

Work to be Performed - ARRA

- e) Perform all planning activities necessary to effectively prepare for and to ensure completion of infrastructure removal and structural demolition of the C-340

Complex as described below by April 30, 2011. Activities include, but are not limited to: baseline management activities; hiring and training of work force; preparation of infrastructure to support additional work force; preparation of new and/or modification of existing work planning and authorization documents (e. g. work packages, safety documents, technical specifications to support procurements, etc.); acquisition of equipment, materials, services, and supplies; coordination planning with other site entities (e.g. USEC); et al.

- f) Perform activities in accordance with the approved NEPA categorical exclusion or under CERCLA as applicable.
- g) The Contractor shall be responsible for preparation and submittal of all reporting as required by the ARRA including required weekly and monthly financial and technical progress reports; input for web-based reporting; presentations; and any and all other reports required by direction from DOE.
- h) Perform all activities necessary to effectively plan, schedule, manage, execute, and oversee the implementation of the C-340 Complex D&D activities as described in this scope of work.
- i) Conduct project support activities, including operating the C-340 boundary control station (BCS); warehousing and stocking necessary personal protective equipment and supplies to accomplish D&D activities; transporting personnel and equipment; and providing and maintaining equipment (e.g. man lifts, forklifts, tools, etc.) to support the D&D activities.
- j) Complete infrastructure removal, which includes but is not limited to, loose material removal, accessible asbestos abatement removal, systems removal, process piping and equipment removal, etc.
- k) Complete disposal of all infrastructure waste by April 30, 2011.
- l) Complete all preparatory activities to leave C-340-A, C-340-B, and C-340-C buildings in a state of readiness for structural demolition by April 30, 2011.
- m) Complete C-340-D and C-340-E building waste disposal by June 30, 2011.

Table C.1.3.3(a) C-340 Complex Facilities

Building Number	Title	Approximate Floor Area (ft ²)	Description	Comments
C-340-A	Powder Building	25,200	Metal frame structures, with transite exterior walls and built	Used as a nuclear chemical process facility
C-340-B	Metals Building	21,360	Metal frame structures, with transite exterior walls and built	Used as a nuclear chemical process facility

Building Number	Title	Approximate Floor Area (ft ²)	Description	Comments
C-340-C	Slag Building	4,200	Metal frame structures, with transite exterior walls and built	Used as a nuclear chemical process facility
C-340-D	Magnesium Storage Building	3,888	Prefabricated metal building that includes the sloped conveyor system	Used for nuclear contaminated storage
C-340-E	Emergency Power for Critical Alarms	100	Prefabricated metal building	Housed propane generator for emergency power backup

The following table provides estimated quantities of material to be dispositioned:

Table C.1.3.3(b) C-340 Complex Facilities Waste Estimates

Waste Type	TSCA	Sanitary	MLLW	LLW
Quantity	Included in MLLW	9,500 ft ³	2,500 ft ³	300,000 ft ³

NOTE: The quantities identified in this PWS are based upon current approximations; actual quantities may vary.

Milestones/Schedule/Reference Documents*

*Milestone tables are not comprehensive of all regulatory documents.

Table C.1.3.3(c) D&D of the C-340 Complex Milestones/Schedule	
Milestone	Date
Complete demolition to slab of C-340-D and C-340-E and all associated waste disposal	4/30/11
Complete all infrastructure removal, waste disposal and preparatory activities to leave C-340-A, C-340-B, and C-340-C buildings in a state of readiness for demolition	4/30/11
Complete demolition for C-340-A, C-340-B and C-340-C	03/31/2013
Complete waste disposal for C-340-A, C-340-B, and C-340-C	09/30/2013
D&D OU D1 Completion Notification Letter (for C-340 and c-410) to Regulators	04/30/2015

Table C.1.3.3(d) D&D of the C-340 Complex Reference Documents	
Document Number	Title
DOE/LX/07-0009&D2	Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision-FY 2007, October 2007
DOE/LX/07-0105&D2	Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision, FY 2008, June 2008
DOE/LX/07-1284&D2	Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision-FY-13, January 2013
DOE/LX/07-0184&D2	Removal Notification for Decommissioning of the C-340 Metals Reduction Plant Complex and the C-746-A East End Smelter at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, August 2009
DOE/LX/07-0131&D1	Engineering Evaluation/Cost Analysis for the C-340 Metals Reduction Plant Complex and the C-746-A East End Smelter at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, September 2009
No document number (Previously issued as POEF-090-95-050 GDP Lease)	Lease Agreement Between The U.S. Department of Energy And The United States Enrichment Corporation, July 1, 1993
No document number	Comparison of Recovery Act Program and Original Base Program (ARRA Paducah Seeded Template, Rev. 7), September 24, 2009
No document number	Approval of Performance Baseline Critical Decision-2 and Start of Construction Critical Decision-3 for the C-340 Complex D&D, PA-0040.R1.2., Paducah Site Office, September 30, 2009

C.1.3.4 Surveillance and Maintenance of DOE Facilities

The Contractor shall perform routine surveillance and maintenance of all DOE-owned facilities assigned to Contractor responsibility in FIMS and Section J, Attachment J8.

Work to be Performed

The Contractor shall perform all activities to:

- a) Perform all S&M activities associated with these facilities through the end of the contract. This will include tasks as required; for example, routine inspections, corrective maintenance, facility repairs necessary to maintain the integrity of the facility, combustible removal, rodent and pest control, gross vacuuming, maintenance vacuuming, cleanup of spills/leaks, control of loose contamination and airborne particles, and isolation of utilities.
- b) Establish and maintain a central trash collection container for weekly sanitary waste trash collection by the Infrastructure Contractor.
- c) Maintain temporary bathrooms, i.e., port-a-johns, procured under this contract.
- d) Develop and implement a plan to reduce cost while maintaining performance of S&M in DOE-owned facilities assigned to Contractor responsibility in FIMS.

Milestones/Schedule/Reference Documents*

*Milestone tables are not comprehensive of all regulatory documents.

Table C.1.3.4(a) Surveillance and Maintenance of DOE Facilities Milestones/Schedule	
Milestone	Date
Submittal of Cost Savings Plan	Six (6) months after contract award and annually thereafter.

Table C.1.3.4(b) Surveillance and Maintenance Reference Documents	
Document Number	Title
DOE/OR/07-1904&D1	Operation and Maintenance Plan for the Surface Water Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, September 2000
UE-TSCA-FFCA	Uranium Enrichment Toxic Substances Control Act Federal Facilities Compliance Agreement, February 1992

C.1.3.5 Preparation for Transition to GDP D&D

The latest published USEC estimate for gaseous diffusion operations at Paducah is through 2013. DOE expects USEC to provide a two-year notice prior to the turnover of the GDP to DOE; however, individual leased facilities may be turned over during the lease without the two-year notice. This work scope includes support to DOE for the planning, de-leasing, and transfer of facilities from USEC control and Nuclear Regulatory Commission (NRC) and Occupational Safety and Health Administration (OSHA) regulation to DOE administrative control and regulation.

Work to be Performed

The Contractor shall perform all activities to:

- a) Provide support to DOE and its contractors in planning, de-leasing, and transferring facilities from USEC control and Nuclear Regulatory Commission (NRC) and Occupational Safety and Health Administration (OSHA) regulation to DOE administrative control and regulation.

The Contractor shall perform all activities to (Option Items):

- b) The Infrastructure Contractor has the primary responsibility of coordinating the transition of de-leased facilities with DOE. The Contractor shall support de-leasing of facilities upon receiving approval from DOE, including authorization basis, programmatic, and operational documents and procedures (Option Item 002). These actions may also include helping DOE determine/verify whether lease turnover requirements have been met, including, but not limited to, USEC deactivation of facilities being returned, walk down of facilities being returned, submission of appropriate records, and data. Procure, receive, inspect, and store trapping materials listed in the table below from a vendor that satisfies NQA-1 requirements. All items shall be in the Contractor's possession by August 30, 2014 and are to be made available for pick up by the Deactivation Contractor after de-lease of the GDP. The Contractor will provide all documentation of the traceability of the materials per the Contractor's NQA-1 Quality Assurance Program. The Deactivation Contractor will, after turnover (de-lease), assume responsibility of procuring any additional trapping media.

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Milestone: By August 30, 2014, the Contractor shall be in possession of all of the items listed in the table below:

Item	Description	Quantity
NaF	PELLETS, SODIUM FLUORIDE, (SIZE 3MMX3MM CYLINDRICAL), DS-CMD-16289-142	16,000 lbs
MgF ₂	MAGNESIUM FLUORIDE (MgF ₂), PELLETS, HIGH SURFACE AREA MATERIAL, 1/8" OR 3MM GRADE, 50 KGS/DRUM (110.250 LBS).	5,000 lbs
Alumina	ALUMNIA, ACTIVATED, BULK, 5X8 MESGM UOP A201, PER DS-CMD-16289-468, REV.	50,000

- c) Conduct S&M of de-leased facilities that are turned over to the Contractor (Option Item 003).
- d) Establish a contract with a vendor to purchase 1,600 lbs of Chlorine Trifluoride (ClF₃) with multiple purchase options for a total quantity of 45,000 lbs of ClF₃. Each option shall be for 1,600 lbs of ClF₃ and have no penalties should the options not be executed. The contract shall be for a maximum quantity of 45,000 lbs of ClF₃ liquid. To support deactivation activities, 18,000 lbs of ClF₃ will be needed per year. The ClF₃ will be brought onsite in vendor owned cylinders containing a nominal 160 lbs of liquid ClF₃ at ≥ 99% pure ClF₃ at a rate of 113 cylinders per year spread evenly throughout the year.

Subsequent orders (i.e., exercise options) shall be at the request of the Deactivation Contractor if the contract is not transferred to the Deactivation Contractor. The contractor shall ensure that the Deactivation Contractor provides the funds necessary for the costs associated with these subsequent purchases.

The vendor owned cylinders shall be type "A" 9 inch OD by 55 inch height. The connection shall be a CGA connection No. 670 with a valve outlet thread of 1.030 inch thread diameter by 14 threads per inch, NGO-LH-EXT, Sherwood or Superior Cylinder valve. The CIF3 vendor will include a certification of inspection criteria. The CIF3 vendor will submit a Certification of Analysis with each cylinder. The analysis will include an FTIR Fingerprint and vapor pressure data of the CIF3 in each cylinder. The Certificates of Analysis shall accompany each shipment.

The vendor must satisfy Quality Assurance Program requirements. The Contractor will provide all documentation of the traceability of the materials per the Contractor's Quality Assurance Program.

Milestone: Deliver to six 160 lb cylinders of CIF3 to C-745-B and four 160 lb cylinders of CIF3 to C-350 and transfer all ten cylinders to the Deactivation Contractor no earlier than 15 days after PGDP turnover (release) and no later than 45 days after PGDP turnover (release).

- e) Establish a contract with a vendor to purchase 1,800 lbs Fluorine (F2) with multiple purchase options for a total quantity of 10,800 lbs of F2. Each option shall be for 1,800 lbs of F2 and have no penalties should the options not be executed. The contract shall be for a maximum quantity of 10,800 lbs of Fluorine (F2) gas. The F2 will be brought onsite in a "tube trailer" containing 1,800 lbs F2. The F2 will be in a mixture Nitrogen (N2) and F2 with concentrations of 80% ± 1% by volume N2 and 20% ± 1% by volume F2. The rate will be one tube trailer every 50 weeks. The Certificates of Analysis shall accompany each shipment.

Subsequent orders (i.e., exercise options) shall be at the request of the Deactivation Contractor if the contract is not transferred to the Deactivation Contractor. The contractor shall ensure that the Deactivation Contractor provides the funds necessary for the costs associated with these subsequent purchases. The vendor must satisfy Quality Assurance Program requirements. The Contractor will provide all documentation of the traceability of the materials per the Contractor's Quality Assurance Program.

Milestone: Deliver one "tube trailer" containing 1800 lbs F2 to C-745-A and transfer materials to the Deactivation Contractor no earlier than 15 days after PGDP turnover (release) and no later than 45 days after PGDP turnover (release).

- f) The Contractor shall fabricate, heat treat, degrease, heat trace, inspect, and deliver to the Deactivation Contractor:

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- 6 each UF6 Cylinder Pigtails for 10 Ton and 14 Ton Feed Autoclaves C-333A and C-337A per drawing M5E-14280-B1;
- 3 each UF6 Cylinder Pigtails for Building C-310 Withdrawal per drawing M5E-14280-C00
- 3 each UF6 30B Cylinder Pigtails for Building C-310 Withdrawal per drawing M5E-14280-D00;
- 3 each UF6 Cylinder Pigtails for Building C-310 Burp Station per drawing M5E-14280-A2;
- 3 each UF6 Cylinder Pigtails; Building C-310 2 and a half ton Withdrawal Pigtail per drawing M5E-ZA2000-A02; and
- 4 each UF6 Cylinder Pigtails; Building C-310 2 and a half ton Burp Station Pigtail per drawing M5E-ZA2000-A01.

The Contractor will provide all documentation of traceability of the materials per the Contractor's NQA-1 approved Quality Assurance Program. The Contractor shall ensure that the pigtails meet all requirements for use in the Paducah GDP Feed and Withdrawal facilities (as designated) consistent with current operational parameters and protocols. Contractor shall complete procurement/fabrication, heat treatment, degreasing, inspection and delivery of all pigtails to the deactivation contractor within 14 days prior to turnover (de-lease).

The Contractor shall develop procedures for the pigtail fabrication process. These procedures shall be verified and approved by DOE prior to use. The pigtails shall be prepared and fabricated in a clean environment. Inspect and verify material certifications. Materials shall be degreased and cleaned prior to fabrication. The tubing should be cut 12 inches longer than drawing specification. Tubing should be filled with sand and ends crimped. Place pigtail into forming jig and bend into configuration per specification. Cut ends and remove sand, clean with dry air and debur ends. Prepare joints to be mated for clearance. Ensure parts have been degreased. Flux mating parts and braze together. Remove excess flux and request Quality Inspection. Ensure stress relief is performed using calibrated furnace for 30 to 60 minutes at 750 to 800 degree F, request Quality Inspection. Hydrostatically test pigtail at a minimum 400 psig for at least 5 minutes with no leaks and request Quality Inspection. Clean the pigtail using an alkali solution and install plugs on both ends. C-310 and C-315 pigtails require heat tracing installation per drawing E5E16755 B.

Drawings have been provided for reference.

- g) Purchase of Coal: The Contractor shall make arrangements to purchase a two-month supply of coal for delivery to PGDP, C-602 Coal Storage Yard. DOE has estimated a 30-day supply of coal to be 3,400 tons. The coal to be purchased must be able to be used in the C-600 Steam Plant and meet the following specifications:

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- 11,800 BTU/Lb Minimum
- 8% Moisture Typical
- 11% Ash Typical
- 1.8% Sulfur Maximum
- 25% Minimum to 35% Maximum Volatiles
- 2,050°F Ash Softening Point
- 10% Fines 1/4x0
- 1¼x1¼ Typical Size

Milestone:

- Complete the purchase of the coal and have placed in the C-602 Coal Storage Yard no later than one week after GDP turnover (de-lease).

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Milestones/Schedule/Reference Documents*

*Milestone tables are not comprehensive of all regulatory documents.

Table C.1.3.5(a) Preparation for Transition to GDP D&D Milestones/Schedule	
Milestone	Date
In conjunction with the Infrastructure Contractor, successfully complete the transition of the DOE leased facilities back to DOE operational control and regulatory oversight.	As defined in the modification exercising the option item

Table C.1.3.5(b) Preparation for Transition Reference Documents	
Document Number	Title
No document number (Previously issued as POEF-090-95-050 GDP Lease)	Lease Agreement between The U.S. Department of Energy And The United States Enrichment Corporation, July 1, 1993

C.1.3.6 Portable Cell Treatment Carts

The Contractor shall implement the design, procurement, fabrication, testing, and deliverable of all equipment (Portable Cell Treatment Carts, test buggies, pumps, Sodium Fluoride traps, temperature/pressure/flow instrumentation, etc.) needed for the Portable Cell Treatment Carts as described in Change Order 104.

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Contract Section C.1.3.6 Portable Cell Treatment Cart Units

The Contractor shall

- (1) provide engineering design, and procurement and fabrication services resulting in supporting the procurement, fabrication and testing of Portable Cell Treatment

Cart Systems which include the Portable Cell Treatment Carts (PCTC), gas sampling and analytical equipment (Test Buggies) that will provide gas analysis and associated support equipment (pumps, temperature/pressure/flow instrumentation, etc.) during in-situ chemical treatment (ICT) treatment activities of the Paducah GDP process equipment; and

(2) procure materials and fabricate (10) FTIR Analyzers, 10 ovens and approximately 130 valves to support the fabrication and construction of and test one (1) prototype PCTC and Test Buggies and associated support equipment; The Portable Cell Treatment Cart Systems shall be designed, fabricated and tested to meet the requirements of "Functional Requirements Documents for Portable Cell Treatment Cart System for use at the Paducah Gaseous Diffusion Plant" (FRD).

The Contractor shall provide design and procurement services for ten (10) production PCTCs and Test Buggies and associated support equipment for ICT of gaseous diffusion cells at the Paducah Gaseous Diffusion Plant. Design services shall include all drawings, specifications, calculations, test plans and procedures required to support the procurement of materials and equipment required for the fabrication of ten (10) production PCTCs and Test Buggies. Design activities shall also include the conceptual design of PGDP facility modifications necessary for regeneration & change-out of NaF trapping material.

The Contractor shall work with the deactivation contractor to transition all activities associated with the design, testing and acceptance, procurement, and fabrication to the deactivation contractor by November 21, 2014. Contractor shall, at turnover, transfer all drawings, specifications, calculations, test plans and procedures developed by the remediation contractor, required to procure, fabricate and test the PCTCs and test buggies

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Deliverables and Milestones shall include:

- Weekly design, fabrication and testing review meetings with DOE or its ETS contractor. Reviews will include technical and schedule updates.
- 30% conceptual design package for the PCTC and test buggy design including the identification of alternatives for the treatment locations and modifications necessary for regeneration of the NaF traps. – Milestone Date: April 21, 2014
- 60% design package for the PCTC and test buggy design (including the final recommendations for the treatment locations and modifications to existing facilities for the regeneration of NaF traps); draft procurement package (specification, drawings and submittals); and draft PCTC and Test Buggy test plans and operating procedures. – Milestone Date: May 16, 2014
- Final PCTC design; procurement package (specification, drawings and submittals); Final test plans; and operating procedures submitted for DOE approval. -- Milestone Date: June 6, 2014

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- Final test buggy design and procurement packages (specification, drawings and submittals); Final test plans; and operating procedures submitted for DOE approval. – Milestone Date: June 6, 2014
- Final conceptual design package for the facility modifications for regeneration and change-out of the NaF including ROM construction estimates... - Milestone Date: August 30, 2014
- Assignment of all subcontracts associated with design, procurement, fabrication, and testing of the Portable Cell Treatment Cart systems over to the deactivation contractor. – Milestone Date: November 21, 2014
- Transfer all associated documentation, material, and equipment produced/procured to-date to the deactivation contractor – Milestone Date: November 21, 2014
- Provide turnover support necessary to facilitate the transfer of all associated documentation, material, and equipment produced/procured to-date to the deactivation contractor – Milestone Date: November 21, 2014

C.1.3.7 Seals and Gaskets

The Contractor shall deliver the following:

- 165 each "00" dresser seals per drawing CX-741-709M;
- 200 each "00" dresser gaskets per Drawing BX-533-12-M263;
- 133 each "000" dresser seals per drawing CX-741-709M;
- 150 each "000" dresser gaskets per Drawing BX-533-11-304;
- 120 each C-310 type "H" dresser seals per drawing DX-533-17-M75 (as modified); and
- 150 each "H" type dresser gaskets per Drawing BX-533-17-M76.

All welds shall be completed per the specifications identified on the drawings (GSP 4.227). All design, fabrication, storage, and construction shall comply with NQA-1 requirements. The Contractor shall manage the attached drawings in accordance with NQA-1 requirements and shall ensure that they are made available to the Deactivation Contractor prior to GDP turn-over. Dresser seal gasket materials shall comply with 21CFR 177.1550. Gasket shall be fabricated, packaged, stored, shipped, and handled in a manner to prevent any contamination with oils, or other organic, and/or foreign material. Prior to completion of fabrication, any dresser seals and associated gaskets to be used for fluorine service shall first be thoroughly cleaned, degreased, and dried, and then treated with increasing concentrations of fluorine gas so that any impurities may be burned out. After treatment, seals and associated gaskets shall be packaged to prevent any contamination.

Milestone: Complete procurement and delivery of all dresser seals and gaskets by September 30, 2014.

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C.1.3.8 Cascade Heating System

The Contractor shall complete a thermal analysis of each process building and shall determine the number and location of 30 kW electrical supplemental (salamander type) heaters required to maintain 40o F minimum in the building. The Contractor shall assume the minimum outside temperature and the average wind speed and direction in the Paducah KY area over the past 50 years, consistent with the "Functional Requirements Document, Supplemental Heaters and associated Power Distribution Panels for the PGDP Cascade Facilities" document, for the thermal analysis. This analysis shall be completed no later than June 30/July 30 2014.

The Contractor shall work directly with USEC to determine the number, type and location of receptacles in the Process Buildings that are currently installed or are being installed by USEC prior to GDP Turnover (De-lease) so as to complete the identification of location and numbers of heaters and TPDPs. In the event that the number of receptacles needed to support the Contractor's thermal analysis is insufficient, the Contractor shall notify DOE in writing.

USEC currently has approximately 250 supplemental heaters provided by DOE that will remain after de-lease. The Contractor shall complete inspection of these existing heaters prior to return from USEC and repair, replace and/or accept for use "as is" based on the most cost effective approach. The Contractor shall ensure that these 250 heaters are operable no later than 30 days after GDP turnover (de-lease).

Contractor shall provide procurement and testing services for the additional 30 kW electrical salamander supplemental heaters and TPDPs required for freeze protection heating of the process buildings (C-310, C-315, C-331, C-333, C-335 and C-337) identified in its thermal analysis. The Contractor shall also procure and install the prefabricated power cords required for each heater. Additionally, the Contractor shall purchase 20 heater s and 4 TPDP as spares (not to be installed, but transferred to the new Deactivation Contractor).

- The Final Design Package shall include, as a minimum: Approved drawings, specifications for the supplemental heating system (heaters, power cords, and TPDPs). The Final Design Package shall be completed by September 30, 2014. Note: The Contractor shall also provide this information to the Deactivation Contractor at the equipment is transferred to the Deactivation Contractor.
- The contractor shall complete all procurement and testing activities for the additional (above the 250 already with USEC) heaters and TPDPs. This equipment shall be operational and on-site no later than September 30, 2014.
- The Contractor shall locate and install/connect the additional tested heaters and TPDPs consistent with the Contractors accepted thermal analysis and associated engineering design packages. The Contractor shall then transfer the operational and maintenance responsibility to the new Deactivation Contractor. These activities shall be completed no later than November 1, 2014. Note: USEC has

indicated a willingness to allow DOE and its contractors to stage and install equipment in leased space prior to turnover (de-lease). The Contractor shall work to accelerate performance ahead of the milestone when cost effective.

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C.1.3.9 Steam Package Boilers and Associated Permitting

The Contractor shall provide engineering design, necessary permitting and regulatory documentation (air, NEPA, KPDES), procurement, installation and testing of a steam generation system consisting of at least six package boilers tied into the existing PGDP steam distribution system. The tie-in is to be located near C-600. The design of these units must address, at a minimum, the following:

- The six or more portable (~ 25,000 lbs/hr each) steam package boiler units shall be procured to allow for the capacity to produce a nominal 150,000 lb/hr steam, pressure rated at 100 psig, fueled primarily by natural gas. Further, each unit must have dual fuel capability (natural gas and No. 2 fuel oil) because of the current interruptible natural gas supply.
- Each unit shall meet the new Boiler MACT requirements becoming effective January 2016 and also achieve ultra low NOx emissions (<10ppm NOx).
- Each unit shall be a complete, stand-alone system contained within a portable enclosure (sufficient to ensure operability for weather conditions at the PGDP) that includes the following:
 - Package Boiler Unit with Ultra Low NOx Burners
 - Gas Pressure Regulator
 - Control Panel
 - Valves
 - Deaerator with two feedwater pumps and condensate return connections
 - Feedwater tank and treatment system
 - Water softener
 - Chemical Feed System
 - Blowdown separator
 - Sample cooler and Sink
 - Interior Lighting
 - Stack (loose)
 - Electric Space Heater
- The design shall include operational flexibility to take each of the units off line without impacting the operability of the remaining units.
- The water supply to the units is 70 psig and the water quality data (e.g., temperature, hardness, pH, turbidity, etc.) is included in the attachment (Package Boiler Sanitary Water Supply 3-year Average Data).
- The electrical power available for these units is 14,400volts/3-phase/60-hertz.
- The natural gas supply available is at different locations and pressures. There is a pressure reducing station north of the plant that reduces the supply to 170-psig entering the plant going to C-600. At C-600 it is further reduced to 60-psig to the boilers and at the boilers, reduced to 15-psig to feed the burners. The available

flow quantity, if not curtailed due to adverse conditions affecting the natural gas supplier, is, at a minimum, 450 MCF/hr.

- The design shall specify how No. 2 fuel oil will be provided and distributed as a backup to natural gas to be used only during periods of natural gas curtailments.
- The contractor shall ensure that it coordinates with the deactivation contractor to minimize impacts to deactivation contractor activities including deposit removal or cylinder transfer operations during final tie-ins.

Deliverables and Milestones shall include:

- Bi-weekly design, fabrication and testing review meetings with DOE or its ETS contractor. Reviews will include technical and schedule updates.
- 30% conceptual design package shall include siting and equipment layout, conceptual configuration for steam system tie-ins and utility connections, estimate of potential emissions and necessary controls, and procurement buy vs lease analysis. It is DOE's expectation that the 30% design package will contain all information needed to develop the air permit application for the new boilers. The contractor shall include a milestone date for this deliverable in its proposal and associated schedule.
- Air permit to construct application for DOE approval. The permitting effort shall maximize DOE's operational flexibility in the future for these units and will contain the absolute minimum information required and be integrated with current DOE permitting efforts to ensure that there are no impacts to the operability of the existing C-600 steam plant. The contractor shall include a milestone date for this deliverable in its proposal and associated schedule.
- 60% design package for the steam generator system configuration detailing locations, tie-ins for natural gas, No. 2 fuel oil, water, and electrical, connections to the existing steam distribution system, installation methodology and schedule, test plans and operating procedures. The contractor shall include a milestone date for this deliverable in its proposal and associated schedule.
- Final certified for construction (CFC) design and layout; procurement package (specification, drawings and submittals); Final test plans; and operating procedures submitted for DOE approval. The contractor shall include a milestone date for this deliverable in its proposal and associated schedule.
- The contractor shall complete all design, procurement, pre-delivery testing, construction and permitting activities by May 31, 2015
- The contractor shall complete all startup testing and associated commissioning activities such that the system is 100% functional (i.e., all punch list items closed and system operating at designed capacity) by July 15, 2015.

C.1.3.10

- a) The Contractor shall procure the following parts:

Item Description	USEC Stores No.	QTY to Order
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BELLOWS, PHOSPHOR BRONZE, SEAMED, PER DRAWING B-30-GB-55	77-702-0705	360
COVER, FR. NO. 1, TYPE "H", PER PGDP DWG. M5E-14908-DW & NI-PLATE SPEC. JS-1421, AQ ITEM, DS-GEN-16289-090, REV.	77-702-1795	102
FLANGE, FR. NO. 2, TYPE "H", PER PGDP DWG M5C-14908-BG & NI-PLATE SPEC JS-1421, AQ ITEM, DS-GEN-16289-090, REV.,	77-702-1796	107
HOUSING, FR. NO. 3, TYPE "H", PER PGDP DWG M5C-14908-AW & NI-PLATE SPEC JS-1421, AQ ITEM, DS-GEN-16289-090, REV.,	77-702-1797	102
FRAME 4, PGDP DWG M5E-14908-DM, FOR SEAL, TYPE H, FOR USE W/ALLIS CHALMERS COMPRESSOR, (STAGE PUMP), CENTRIFUGAL, SIZE 12-112, REF SIZE 12, DWG 1220-164, "AQ" ITEM, DS-GEN-16289-090,	7-702-3933	51
RING C, PGDP DWG M5C-14908-CN, PARTS FOR ALLISCHALMERS COMPRESSOR SEAL, TYPE H, AC SIZE 38 AND 92, "AQ" ITEM, DS-GEN-16289-090,	77-702-4087	6
SLEEVE, TYPE H-1, PER PGDP DWG M5C-14908-CP, MAT'L MONEL, AQ ITEM, APP'D 3-3-98, S-2, S-8.5, QC-2, QC-8, QC-10,	77-702-4167	116
SPRING, BELLEVILLE, PAD DWG M5C-14908-CM, TYPE H, FOR USE W/ALLIS CHALMERS COMPRESSOR, (STAGE PUMP), CENTRIFUGAL, AQ ITEM, S-2, S-7.1, QC-2, QC-10,	77-702-4417	65
SPRING, PER UCCND DWG CM-79551-P18, TYPE H, "AQ" ITEM, S-4.2 OR 5.2 (SS), S-7.21 (LOAD TEST PER DWG. - NORMAL SAMPLE SIZE),	77-702-4437	250

- b) The Contractor will provide all documentation of traceability of the materials per the Contractor's NQA-1 approved Quality Assurance Program. The Contractor shall ensure that the parts meet all requirements for use in the Paducah GDP facilities consistent with current operational parameters and protocols.

Milestone: All spare parts are in the Contractor's possession by October 31, 2014 and are to be made available for pick up by the Deactivation Contractor after turnover (de-lease) of the GDP.

C.1.3.11 C-751 Fuel Facility Closure

- a) Upon release from USEC, the Contractor shall accept operational responsibility for the C-751 Fuel Facility, including the two (2) USTs listed in Exhibit C.1.1.10.3.
- b) The Contractor shall plan and implement closure and disposition of the C-751 Fuel Facility and closure of the two (2) USTs as required by Subtitle I, including any necessary sampling required by Subtitle I. The remaining fuel

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- should be removed and transferred appropriately to support DOE activities. The UST closure plan shall include provisions to remove soil down to 10 feet below the tanks to ensure any identified soil contamination is removed.
- c) The Contractor shall meet all required regulatory inspections and reporting associated with the two (2) USTs and C-751 Fuel Facility, including closure documentation, until closure is complete and accepted by the Kentucky UST Branch.
 - d) Additionally, the Contractor shall sample the soil after tank removal to support the current "No Further Action" determination and complete any Subtitle I or CERCLA documentation necessary.
 - e) The Contractor shall package, characterize, and properly dispose of all waste associated with the C-751 Fuel Facility operations and closure.

Milestones/Schedule/Reference Documents*

*Milestone tables are not comprehensive of all regulatory documents.

Table C.1.3.11 C-751 Fuel Facility Closure Milestones/Schedule	
Milestone**	Date
Complete removal of the C-751 Fuel Station	Within 45 days of Release
Complete closure of the two (2) USTs in accordance with Subtitle I	Within 30 Days of Removal of C-751 Fuel Facility
Complete disposition of all waste associated with this project	Within 60 days of Closure of USTs

C.1.3.12 Replace Valves in High Pressure Fire Water System

Replace Valves in High Pressure Fire Water System: The Contractor shall procure and replace the following High Pressure Fire Water System (HPFWS) valves:

- Sectional Valve HP-W-14-S4 (150 psig, 16" Ductile Iron Resilient Seat Valve) broken between C-335 and C-337. This valve is a major line valve in the HPFWS fire suppression loops that surround C-335/C-337. (Specs: Valve, Gate, 16", Double Disc, Parallel Seat, IBBM, 150# Flanged Ends, Ductile Iron, Non-Rising Stem (NRS), 2" Square Operating Nut, Clow Figure F5070 or approved equivalent)
- Air Relief Valve AR-17 (150 psig, 2" Ductile Iron Relief Valve) at the NW Corner of C-337. (Specs: Replace like-for-like or approved equivalent)
- Valve HP-V-16-W5 (150 psig, 8" Ductile Iron Resilient Seat Valve) located near C-631 Cooling Tower Suppression System Supply. (Specs: Valve, Gate, 8", Resilient Seat, MJ Ends, Ductile Iron, NRS, 2" Square Operating Nut, Clow Model 2639, Figure F 6100, Glands furnished with Cup Point Set Screws, plus Sleeve, Cutting In, 8", Mechanical Joint by Plain End, Gland With Cup Point Set Screws, or approved equivalents)

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Milestones:

- Complete installation of valve AR-17 no later than two weeks after GDP turnover (de-lease).
- Complete installation of valves HP-W-14-S4 and HP-V-16-W5 no later than 45 days after GDP turnover (de-lease)

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C.1.4 Soils Operable Unit

The three Soils Operable Unit areas are Sitewide Remedial Action (and Removal Action if necessary) (C.1.4.1), Soils Inactive Facilities (C.1.4.2); and Soil Piles/Rubble Areas (C.1.4.3).

C.1.4.1 Sitewide Remedial Action (and Removal Action, if necessary)

This work scope shall be considered complete following development and regulatory approval of the RI Report and any follow-on documentation based on comment resolution commitments, such as revisions of SWMU Assessment Reports.

General Information

This work scope addresses 79 SWMUs; however as a result of ongoing investigations, additional areas (e.g., SWMUs) may need to be addressed. The work scope includes characterization for all chemicals of potential concern up to a sixteen foot depth. This work scope consists of:

- a) An RI for 79 SWMUs (perform the RI work and prepare, complete, and submit an RI Report);
- b) A PCB evaluation and a limited area radiological survey.

Work to be Performed

The Contractor shall perform all activities to:

- a) Execute and complete the remedial investigation;
- b) Prepare, complete, and submit an RI Report that is of sufficient quality such that DOE and regulators can approve it without further modification or correction. Actively assist in obtaining regulatory approval of documents. Includes all applicable field work and analytical work necessary to support CERCLA documents;
- c) Complete disposal of all wastes generated during this project and all site restoration and demobilization activities. All wastes generated up to 90 days prior to the end of the contract must be disposed of prior to the end of the contract period of performance.

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- d) Prepare, complete, and submit an RI Workplan Addendum that is of sufficient quality such that DOE and regulators can approve it without further modification or correction. Actively assist in obtaining regulatory approval of documents. Includes all applicable field work and analytical work necessary to support CERCLA documents. The work to be addressed includes the 13 remaining SWMUs from the Remedial Investigation Report (DOE/LX/07-358&D2/R1) plus SWMU 1 associated with Southwest Plume soil mixing area and SWMU 27.
- e) Execute and complete the Remedial Investigation Phase II. The work to be addressed includes the 13 remaining SWMUs from the Remedial Investigation Report (DOE/LX/07-358&D2/R1) plus SWMU 1 associated with Southwest Plume soil mixing area and SWMU 27.
- f) Prepare, complete, and submit an RI II Report that is of sufficient quality such that DOE and regulators can approve it without further modification or correction. Actively assist in obtaining regulatory approval of documents. Includes all applicable field work and analytical work necessary to support CERCLA documents. The work to be addressed includes the 13 remaining SWMUs (excluding SWMU 229) from the Remedial Investigation Report (DOE/LX/07-358&D2/R1).
- g) Prepare, complete, and submit an RI Report Addendum to the existing RI Report (DOE/LX/07-358&D2/R1) that is of sufficient quality such that DOE and regulators can approve it without further modification or correction. Actively assist in obtaining regulatory approval of documents. Includes all applicable field work and analytical work necessary to support CERCLA documents. The work to be addressed includes SWMU 1 associated with the Southwest Plume mixing area and SWMU 27.

Milestones/Schedule/Reference Documents*

*Milestone tables are not comprehensive of all regulatory documents.

Table C.1.4.1(a) Sitewide Soils Remedial Action (and Removal Action, if necessary) Milestones/Schedule	
Milestone	Date
Submit Remedial Investigation Workplan Addendum to the regulators (D2/R2/A1)	6/23/2014
Field Sampling Start for RI II (includes SWMU 27)	10/01/2014
Field Sampling complete for RI II including all waste disposal (includes SWMU 27)	04/09/2015

Submit RI II Report to the regulators for the 13 remaining SWMUs (excluding SWMU 229) from the Remedial Investigation Report	<u>06/30/2015</u> <u>07/07/2015</u>
Submit RI II Report to the regulators for the 13 remaining SWMUs from the Remedial Investigation Report	
Field Sampling complete for SWMU 229	<u>07/15/2015</u>
Field Sampling Start for SWMU 1 soil mixing area	<u>04/06/2015</u>
Field Sampling Complete for SWMU 1 soil mixing area	<u>04/27/2015</u>
Submit Draft (D2/R1/A1) RI Report Addendum to DOE for the SWMU 1 soil mixing area and SWMU 1-27	<u>06/30/2015</u> <u>07/07/2015</u>
Waste disposal complete for SWMU 1 soil mixing area	<u>07/13/2015</u>

Table C.1.4.1(b) Sitewide Soils Remedial Action (and Removal Action, if necessary) Reference Documents	
Document Number	Title
DOE/LX/07-0027&D1 DOE/LX/07-0027&D1	Scoping Document for the Soils Operable Unit Remedial Investigation/Feasibility Study at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, December 2007 Scoping Document for the Soils Operable Unit Remedial Investigation/Feasibility Study at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, December 2007
DOE/OR/07-1958&D1/R1 DOE/OR/07-1958&D1/R1	Engineering Evaluation/Cost Analysis for Site-Wide Sediment Controls at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, February 2002 Engineering Evaluation/Cost Analysis for Site-Wide Sediment Controls at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, February 2002

Table C.1.4.1(b) Sitewide Soils Remedial Action (and Removal Action, if necessary) Reference Documents	
Document Number	Title
DOE/LX/07-0001&D2/R1 DOE/LX/07-0001&D2/R1	Surface Water Operable Unit (On-site) Site Investigation and Baseline Risk Assessment Report at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, February 2008 Surface Water Operable Unit (On-site) Site Investigation and Baseline Risk Assessment Report at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, February 2008
DOE/LX/07-0120&D2/R2/A1/R1	Addendum to the Work Plan for the Soils Operable Unit Remedial Investigation/Feasibility Study at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Remedial Investigation 2, Sampling and Analysis Plan, August 2014

C.1.4.2 Soils Inactive Facilities

This work scope consists of the C-218 Firing Range (SWMU 181), C-403 Neutralization Tank (SWMU 40), and C-410-B HF Neutralization Lagoon (SWMU 19) and shall be considered complete following disposal of all wastes excavated or generated, all site restoration, demobilization activities, and submittal of the Removal Action Completion Reports that are of sufficient quality such that DOE and regulators can approve the documents without further modification or correction.

General Information

C-218 is an outdoor firing range that was in operation from 1985 to 1992. The facility is located immediately west of the PGDP on DOE property and consists of a U-shaped soil berm approximately 16 ft high. C-218 is contaminated with lead. C-403 is located at the northeast corner of the C-400 building. The tank is approximately 25 ft² by 26 ft deep, in-ground, and open-topped. It is constructed of concrete and lined with two layers of acid brick. The tank was used for the storage and treatment of acidic, uranium-bearing waste solutions generated during cleaning operations in C-400 until 1957. TCE is the primary contaminant. C-410-B is located north of the C-410 Feed Plant. It is a rectangular, below grade impoundment with a volume of approximately 1938 ft³. It has an earth-clay floor and has sloped sides reinforced with wire and grout. It received effluent from the C-410-C Neutralization Building. Radionuclides are the primary contaminant of concern. The Removal Action for the three facilities, including field activities, will be completed by September 30, 2009.

Work to be Performed

The Contractor shall perform all activities to:

- a) Prepare, complete, and submit all required CERCLA documentation, including submittal of final Removal Action Completion Reports that are of sufficient quality such that DOE and regulators can approve them without further modification or correction. Includes all applicable field work and analytical work necessary to support CERCLA documents;
- b) Actively assist in obtaining regulatory approval of documents;
- c) Complete the final Removal Action Completion Report or Remedial Action Completion Report (RACR for the C-218 Firing Range and C-410B HF Neutralization Lagoon (SWMU 19).

Milestones/Schedule/Reference Documents*

*Milestone tables are not comprehensive of all regulatory documents.

Table C.1.4.2(a) Soils Inactive Facilities Milestones/Schedule	
Milestone	Date
Submit Removal Action Completion Report(s)	7/31/10

Table C.1.4.2(b) Soils Inactive Facilities Reference Documents	
Document Number	Title
DOE/LX/07-0014&D1	Removal Notification for the Soils Operable Unit Inactive Facilities at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, February 2007
DOE/LX/07-0016&D2	Engineering Evaluation/Cost Analysis for the Soils Operable Unit Inactive Facilities at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, July 2008

C.1.4.3 Soil Piles/Rubble Areas

This work scope shall be considered complete following completion of field work and waste disposal, as appropriate; submittal and approval of all CERCLA documents including, but not limited to, Action Memorandum, EE/CA, Removal Action Work Plan, and Removal Action Completion Report; and the archive of all accumulated sampling data in Paducah Oak Ridge Environmental Information System (OREIS). OREIS is a database containing sampling information from the site.

General Information

This work scope includes planning for development and regulatory approval of CERCLA documents for completion of removal actions. These removal actions, if selected within the Action Memorandum are expected to include excavation of approximately 10,000 yd³ of soil from soil pile areas near Bayou Creek, Little Bayou Creek, the North-South Diversion Ditch, and an un-named tributary; removal and excavation of approximately 250 yd³ of rubble; and appropriate disposition of excavated soil and rubble. Based on the data in the Site Evaluation Reports (SERs) combining this potential removal action with the sitewide soils remedial/removal action (Section C.1.4.1) may be warranted. DOE and regulator approval will be required.

Work to be Performed (RESERVED)

- a) Prepare, complete, and submit a Site-wide Evaluation Workplan that is of sufficient quality such that DOE and regulators can approve it without further modification or correction. Actively assist in obtaining regulatory approval of documents. Includes all applicable field work and analytical work necessary to support CERCLA documents
- b) Execute and complete the Site-wide Evaluation field sampling.
- c) Prepare, complete, and submit a Site-wide Evaluation Report that is of sufficient quality such that DOE and regulators can approve it without further modification or correction. Actively assist in obtaining regulatory approval of documents. Includes all applicable field work and analytical work necessary to support CERCLA documents

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Milestones/Schedule/Reference Documents*

*Milestone tables are not comprehensive of all regulatory documents.

Table C.1.4.3(a) Soil Piles/Rubble Areas Milestones/Schedule	
Milestone	Date
Submit D2/R1 or D1/R1 Site-wide Evaluation Work Plan(RESERVED)	06/13/2014 06/27/2014
Field Sampling Start for Site-wide Evaluation	09/15/2014 09/29/2014
Field Sampling Complete for Site-wide Evaluation including all waste disposal	02/19/2015 03/05/2015
Submit D1 Site-wide Evaluation Report to regulators	03/23/2015 05/12/2015

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Table C.1.4.3(b) Soil Piles/Rubble Areas Reference Documents	
Document Number	Title
PPPO-02-297-07	Notification of Soil and Rubble Areas at the Paducah Gaseous Diffusion Plant, February 16, 2007

Table C.1.4.3(b) Soil Piles/Rubble Areas Reference Documents	
Document Number	Title
DOE/LX/07-0015&D2/R1	Sampling And Analysis Plan For Soil Piles at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, August 2007
DOE/LX/07-0015/A1&D2/R1	Addendum 1-A to the Sampling and Analysis Plan for Soil Piles at the Paducah Gaseous Diffusion Plant Paducah, Kentucky, August 2007
DOE/LX/07-0015/B	Addendum 1-B to the Sampling and Analysis Plan for Soil Piles at the Paducah Gaseous Diffusion Plant Paducah, Kentucky, December 2007
DOE/LX/07-0015/A2	Addendum 2 to the Sampling and Analysis Plan for Soil Piles at the Paducah Gaseous Diffusion Plant Paducah, Kentucky, December 2007
DOE/LX/07-0060&D2	Sampling and Analysis Plan for Rubble Areas at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, September 2008
DOE/LX/07-0108&D1	Site Evaluation Report for Soil Pile 1 at Paducah Gaseous Diffusion Plant, Paducah, Kentucky, May 2008
DOE/LX/07-1288&2	Sitewide Evaluation Work Plan for Anomalies Located Outside the Limited Area at the Paducah Gaseous Diffusion Plant, Paducah Kentucky, August 2014

C.1.5 Surface Water Operable Unit

C.1.5.1 Removal Action for Selected Effluent Ditches and Storm Sewers (On-Site)

This work scope shall be considered complete following completion and regulatory approval of the Removal Action Completion Report for selected effluent ditches and storm sewers within the industrial area of the plant up to the KPDES outfalls (i.e., 001, 008, 010, 011, 015) and for the North/South Diversion Ditch (NSDD), Section 3, 4 and 5.

General Information

The specified effluent ditches, storm sewers, and Sections 3, 4 and 5 of the NSDD have soil/sediment contamination (e.g., americium, plutonium, thorium, cesium, uranium, neptunium), metals (e.g., mercury, chromium, beryllium, arsenic, lead, manganese, nickel, vanadium, etc.), potential RCRA listed waste, and PCBs. The majority of these

effluent ditches and storm sewers are located within the limited area of the plant; however, the KPDES outfalls and Sections 3, 4 and 5 of the NSDD are located outside the limited area of the site. Many of the effluent ditches and storm sewers are currently in use. However, the flow through Sections 3, 4 and 5 of the NSDD has been limited by the installation of piping from the C-400-L, C-616 and Outfall 001 Lift Stations to a new discharge area at the C-616-C inlet control structure. The Site Investigation/Baseline Risk Assessment Report has been approved by the regulators and the EE/CA has been submitted for review. The removal action is expected to focus on hot spot removal within the ditches/storm sewers.

Work to be Performed

The Contractor shall perform all activities to:

- a) Complete remaining field work. Prepare, complete, and submit a final Removal Action Completion Report that is sufficient in quality such that DOE and regulators can approve it without further modification or correction;
- b) Actively assist in obtaining regulatory approval of documents;
- c) Implement the selected CERCLA response and complete disposal of all wastes excavated or generated, all site restoration, and demobilization activities.

Milestones/Schedule/Reference Documents*

*Milestone tables are not comprehensive of all regulatory documents.

Table C.1.5.1(a) Removal Action for Selected Effluent Ditches and Storm Sewers (On-Site) - Milestones/Schedule	
Milestone	Date
Submit D1 Removal Action Completion Report to regulators	7/31/10

Table C.1.5.1(b) Removal Action for Selected Effluent Ditches and Storm Sewers (On-Site) - Reference Documents	
Document Number	Title
DOE/LX/07-0001&D2/R1	Surface Water Operable Unit (On-site) Site Investigation and Baseline Risk Assessment Report at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, February 2008.
DOE/LX/07-0011&D1	Removal Notification for the Surface Water Operable Unit (On-Site) at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, January 2007
DOE/LX/07-0012&D2	Engineering Evaluation/Cost Analysis for Surface Water Operable Unit (On-Site) at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, September 2008

PPPO-02-111-09, dated October 2, 2008	Replacement Pages for Engineering Evaluation/Cost Analysis for Surface Water Operable Unit (On-Site) at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, (DOE/LX/07-0012&D2), September 2008
DOE/OR/07-1506/V1&D2	Methods for Conducting Risk Assessments and Risk Evaluations at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Volume 1 Human Health, and Volume 2 Ecological, December 2001
DOE/OR/07-0107&D2/R1/V1	Methods for Conducting Risk Assessments and Risk Evaluations at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Volume 1. Human Health and Volume 2. Ecological, February 2011

C.1.5.2 Remedial Action for All Effluent Ditches and Site Creeks (Off-Site)

~~This work scope shall be considered complete following development and regulatory approval of the RI/FS WP, RI Report, FS Report, PRAP, and submittal of the ROD by September 2014.~~

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General Information

Discharges from the uranium enrichment process buildings have historically been sent to internal plant ditches, which then drain into the Little Bayou Creek and Bayou Creek. This has resulted in radionuclides (primarily Cesium) and PCBs being introduced into the sediments and surface water at various locations throughout the Paducah Site.

Work to be Performed

The Contractor shall perform all activities to prepare, complete, and submit a RI/FS WP and actively assist in obtaining regulatory approval of the documents. The contractor will also perform a maintenance action to address the concrete slabs, other debris, and soils at SWMU 199.

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The Contractor shall perform all following activities related to SWMU 199:

- a) Develop the work plan and any other necessary documents to perform the activities identified in items b) through j).
- b) Relocate of the concrete slabs and other debris;
- c) Sample of the concrete slabs and other debris, per the Rubble Pile Sampling and Analysis Plan;
- d) Dispose of the concrete slabs and other debris;
- e) Sample the soils under the original location of the concrete slabs and ;

- f) Sample the soils under the area of the relocated concrete (after the removal of the concrete slabs and other debris);
- g) Excavate soils, as necessary, based on a comparison to the background/risk based NALs;
- h) Sample after the excavation of the soils, as needed, for future remedial action information;
- i) Sample the soils under the area of the relocated concrete (after the removal of the concrete slabs and other debris); and
- j) Develop a revised SAR to document the activities above and the final outcome.

Milestones/Schedule/Reference Documents*

*Milestone tables are not comprehensive of all regulatory documents.

Table C.1.5.2(a) Remedial Action for All Effluent Ditches and Site Creeks (Off-Site) - Milestones/Schedule	
Milestone	Date
(RESERVED) Complete the sampling and disposal of the concrete slabs, other debris, and associated soils at SWMU 199. Complete necessary documentation for the administrative record.	07/01/2015

Table C.1.5.2(b) Remedial Action for All Effluent Ditches and Site Creeks (Off-Site) - Reference Documents	
Document Number	Title
DOE/LX/07-0105&D2	Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision-FY 2008, June 2008
DOE/LX/07-0009&D2	Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision-FY 2007, October 2007
DOE/LX/07-1284&D2	Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision-FY-13, January 2013
DOE/OR/07-1506/V1&D2	Methods for Conducting Risk Assessments and Risk Evaluations at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Volume 1 Human Health, and Volume 2 Ecological, December 2001

DOE/OR/07-0107&D2/R1/V1	Methods for Conducting Risk Assessments and Risk Evaluations at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Volume 1. Human Health and Volume 2. Ecological, February 2011
DOE/LX/07-0060&D1	Sampling and Analysis Plan for Rubble Areas at the Paducah Gaseous Diffusion Plant Paducah, KY, May 2008

C.1.5.3 C-613 Sedimentation Basin Automated Control [MOD 0164]

The Contractor shall design, install, and test equipment needed to automate operation of the C-613 sedimentation basin. The specified equipment shall, at a minimum, allow for realtime monitoring of pH, TSS and water flow rates and automated shutdown of associated operational equipment. The system shall include an automated call-out system when monitored parameters exceed designated values. The Contractor shall consult with DOE to ensure equipment/system modifications are appropriate prior to impementation.

Deliverables and Milestones shall include :

- Complete installation, testing and place into service the automated basin control equipment and instrumentation – Milestone Date : June 30, 2015

C.1.6 Waste Disposition Alternatives Project

This work scope shall be considered complete following submittal, and approval of a Record of Decision and all associated project CERCLA documentation and submittal of a 60% Remedial Design Report.

General Information

The DOE estimates a future need for disposal of approximately 3.7 million cubic yards of radioactively contaminated, non-radioactively contaminated, and hazardous material (soil and building debris), including sanitary waste (Table C.1.6(b)) through the end of D&D of the PGDP in 2040. The majority of thisis waste will be disposed of outside of the period of performance of this contract as it is currently associated with D&D of the GDP. An estimate of the waste that will be disposed during this contract is provided in Table C.1.6(b). Approximately 2,000 yd³ of these volumes are classified waste. Currently, the majority of remediation-generated waste is being disposed at the onsite C-746-U landfill, EnergySolutions of Utah, and the Nevada National Security Site.

Work to be Performed

The Contractor shall perform all activities to
 a) pPrepare, complete, and submit RI/FS, Proposed Plan, ROD, and all 60%-RDR and necessary subsequent CERCLA documents consistent with the results of the

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RI/FS that evaluated the waste disposal options for material generated from remediation, deactivation, decommissioning and decontamination activities at the PGDP. Includes all applicable fieldwork and analytical work necessary to support CERCLA documents. Documents are to be of sufficient quality such that DOE and regulators can approve them without further modification or correction. Actively assist in obtaining regulatory approval for any submittal.

- b) Implement the ROD to support all waste disposal activities associated with the BGOU and other projects as required.
- c) If the ROD selects the on-site disposal cell alternative, minimize the footprint for the portion of the disposal cell associated with the classified waste.
- d) Prepare necessary CERCLA documentation (sampling and analysis plan and quality assurance project plan) to perform the fieldwork.
- e) Conduct the installation of ten piezometers in the On-site Waste Disposal Facility Candidate Site 5A for collection of water levels in the Upper Continental Recharge System (UCRS) and
- f) Conduct the installation of three piezometer transects consisting of three piezometers per transect (one in the middle of the stream and one to each side of the stream on the bank) along the ephemeral stream located in Candidate Site 11. Transducer monitoring for two-three months is required for the nine piezometers located at the three transects in Site 11.
- g) Soil samples are to be collected from all of the piezometer borings in both Sites 5A and 11 and analyzed for general physical soil index properties (e.g., Grain Size with Hydrometer, Atterberg Limits, Moisture Content, and USCS Soil Classification). Fieldwork activities shall include site preparation (e.g, clearing the site, installation of gravel access roads, etc.), proper handling and disposal of any field-related wastes generated during the field activities associated with the installation of the piezometers and transects.
- h) Prepare necessary CERCLA documentation (D2/R1 RI/FS additions or a RI/FS addendum) to document results.

1.

The following table provides estimated quantities of material to be dispositioned over the project life-cycle consistent with Table C.1.6(c):

Table C.1.6(a) Life-cycle CERCLA Waste Estimates

Waste Type	TSCA	Sanitary	MLLW	RCRA	LLW
Quantity	13,000 yd3	1,079,000 yd3	63,300 yd3	16,700 yd3	2,547,000 yd3

Note: The quantities identified in this PWS are based upon current approximations; actual quantities may vary.

The following table provides estimated quantities of material to be dispositioned during the contract performance period:

Table C.1.6(b) CERCLA Waste Estimates

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Paducah Remediation

DE-AC30-10CC40020

Waste Type	TSCA	Sanitary	MLLW	LLW
Quantity(RESERVED)	-	-	-	-

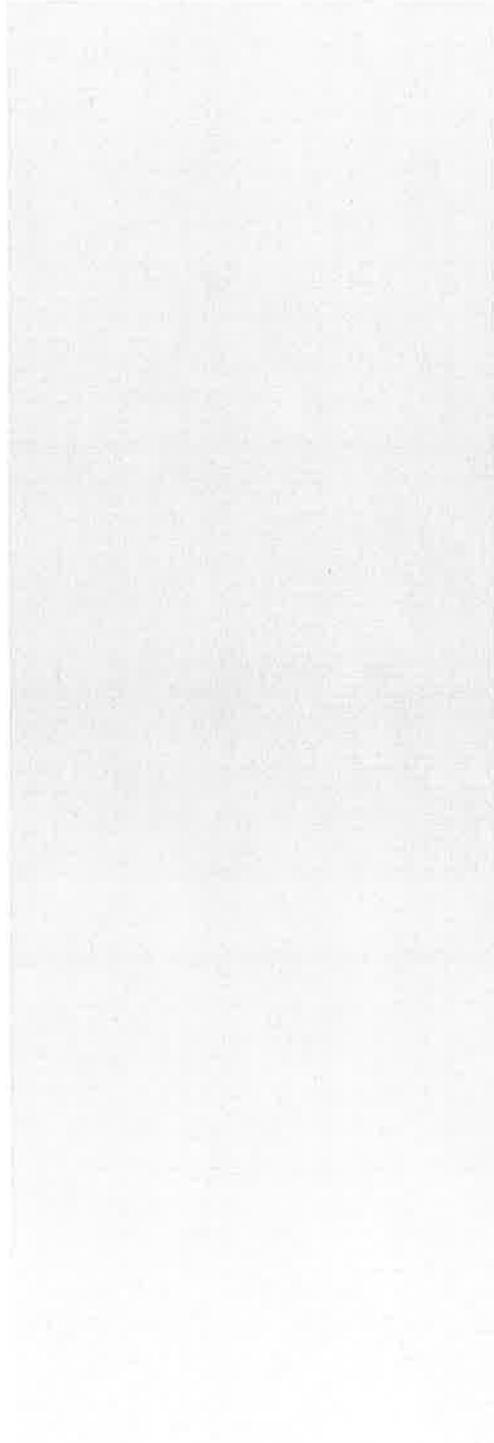


Table C.1.6(c) Estimated Disposal Volumes by Waste Form for Waste Disposition Options Project through 2040

Waste form	LLW (yd ³)	LLW/RCR A (yd ³)	LLW/RCRA/TS CA (yd ³)	LLW/ TSCA (yd ³)	RCRA (yd ³)	TSCA (yd ³)	Sanitary (yd ³)	Total (yd ³)
Asbestos	3,742	21	24,773	0	0	4,031	980	33,547
Concrete	377,393	746	0	0	0	0	393,349	771,488
General Construction Debris	425,867	2,863	0	19	0	2,871	235,380	667,000
Other Dry Solids	45,951	95	5,325	167	542	780	4,172	57,032
Scrap Metal	407,746	172	0	0	0	3,676	68,827	480,421
Soil	1,286,267	29,154	12	0	16,121	1,685	376,273	1,709,512
Total	2,546,966	33,051	30,110	186	16,663	13,043	1,078,981	3,719,000

LLW = low-level waste

RCRA = Resource Conservation and Recovery Act of 1976

TSCA = Toxic Substances Control Act of 1976, Public Law 94-469, October 11, 1976, 15 USC Section 2622

Source: DOE/LX/07-0035&D1, Scoping Document for CERCLA Waste Disposal Alternatives Evaluation Remedial Investigation/Feasibility Study at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, April 2008

Milestones/Schedule/Reference Documents*

*Milestone tables are not comprehensive of all regulatory documents.

Table C.1.6(d) Waste Disposition Alternatives Project Milestones/Schedule		
Milestone	Briefing Date	Due Date
Submittal of D1 RI/FS	NA	11/30/09
Submittal of D2 RI/FS to Regulators	NA	04/27/2013 07/25/2013
D1 Proposed Plan to Regulators Submittal of D1 Proposed Plan to regulators NOTE: This revised date is based on an anticipated milestone calculated under the terms of the FFA and an assumed dispute resolution period of 3 months on the D2 RI/FS. If the dispute is resolved in less than 3 months, then the date will be adjusted.	40 days after submittal of the D2/R1 RI/FS	06/23/2013 45 days after submittal of the D2/RI RI/FS
D1 Record of Decision to Regulators Submittal of D1 Record of Decision to Regulators NOTE: This revised date is based on an anticipated milestone calculated under the terms of the FFA and an assumed dispute resolution period of 3 months on the D2 RI/FS. If the dispute is resolved in less than 3 months, then the date will be adjusted.	280 days after the submittal of the D2/R1 RI/FS OR 1 days after the approval of the D2 PP, whichever is sooner	02/05/2014 285 days after the submittal of the D2/R1 RI/FS OR 5 days after the approval of the D2 PP, whichever is sooner
D1-RDSI-Work Plan to Regulators	05/06/2014	
D1 RDWP to Regulators Submittal of D1 Remedial Design Work Plan to Regulators NOTE: This revised date is based on an anticipated milestone calculated under the terms of the FFA and an assumed dispute resolution period of 3 months on the D2 RI/FS. If the dispute is resolved in less than 3 months, then the date will be adjusted.	25 days after the submittal of the D1 ROD	05/06/2014 30 days after the submittal of the D1 ROD
RDSI Field Start	07/20/2014	
RDSI Reporting	11/12/2014	
60% Design to Regulators	05/30/2015	
If required, post-ROD CERCLA documentation, including final design documents, Quality Control Plans, etc.		As established in the Contractor's baseline and approved by DOE.

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Submittal of CERCLA document (sampling and analysis plan and quality assurance project plan)	<u>April 15, 2015</u>	<u>May 1, 2015</u>
Complete field work and demobilization	<u>July 1, 2015</u>	<u>July 1, 2015</u>
Submit CERCLA documentation for documenting the results of the fieldwork	<u>July 10, 2015</u>	<u>July 15, 2015</u>

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Document Number	Title
DOE/OR/07-1893&D1	Initial Assessment of Consideration of On-Site Disposal of CERCLA Waste as a Potential Disposal Option
DOE/OR/07-1916&D1	Seismic Issues for Consideration in Site Selection and Design of a Potential On-Site CERCLA Waste Disposal Facility
DOE/OR/07-1939&D1	Identification and Screening of Candidate Sites for a Potential CERCLA Waste Disposal Facility
DOE/OR/07-2038&D1	Seismic Investigation Report for Siting of a Potential On-Site CERCLA Waste Disposal Facility
DOE/LX/07-0035&D1	Scoping Document for CERCLA Waste Disposal Alternatives Evaluation Remedial Investigation/Feasibility Study at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, February 2008

C.1.7 Polychlorinated Biphenyl Activities

The cleanup of PCB spills and leaks, maintenance of PCB collection trough systems in the Gaseous Diffusion Plant cascade buildings, and the disposal of PCB waste are ongoing activities.

General Information

PCBs were used extensively in the uranium enrichment process. The lube oil system that USEC currently operates leaks oil that migrates into the USEC ventilation systems and comes into contact with PCB impregnated gaskets. These systems occasionally leak due to age, vibration, and thermal cycling. Troughs and a collection system have been installed under the areas that have a high potential to leak. There are over 16,000

PCB collection troughs (ranging from 4½ to 6 feet in length) installed inside the cascade buildings (C-331, C-333, C-335, and C-337). The cascade buildings cover approximately 6,400,000 square feet of floor space. PCB lube oils are continuously collected and dispositioned; maintenance of the trough system is ongoing. PCB lube oils that leak or spill are collected, cleaned-up, sampled, and properly disposed.

Work to be Performed

The Contractor shall perform all activities to:

- a) Perform surveillance and maintenance of the PCB collection and containment trough system through the end of the contract including disposition of the collected PCB lube oils.
- b) Clean up, sample, and decontaminate PCB spills and leaks, sample and analyze spill sites (estimated to be 40 small spills per year), and properly disposition the PCBs and PCB contaminated material (e.g., absorbent pads and pigs) through the end of the contract.
- c) Collect quarterly air quality data throughout the cascade buildings, and submit quarterly and annual reports through the end of the contract.

Milestones/Schedule/Reference Documents*

*Milestone tables are not comprehensive of all regulatory documents.

Table C.1.7(a) Polychlorinated Biphenyl Activities Milestones/Schedule	
Milestone	Date
As defined by Uranium Enrichment Toxic Substances Control Act Federal Facilities Compliance Agreement (UE TSCA FFCA)	As defined by the UE TSCA FFCA
UE TSCA FFCA Annual Compliance Agreement Report	Due 7/1 (for previous calendar year)
Troughing of all motor exhaust duct gasket flanges	To be documented as required by UE TSCA FFCA - 1992
Quarterly Air Sampling Report	To be documented as required by UE TSCA FFCA - 1992
Quarterly PCB Spills and PCB Spill Clean-up Report	To be documented as required by UE TSCA FFCA - 1992
Annual inspection of readily accessible C-340 PCB-contaminated hydraulic system components	To be documented as required by UE TSCA FFCA - 1992
PCB Waste Off Site Disposal Activities	To be documented as required by UE TSCA FFCA - 1992.

Table C.1.7(b) Polychlorinated Biphenyl Reference Documents	
Document Number	Title

UE-TSCA-FFCA	Uranium Enrichment Toxic Substances Control Act Federal Facilities Compliance Agreement, February 1992
No document number	Paducah DOE TSCA/FFCA Concurrence Agreements (1992-1998)
PRS-WSD-0278	The Site Treatment Plan Annual Update for the United States Department of Energy Paducah Gaseous Diffusion Plant, Paducah, Kentucky, March 2008
Commonwealth of Kentucky File Number DWM-30039-042	Site Treatment Plan Agreed Order, 9/10/97
Letter dated May 6, 1998	DOE Legacy Waste Agreement between DOE and USEC

C.1.8 Environmental Monitoring and Reporting

This is an ongoing activity requiring the Contractor to perform environmental monitoring of on-site and off-site air, soils, and water, and to report results to DOE and regulators.

General Information

In order to protect the health and safety of the on-site workforce, the public, and the environment, monitoring of on-site and off-site air, soils, and water is continuously performed.

An environmental monitoring program has been established. Agreements with the regulators have been made on the scope of the program. It is DOE's goal to continuously optimize the monitoring requirements through agreements with the regulators; however, the Contractor must obtain DOE and/or regulator approval as appropriate prior to reducing any monitoring activities.

Work to be Performed

The Contractor shall perform all activities to:

- a) Monitor and maintain the structural integrity of the groundwater monitoring wells (currently estimated at 356). Well maintenance includes, but is not limited to, replacing broken concrete pads surrounding the wells; repairing, replacing, extending the outer protective steel casing; repairing, replacing, installing vehicle guard posts around the wells; repairing and replacing casing covers, lock hasps, and hinges on outer protective casings; drilling weep holes in the outer protective casing; and painting the outside of the outer protective casings, including well rehabilitation or replacement, and abandonment as required.
- b) Monitor outfalls (including Outfall 17), seeps, in-stream surface water locations, and sediment monitoring locations.

- c) Conduct thermoluminescent dosimeter (TLD) monitoring at an estimated 40 locations; aquatic and other biological monitoring; and landfill surface water and leachate monitoring.
- d) Conduct monthly inspections of C-746-K and C-404 burial ground caps, and provide corrective maintenance as required.
- e) Perform daily inspections of C-400-L and C-616-L lift stations.
- f) Execute the Water Policy (interim control measure) to include management of license agreements (an estimated 101) with local residents and businesses to supply municipal water and license agreements (an estimated 2) to allow DOE to access and sample off-site monitoring and residential wells.
- g) Maintain 2 license agreements with Kentucky Fish and Wildlife for management of the approximately 1,986 acres of DOE property not in the industrialized portion or buffer area of the plant.
- h) Operate and maintain the Paducah Data Warehouse. Provide an Official Use Only (OUO) version for access by regulators and Citizens Advisory Board members and a separate version that is not OUO that is accessible by the public.
- i) Perform all environmental monitoring tasks necessary to support all site activities, including but not limited to sample collection, and analysis as necessary to prepare and submit reports identified in Section J, Attachment J4, including input from others on-site.
- j) Monitor all SWMUs in accordance with the RCRA permit.
- k) Maintain, input, create reports, and complete all other activities necessary to manage environmental data generated by the Contractor's activities and data provided by other site Contractors. Ensure the data is current, complete, and compliant with contract requirements. This includes management of databases (e.g., Oak Ridge Environmental Information System (OREIS), Geographical Information System (GIS), Paducah Project Environmental Measurement System (Paducah PEMS)) transitioned to the Remediation Contractor or included as part of any regulatory agreement(s).
- l) Provide SWMU notifications for work in all SWMUs at PGDP in compliance with all legal requirements.
- m) Complete the C-746-U Groundwater Assessment Plan field investigation report and any required remedial actions in performance of the C-746-U Landfill Assessment.
- n) The Contractor shall prepare and submit the D1 Five Year Review by 9/30/13 and in accordance with the Federal Facility Agreement.
- o) The Contractor shall the necessary actions to implement the following items:
 - 1) Evaluation of the proper number and location of the air monitors on DOE property to meet National Emission Standards for Hazardous Air Pollutants (NESHAP) requirements. The evaluation needs to include three different scenarios: current remediation conditions, future GDP D&D conditions, and current DUF6 conditions; the number of units; proposed locations of the air monitors; power source options for the each location; schedule for each option/scenario; and cost analysis for each option/scenario.

- 2) Purchase, installation (including power requirements), operation and maintenance of new air monitors.
- 3) Perform ambient air monitoring data to verify radionuclide levels in off-site ambient air in accordance with the Paducah Gaseous Diffusion Plant Department of Energy NESHAP Management Plan, BJC/PAD-141, February 2000. Collect radionuclide samples surrounding the plant to capture airborne radionuclides emitted from all sources including fugitive and diffuse sources. Perform air filter screening for development of the annual NESHAP report and reporting in the Annual Site Environmental Report.
- 4) Collection and distribution of the air monitoring data, in accordance with the Paducah Gaseous Diffusion Plant Department of Energy NESHAP Management Plan, BJC/PAD-141, February 2000.
- p) The Contractor shall provide regulatory compliance support for release and subsequent DOE Deactivation Contactor deactivation/S&M of the gaseous diffusion plant (GDP) from USEC to include the following:
 - 1) Assist DOE in negotiations with the Kentucky Division of Water to transfer responsibilities for the current USEC KPDES permit to DOE.
 - 2) Prepare and submit necessary documentation to transfer current USEC KPDES permit to DOE.
 - 3) Prepare and submit permit modification to the DOE KPDES permit to consolidate former USEC outfalls to appropriately address the discharges associated with future DOE deactivation activities at the Paducah Site in accordance with negotiated schedule.
 - 4) Provide Clean Air Act (CAA) support, including programmatic evaluation of appropriate permitting and management strategies to ensure site-wide CAA compliance, considering DOE acceptance of the former USEC Title V permit.
 - 5) Prepare and submit necessary documentation to transfer current USEC Title V permit to DOE or submit an application for a new Title V permit, if necessary.
 - 6) Prepare and submit a modification or modified application of the Hazardous Waste Facility Permit (HWFP) to include appropriate changes for the formerly USEC-leased facilities at the Paducah Site.
 - 7) Evaluate GDP facilities and uses in consultation with DOE to determine if additional Solid Waste Management Units should be identified under the HWFP and the Federal Facility Agreement.
- q) The Contractor shall evaluate the following programs and plans and revise, as necessary, to include requirements to account for the future DOE Deactivation activities and formerly USEC-leased facilities.
 - 1) Evaluate the Environmental Radiological Protection Program (ERPP) and revise if necessary, to incorporate any additions necessary to monitor deactivation activities of the GDP.
 - 2) Evaluate the current National Emission Standards for Hazardous Air Pollutants (NESHAPs) Management Plan and revise if necessary, to incorporate all aspects of maintaining compliance upon release of the GDP, considering that USEC will no longer be participating in the development of the Annual NESHAPs report.

- 3) Revise the Environmental Monitoring Plan (EMP) to document the additional sampling and analysis required, if necessary revision does not coincide with an annual update.
- 4) Evaluate the Groundwater Protection Program Plan (GWPP) and revise if necessary, to address additional GDP facilities upon release.
- 5) Evaluate the current Best Management Practices Plan (BMP) and revise if necessary or develop a separate BMP to address the former USEC outfalls to be utilized with either the transferred USEC KPDES permit or a consolidated DOE KPDES permit.
- 6) Evaluate the Spill Prevention, Control, and Countermeasure (SPCC) Plan and revise if necessary, to address additional GDP facilities upon release.
- 7) Evaluate the Pollution Prevention/Waste Minimization Plan and revise, if necessary to incorporate deactivation activities.
- 8) Evaluate the site-wide Superfund Amendments and Re-authorization Act (SARA) reporting and provide recommendations to improve efficiencies or more effectively manage compliance and reporting processes.
- r) Coordinate and integrate with DOE's technical support contractor and DOE to maintain current plans and schedule for GDP release and post-release activities.
- s) Perform environmental monitoring services (on-site and off-site) for air, soils and water and other site-wide environmental documentation (e.g., NEPA, NESHAPS, KPDES, etc.) associated with the formerly USEC-leased facilities and areas from October 21, 2014 to July 25, 2015.
- t) Support DOE in scoping discussions with Federal Facility Agreement (FFA) parties concerning EPA's recommendation for additional action related to EPA comments on 2013 CERCLA Five-Year Review for the Paducah Gaseous Diffusion Plant (DOE/LX/07-1289&D2/R1) for the Water Policy area. DOE anticipates that these discussions will:
 - Evaluate existing data
 - Identify additional data needs
 - Consider the existing Land Use Control Implementation Plan for the C-400 Building
- u) Provide project planning and scoping support for development of CERCLA documentation to address the EPA's recommendation for additional action related to EPA comments on 2013 CERCLA Five-Year Review for the Paducah Gaseous under the FFA.
- v) Prepare necessary CERCLA documentation (sampling and analysis plan and quality assurance project plan) to perform the fieldwork. The contractor shall prepare CERCLA documents that are sufficient in quality such that DOE and regulators can approve the documents without further modification or correction, and actively assist in obtaining regulatory approval.
- w) In support of addressing the EPA concern regarding vapor intrusion, integrate possible data needs into other project field efforts to minimize duplication of field mobilization and installation costs. Prepare necessary CERCLA documentation for sampling and reporting subsequent results for samples obtained at project sites that would be beneficial to addressing EPA's concern regarding vapor

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intrusion. Obtain water samples from ten borings being installed by the Waste Disposition Disposal Alternatives (WDA) project (Site 5A) and analyze for TCE and any other parameters identified during scoping. Also conduct soil gas measurements at five of the WDA borings. Collect water samples from up to ten additional existing wells and soil gas measurements from up to six additional borings associated with other DOE projects. Also, install a cluster of up to three Direct Push Technology (DPT) borings at four different locations for a total of up to twelve borings. Collect a water sample from one boring at each of the four locations for a total of four water samples, in accordance with the final approved Sampling Analysis Plan (SAP). Each water sample shall be analyzed for, at a minimum, TCE and any other constituents identified in the SAP. Develop and obtain necessary access agreements and notifications with non-DOE landowners to allow for the necessary fieldwork.

- x) Prepare necessary CERCLA documentation to document results.

Milestones/Schedule/Reference Documents*

*Milestone tables are not comprehensive of all regulatory documents.

NOTE: Assume a release date of October 20, 2014 for planning purposes only.

Table C.1.8(a) Environmental Monitoring and Reporting Milestones/Schedule	
Milestone	Date
Submittal of Evaluation Report for Air Monitoring System	03/19/2012
Begin Operations of the Air Monitoring System	07/01/2012
D1 Five Year Review	As identified in C.1.8
Submittal of Reports	As identified in Section J, Attachment J4
Complete C-746-U Groundwater Assessment per the Groundwater Assessment Plan	As established in the Contractor's baseline and approved by DOE.
Complete any required remedial actions resulting from the Groundwater Assessment Plan investigation	As established in the Contractor's baseline and approved by DOE.
Submit Draft Request to Transfer the current USEC KPDES Permit to DOE for Review	07/02/2014
Submit Final Request to Transfer the current USEC KPDES Permit to DOE for Certification	10/6/2014
Submit Draft DOE KPDES Permit Modification to include former USEC outfalls to DOE for Review	03/23/2015

Submit Final DOE KPDES Permit Modification to include former USEC outfalls to DOE for Certification	<u>04/30/2015</u>
Submit Draft Request to Transfer the current USEC Title V Permit to DOE for Review	<u>07/16/2014</u>
Submit Final Request to Transfer the current USEC Title V Permit to DOE for Certification	<u>10/06/2014</u>
Submit Draft modification or modified application of the HWFP to DOE for Review	<u>08/01/2014</u>
Submit Final modification or modified application of the HWFP to DOE for Certification	<u>08/29/2014</u>
Submit Draft Revised ERPP to DOE	<u>08/20/2014</u>
Submit Final Revised ERPP to DOE	<u>10/30/2014</u>
Submit Draft Revised NESHAP Management Plan to DOE for Review	<u>08/01/2014</u>
Submit Final Revised NESHAP Management Plan to DOE for Certification	<u>08/29/14</u>
Submit Draft Revised EMP to DOE	<u>08/20/2014</u>
Submit Final Revised EMP to DOE	<u>10/31/2014</u>
Submit Draft Revised GWPP to DOE	<u>10/20/2014</u>
Submit Final Revised GWPP to DOE	<u>01/15/2015</u>
Submit Draft BMP to include former USEC outfalls to DOE for Review	<u>07/31/2014</u>
Submit Final BMP to include former USEC outfalls to DOE for Certification	<u>10/20/2014</u>
Submit Draft SPCC to DOE for Review	<u>08/11/2014</u>
Submit Final SPCC to DOE for Certification	<u>11/14/2014</u>
Submit Draft Revised PP/WM Plan to DOE	<u>08/20/2014</u>
Submit Final Revised PP/WM Plan to DOE	<u>10/30/14</u>
Submittal of CERCLA document (sampling and analysis plan and quality assurance project plan)	<u>May 1, 2015</u>
Complete field work and demobilization	<u>July 1, 2015</u>
Submit CERCLA documentation for documenting the results of the fieldwork	<u>July 15, 2015</u>

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Table C.1.8(b) Environmental Monitoring and Reporting Reference Documents	
Document Number	Title
PRS-ENM-0034 Volume I	Paducah Site Annual Site Environmental Report for Calendar Year 2006, September 2008
PRS-ENM-0034 Volume II	Environmental Monitoring Results, Annual Site Environmental Report, Calendar Year 2006, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, September 2008
Commonwealth of Kentucky Permit Number KY0004049	Kentucky Pollutant Discharge Elimination System Permit Number KY0004049 for the Paducah Gaseous Diffusion Plant/U.S. Department of Energy Outfalls Under, McCracken County, Kentucky
Commonwealth of Kentucky Permit Numbers 073-00045, 073-00014, 073-00015	C-746-U, C-746-S and C-746-T Landfills Solid Waste Permits
REEMCBCDOE-03-06-0710, REORDOER-3-93-0700	License Agreements between DOE and the Kentucky Department of Fish & Wildlife Resources for Paducah Gaseous Diffusion Plant Deer Bow Hunts and Paducah Gaseous Diffusion Plant Wildlife Development
Permit Number KY8-890-008-982	Kentucky Division of Waste Management Hazardous Waste Management Facilities Permit
REEMCBCDOE-7-08-0xxx (PPPO-02-232-08 Enclosure)	License (Single Purpose: Groundwater Monitoring Wells, Sampling, Furnishing Municipal Water to Grantor)
REEMCBCDOE-7-08-0xxx	License (Single Purpose: Groundwater Monitoring Wells, Miscellaneous Sampling)
Dated March 13, 2006; signed by DOE May 9, 2006	Tennessee Valley Authority – Shawnee Fossil Plant – Paducah Gaseous Diffusion Plant Letter of Agreement
PRS-ENM-0024	Environmental Monitoring Plan, Fiscal Year 2008, Paducah Gaseous Diffusion Plant, Paducah, Kentucky
PRS-PROJ-0003	Bayou Creek And Little Bayou Creek Revised Watershed Monitoring Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky; Kentucky Pollutant Discharge Elimination System Permit Number KY0004049, November 2006

Table C.1.8(b) Environmental Monitoring and Reporting Reference Documents	
Document Number	Title
PRS/PROJ/0025	Monitoring Well Maintenance Implementation Plan For The Paducah Gaseous Diffusion Plant, Paducah, Kentucky, February 2008
Dated December 2007	KPDES Agreed Order
Permit Number KY8-890-008-982	Kentucky Division of Waste Hazardous Waste Management Facilities Permit
PRS-PROJ-0006	Groundwater Assessment Plan for the C-746-U Landfill at the Paducah Gaseous Diffusion Plant Paducah, Kentucky, Permit Number 073-00045, Agency Interest No. 3059
DOE/LX/07-0117&D1	CERCLA Five-Year Review, November 2008
PRS-ENM-0031/R2	C-404 Landfill Source Demonstration Paducah Gaseous Diffusion Plant, Paducah, Kentucky, August 2007
DOE/OR/06-1201&D2	Action Memorandum for the Water Policy at the Paducah Gaseous Diffusion Plant Paducah, Kentucky, June 1994
PRS/ENM/0037	Spill Prevention, Control, and Countermeasure Plan for the DOE Paducah Site, McCracken County, Kentucky, February 2008
PRS/PROG/0015/R1	Pollution Prevention/Waste Minimization Program Plan for the U.S. Department of Energy Paducah Remediation Project, February 2008
BJC/PAD-691/R1	Cultural Resource Management Plan for the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, March 2006
KY8-890-008-982	Letter from A. Webb to J. Woodard, "Five-Year Review of Remedial Actions at the Paducah Gaseous Diffusion Plant (DOE/LX/07-1289&D2/R 1), Paducah Gaseous Diffusion Plant, Paducah, McCracken County, Kentucky," dated July 8, 2014
	Letter from J. Tufts to R. Blumenfeld, "EPA Comments on 2013 CERCLA Five-Year Review for the Paducah Gaseous Diffusion Plant (DOE/LX/07-1289&D2/R1)," dated July 3, 2014

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Table C.1.8(b) Environmental Monitoring and Reporting Reference Documents	
Document Number	Title
DOE/LX/07-1289&D2/R1	Five-Year Review of Remedial Actions at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, May 30, 2014

C.1.9 Burial Grounds Operable Unit (BGOU)

This work scope shall be considered complete following submittal and approval of all specified regulatory documents, and completing the characterization activities at SWMU 4, and initiating implementation of the remedial action at SWMUs 5 and 6.

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General Information

There are on-site burial grounds that are being investigated in the Burial Grounds Operable Unit. Known contaminants include, but are not limited to, heavy metals, TCE, radioactive materials, and PCBs. The burial grounds may be contributing sources of TCE contamination to the Southwest and Northwest Dissolved Phase Plumes. These burial grounds contain various waste forms that include, but are not limited to radiologically contaminated (uranium, ⁹⁹Tc, etc.) dry active waste, debris, drummed sludges, metals, classified components, and excess equipment. The burial grounds at SWMUs 2, 4, 5, 6, 7, 13, 30, and 145 all have a soil cover (not a cap). The SWMUs cover an area of approximately 32,000 ft², 286,700 ft², 197,400 ft², 13,500 ft², 240,900 ft², 294,000 ft², 128,000 ft², and 44 acres, respectively. SWMU 3 (C-404 RCRA landfill) has a Subtitle C RCRA cap, though it has no subsurface liner, and is approximately 1.2 acres. The Remedial Investigation Report for the BGOU was approved by the regulatory agencies in March 2010.

Though the final remedy will not be determined until the RODs are signed, the baseline assumption is that buried wastes at SWMU 2, SWMU 3, and SWMU 4 will be excavated. Some wastes may meet the waste acceptance criteria for the C-746-U landfill. Other wastes will be disposed off-site, and some wastes may meet the waste acceptance criteria for an on-site CERCLA cell that is under consideration (see Section C.1.6 Waste Disposition Alternatives Project). It also is assumed that the remaining SWMUs will receive soil covers and their wastes will remain in place. In addition, it is assumed that at least three burial grounds (SWMU 4, SWMU 7, and SWMU 30) will also require treatment such as ERH, Chem-Ox, and/or C-Sparge. Note that the assumption is that the remedy selected for SWMUs 5 and 6 will be a Kentucky Subtitle D Cap.

Initially, one set of "BGOU" CERCLA documents (e.g., FS, ROD, etc.) were planned to address all BGOU SWMUs. Regulator comments on the BGOU D2 FS resulted in a dispute; the resulting dispute resolution agreement specified separate FS reports (i) for SWMUs 5 and 6 and (ii) for SWMUs 2, 3, 7, and 30. As a result of re-prioritizing project activities, the scope has been limited to (i) completing the FS, PP, and ROD for SWMUs 5 and 6, along with initiating the remedial action; and (ii) Completing the FS for SWMUs 2, 3, 7 and 30. As a separate activity, the implementation of sampling field work for SWMU 4 will be completed, along with development of an RI Report Addendum and D1 FS.

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Work to be Performed

The Contractor shall perform all activities to:

- a) Prepare the CERCLA documents specified in Table C.1.9(a) supporting the remediation of the burial grounds. Includes all applicable field work and analytical work necessary to support CERCLA documents. These documents must be consistent with the Site Management Plan and of sufficient quality such that DOE and regulators can approve them without further modification or correction. Actively assist in obtaining regulatory approval of document submittals. This may include providing support to resolve disputes. (The scope for SWMUs 2, 3, 7, and 30 will be considered complete upon approval of the FS report.)
- b) Initiate implementation of the selected remedial action at SWMUs 5 and 6 as specified within the SWMUs 5 and 6 Record of Decision, and subsequent CERCLA documents (e.g., including the Remedial Design Work Plan and Remedial Design Report, Remedial Action Work Plan, Land Use Control Implementation Plan, and Operations and Maintenance Plan) up to and including mobilization activities and procurement activities for the fencing and remedial action.
- c) Dispose of all wastes excavated or generated up to 90 days prior to the completion of the contract period.
- d) Develop a remedial investigation work plan (RIWP) addendum to better characterize SWMU 4 and optimize remedy selection. Perform fieldwork as defined in the RIWP Addendum, which incorporates the newly collected data. Develop a feasibility study using the information from the Remedial Investigation Report Addendum.
- e) Prepare, complete and submit appropriate documentation to record the field sampling agreement. The documentation should be of sufficient quality such that DOE and regulators can approve it without further modifications or correction. Actively assist in obtaining regulatory approval of documents. Includes all applicable field work and analytical work necessary to support CERCLA documents.
- f) Execute and complete the field sampling outlined in item e).
- d)g) Collect water samples from the existing piezometers within the SWMU 4 boundary and analyze for TCE.

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Milestones/Schedule/Reference Documents*

*Milestone tables are not comprehensive of all regulatory documents.

Table C.1.9(a) Burial Grounds Operable Unit Milestones/Schedules	
Burial Grounds Operable Unit	Date
SWMU 4 D1 RIWP Addendum	10/31/2011
SWMU 4 Fieldwork Start	09/07/2012
SWMU 4 Phase 3 (of RI Fieldwork) Completion	07/30/2013
Submittal of appropriate documentation to record the field sampling agreement for SWMU 4 to regulators	09/30/2014
Complete additional SWMU 4 Phase III sampling as outlined in item e) above	03/01/2015
Complete SWMU 4 Phase IV sampling as outlined in the RI WP Addendum (including waste disposal and demobilization)RI-Completion	06/01/201407/15/2015
SWMU 4 D1 RIR-Addendum to Regulators	12/01/2014
SWMU 4 D1 Feasibility Study to Regulators	07/01/2015
SWMUs 5&6 D2/R3 FS to Regulators	02/15/2013
SWMUs 5&6 D1 PP to Regulators	05/16/2013
SWMUs 5&6 D1 ROD to Regulators	10/13/201312/01/2014
SWMUs 5&6 D1 RDWP to Regulators	11/12/201312/30/2014
SWMUs 5 & 6 60% RDR to DOE	06/30/2015
SWMUs 5&6 D1 RDR to Regulators	10/13/2014
SWMUs 5&6 D1 RAWP to Regulators	11/12/2014
SWMUs 5&6 Fieldwork Mobilization	05/24/2015

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Table C.1.9(b) Burial Grounds Operable Unit Reference Documents	
Document Number	Title
DOE/OR/07-2178&D1	Scoping Document for the Burial Grounds Operable Unit Remedial Investigation/Feasibility Study at Paducah Gaseous Diffusion Plant Paducah, Kentucky, November 2004
DOE/OR/07-2179&D2/R1	Work Plan for the Burial Grounds Operable Unit Remedial Investigation/Feasibility Study at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, October 2006

DOE/LX/07-0030&D1	Remedial Investigation Report for the Burial Grounds Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, May 2008
DOE/LX/07-0030&D2/R1	Remedial Investigation Report for the Burial Grounds Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, February 2010
DOE/LX/07-0130&D1	Feasibility Study for the Burial Grounds Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, April 2010

C.1.10 Project Support

The Contractor shall provide all project support necessary for performance of this contract. This is an ongoing activity.

C.1.10.1 Project Management System

The Contractor shall perform all activities to:

- a) Develop and maintain a project management system in accordance with clause H.1, Project Control Systems and Reporting Requirements, for both the scope of work under this contract and the anticipated site environmental restoration lifecycle.
- b) Ensure that Long-Term Stewardship (LTS) issues are considered in the cleanup decision-making processes. Even though the LTS activities are not included in the scope of this contract, some of the activities needed to ensure the site’s successful transition to future LTS are integrated into the work scope defined in this contract.
- c) Assist DOE in coordination and communication regarding LTS planning and transition with all involved parties including local stakeholders and regulators.
- d) Maintain the Paducah Site Life Cycle Baseline for all Performance Baseline Summary (PBS) activities associated with the site to include all other DOE site contractors.

C.1.10.2 Integrated Safety Management System

The Contractor shall develop and maintain a single, site-wide Integrated Safety Management System (ISMS) to accomplish all work under this contract as required by Department of Energy Acquisition Regulation Clause 970.5223-1, "Integration of Environment, Safety and Health into Work Planning and Execution." The Contractor shall prepare, complete, and submit within 60 calendar days after contract award an ISMS for DOE approval and Phase I/II verification. The ISMS must also comply with Environmental Management System requirements set forth in DOE O 450.1A.

The initial ISMS program must be approved by DOE prior to the start of operations. The ISMS program shall be subject to an annual verification review by a DOE chartered ISMS verification team.

C.1.10.3 Environment, Safety and Health Program

The Contractor shall perform all activities to:

- a) Conduct all activities required for compliance with applicable laws, regulations, permits, agreements and Orders, and DOE Directives including those listed in Section J, Attachments J1 and J2. The Contractor's Environment, Safety and Health (ES&H) program shall be operated as an integral, but visible, part of how the Contractor conducts business. This includes, but is not limited to: prioritizing work planning and execution; establishing clear ES&H priorities; allocating resources to address programmatic and operational considerations; collecting and analyzing samples; and correcting non-compliances and addressing all hazards for all facilities, operations, and work. The Contractor shall ensure that cost reduction efforts and efficiency efforts are fully compatible with ES&H performance.
- b) Take all actions necessary to preclude serious injuries and/or fatalities; keep worker exposures and environmental releases as low as reasonably achievable and below established limits; minimize the generation of waste; maintain or increase protection to the environment; and maintain or increase public and worker safety and health.
- c) Maintain the documented safety analysis and safety basis documents, as applicable, for all non-leased DOE facilities, including, but not limited to, C-410/420 and C-746-Q. The Contractor shall, as required, develop, update and maintain all safety analysis and safety documents in accordance with the requirements of 10 CFR 830, Subpart B.
- d) Develop and/or update existing regulatory required implementation plans and processes (e.g., 10 CFR 835, Radiation Protection Plan; Unreviewed Safety Question Process; and 10 CFR 851, Worker Safety and Health Plan). Plans shall be submitted to DOE for approval within 30 calendar days after contract award and updated annually for changes.
- e) Establish and maintain a formal quality assurance program which satisfies the quality assurance requirements contained in the Paducah List of Applicable Laws and Regulations (List A) and applicable DOE Directives (List B) (see Section J, Attachments J1 and J2) and the American Society of Mechanical Engineers (ASME) NQA-1, Quality Assurance Requirements for Nuclear Facility Applications, NQA-1-2004 (and Addenda through 2007). A Quality Assurance Plan (QAP) shall be submitted to DOE for approval within 30 calendar days after contract award and updated annually for changes. The Contractor's QAP shall be implemented for all work performed by the Contractor (e.g., mission, safety, and health).
- f) Submit within 60 calendar days after contract award for DOE review and approval a Beryllium Protection Program consistent with 10 CFR 850. A study

has been completed characterizing the levels of Beryllium within the site (BJC/PAD-581) and shall be considered by the Contractor in development and implementation of a Beryllium Protection Program and in the performance of this contract.

- g) Develop all remaining elements of the contractor's fire protection program to meet DOE O 420.1B.
- h) Ensure adequate access to health programs/ambulatory care, and beryllium and radiation worker health surveillance programs. These services are required to assess, monitor, record data, and provide medical support for current site workers who are or may be exposed to radiological and hazardous materials. The Contractor shall provide radiation dosimetry (TLDs/Personal Nuclear Accident Dosimeters (PNADs)) and bioassays as required by 10 CFR 835 for the Contractor.
- i) Provide project-specific training for both the Contractor's and the DOE employees as required by DOE, the Department of Transportation, and safety and health requirements. The Infrastructure Contractor shall provide the following training: Consolidated Annual Training, Radiation Worker I and II, General Employee Training, Annual Security Refresher, Workplace Violence Prevention, Diversity Awareness, Employee Conduct Training, Business Ethics/Standards of Conduct, and Fire Extinguisher Training, DOE Orders/Work Smart Standards and ISMS. The training for Work Smart Standards and ISMS shall be general introductory courses, not specific to any Contractor's program. The Contractor shall track the training status and notify employees of pending expiration of training.
- j) Ensure personnel are properly and adequately trained.
- k) Provide safety and health Personal Protective Equipment (PPE) for both the Contractor's and the DOE employees. The Infrastructure Contractor shall provide calibration and maintenance of all monitoring and surveying equipment as required by 10 CFR 835. The Contractor shall perform radiological surveys as needed for their work.
- l) Although the Infrastructure Contractor provides for integrating DOE contractor emergency management support, the Contractor shall within 60 calendar days after contract award provide support to DOE and participate in the site's Emergency Management program (including procedure or plan development). The Contractor shall coordinate with the Infrastructure Contractor and provide adequate staff to support the Emergency Operation Center efforts for its operations, and ensure adequate support is available to respond to an emergency. The Emergency Operation Center for the site is provided by USEC with specific support from DOE for DOE activities. The Contractor shall develop and update the Emergency Planning Hazard Surveys/Assessments at least every three years or whenever a major change occurs. Develop and update as needed, site/facility-specific Emergency Action Levels (EALs) for the spectrum of potential Operational Emergencies identified by the Emergency Planning Hazard Assessment to include protective actions for implementation in the USEC Site Emergency Program. Provide the Infrastructure Contractor timely Emergency

- Readiness Assurance Plan (ERAP) information to be included in the DOE Paducah Site Integrated ERAP for DOE submittal per DOE Order 151.1C.
- m) Implement an Underground Storage Tank (UST) program consistent with all State Regulations. A list of USTs is provided in Exhibit C.1.10.3.
 - n) Perform an environmental compliance due diligence review within 30 days after the end of the transition period to ensure noncompliances are known and managed and provide a certification to the Contracting Officer.
 - o) Provide investigations and support for ES&H issues/effects resulting from the historical "work for others program". The Contractor may encounter materials and historical information that references a "work for others" program; these materials may include classified information. The potential implications will be discussed after award of this contract consistent with security requirements.
 - p) Provide input and support, to include, but not be limited to: actions, documents, responses, and information for DOE's preparation of various reports to Congress, DOE-HQ, the public, and other requesting organizations.
 - q) Provide non-emergency spill contamination, clean-up, and other post-emergency response activities. Spills could include, but not be limited to, diesel fuel, oils containing PCBs, and radioactive contamination.
 - r) Provide certified analytical laboratory services to analyze samples it takes in support of this contract. to include certified analytical laboratory services to the Deactivation Contractor. The Contractor shall ensure costs are segregated appropriately and shall require the Deactivation Contractor to pay the fully burdened cost for performance of the analytical services.
 - s) Provide programmatic and oversight support to other DOE contractors, as requested by DOE. Examples may include Kentucky Research Consortium for Energy and Environment (KRCEE) demonstration projects on DOE property.
 - t) Identify and ensure the operability of systems, structures and components (SSCs) used to support fire suppression systems and mitigation systems in facilities operated by DOE (this includes fire suppression systems, smoke/heat detection systems, and alarm notification systems).
 - u) Identify interface points (for facilities as assigned in FIMS) with SSCs operated by USEC and other utility providers.
 - v) Ensure that operation and maintenance of the fire suppression and mitigation systems in facilities operated by DOE is performed in a manner that minimizes impact on the safety and efficiency of DOE and USEC operations.
 - w) RESERVED
 - x) The Contractor shall coordinate with DOE, Infrastructure Contractor, and DUF6 Contractor to assess emergency response needs based on the impact of reduced GFSI. Based on this assessment, the Contractor shall provide the necessary resources, services and items to ensure compliance with DOE orders or other applicable requirements

Milestone: Complete corrective actions by April 4, 2014.

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C.1.10.4 Administration

The Contractor shall provide administrative services including, but not limited to, management, public affairs, financial, legal, procurement, program management, taxes (Contractor should pursue any available exemptions), public information, support to DOE, Paducah Site Citizens Advisory Board (CAB) support, and human resource management commensurate to support the Contractor's scope of work. The Contractor shall perform all activities to:

- a) Support DOE in responding to Congressional, regulatory and other requests for documents and information; examples of such include: Freedom of Information Act requests; Privacy Act requests; and litigation document requests served upon DOE and its current and former prime Contractors.
- b) Support shall include, but not be limited to, preparation for briefings, public presentations, and search, review, and reproduction of documents. The Contractor shall ensure all external briefing materials and public presentations are of the highest professional quality to market the current and planned project achievements.
- c) Provide administrative services pertaining to public affairs. These shall include, but not be limited to, development of a project/site external communication strategy to market the current and planned project achievements to DOE's stakeholders, including local and state government and congressional representatives.
- d) Ensure that all environmental regulatory documents have received adequate legal review for sufficiency, accuracy and strategic impacts before being submitted to DOE and then to the regulatory agencies.
- e) Support DOE efforts with regard to site reindustrialization/reutilization activities and with regard to Natural Resource Damage Assessments.
- f) Provide joint legal support to DOE in connection with legal or regulatory proceedings at DOE's request.
- g) Support transition from the existing Contractor, and transition to a new Contractor at the end of this contract. Complete transition of "blue sheet" procedures (procedures carried over from existing Contractor) to Contractor procedures within 60 days of transition.
- h) Provide central locations and receptacles for the collection and delivery of site mail by the Infrastructure Contractor.

The work activities herein will be provided on a completion basis and will include but not be limited to the following tasks (unless otherwise determined by the Contracting Officer to be not applicable):

I. Submission of Contractor Closeout Request with the following:

- a. All actions definitized – Provide the necessary contract proposals and baseline change proposals to complete a final contract modification based on work completed and associated costs/fee;

- b. Verify that all contract deliverables have been received and accepted;
 - c. Contractor has complied with all contractual terms and conditions;
 - d. Demonstrate that all Subcontracts, etc., are closed and claims/litigation resolved; and
 - e. All disallowed payments, performance or suspended costs have been resolved.
2. Process to finish or resolve all contractual requirements for a physically complete contract with the objective of establishing the final price and making final payment.
 3. Determination of final overhead rates is dependent on a review of the contractor's incurred direct and indirect costs. FAR 52.216-7 requires the contractor to submit a final indirect cost proposal to the Government within 180 days of the close of its fiscal year.
 4. All classified documents must be dispositioned in accordance with government security regulations and accounted for by the contractor.
 5. Submit final patent report.
 6. The contractor should ensure that a process exists for handling warranties as appropriate.
 7. The contractor should ensure that all issues related to any lease under the contract are closed out as appropriate.
 8. All open actions and liabilities must be resolved prior to closeout including resolution of any disputes/litigation, terminations and/or claims.
 9. Government property provided to the contractor during contract performance and not consumed must be dispositioned at the end of the contract. The FAR provides procedures for the proper disposition of government property, which include contractor reporting of all government property. The government will review the report and provide specific instructions to ship, leave in place, or scrap the property.
 10. All subcontracts must be paid and closed before the prime contract can be eligible for contract close-out. This includes Subcontracts, Purchase Orders and other agreements.
 11. All excess funds, such as un-liquidated obligations have been verified and the de-obligations of funds have been accomplished.
 12. The Contractor must execute a General Assignment which assigns to the Government any refunds, rebates, credits or other amounts allocable to costs for which the Contractor has been reimbursed by the Government. The Contractor must also execute a final release discharging the Government, its officers, agents, and employees from all liabilities, obligations, and claims under the contract except claims which may be specified.
 13. Submission of a Summary Settlement Statement outlining direct and indirect costs, fees and retainage.
 14. Once final annual indirect cost rates are settled for all years of a physically complete contract, the contractor must submit a completion invoice or voucher reflecting the settled amounts and rates within 120 days to include the following:
 - a. Verification that all contractual requirements have been satisfied;
 - b. Completion of fee adjustments;
 - c. Verification that contractual funding limitations have not been exceeded;
 - d. Identification of the application of any offsets;
 - e. Accuracy of Contractor Release and Assignment;
 - f. Verification that all previous contractor vouchers have been paid; and
 - g. Verification that the final voucher is identified as a "Final Voucher" and has a "Z" in the position of the voucher number.
 15. Complete all necessary submittals delineated in Table C.1.10.4 below.

- 16. Provide a Fiscal Year spending projection (by month) for any outstanding or accrued costs for work performed under this contract for work completed as of July 26, 2015. This should be updated on a monthly basis.
- 17. Complete turnover of all DOE-owned records inclusive of warranties and operating manuals, including turnover of electronic information on data servers and email.
- 18. Perform all actions necessary to terminate security clearances and turnover of any security-related material.
- 19. Complete all activities required for employee termination, including payment of any benefits owed to the employees and post-termination costs for laid-off employees.

Table C.1.10.4 Contract Close-out Submittals	
Submittal	Date
Proposal for Contract Close-Out	August 20, 2015
Invoices	At least monthly
Fiscal Year Spending and Staffing Projection	July 1, annually monthly update 15 th of each month for first year, quarterly for years 2 and 4
Differences, and Draft Proposal for Contract Deletions Baseline Change Proposals	September 15, 2015
Final Proposal for Contract Deletions Baseline Change Proposals	October 15, 2015
Statement of Royalties Paid	As required
Patent Report	As required
Inventory Closeout Report	October 31, 2015
Statement Identifying Completion of Records Turnover	December 15, 2015
Security Clearance Termination Survey Report	January 31, 2016
Final Invoice	Within 90 days after settlement of the final annual indirect cost rates
General Assignment and Final Release	As agreed to by the Contracting Officer

C.1.10.5 Transportation

The Contractor shall be responsible for its own services including, but not limited to, transportation, traffic management, shipping/receiving, scale calibrations, maintenance of one trackmobile, vehicle and equipment maintenance and management, except as specifically referenced as being furnished by the DOE or by others on behalf of DOE in Section H clause entitled "Government Furnished Services and Items." Additionally, the Contractor shall maintain equipment and appropriate certifications to ensure an effective transportation program.

C.1.10.6 Records Management

The Contractor shall perform all activities to:

- a) Provide a records management program for records attained for or generated under the performance of this contract. This includes, but is not limited to: maintaining, storing, protecting, and dispositioning active and inactive records; retrieving records from on-site storage facilities; and supporting ongoing discovery efforts for litigation or Freedom of Information Act (FOIA) requests. Records management shall be in compliance with regulatory requirements, such as RCRA on-site records storage requirements.
- b) 1. Provide electronic copies of documents to the Infrastructure Contractor (for inclusion in the site's centralized records repository) that meet National Archives and Records Administration (NARA) requirements, including these:
 - a) Portable Document Format (PDF), or other NARA-acceptable format, with a resolution of 300 dots per inch.
 - b) Optical character recognition process performed.
 - c) All text and markings are clear and legible.
 - d) All pages are legible or marked as "poor quality original."
 - e) Electronic file and hard copy are identical.
 - f) Pages are rotated correctly.
 - g) Classification markings are clear and legible.
 - h) Electronic record contains no security settings (e.g., encryption, passwords, and/or permissions) that prevent opening, viewing, or printing a record.
 - i) Photographs are captioned either on the back of the photograph or on a separate index. Captions should include a unique photograph identification number, date, location, names of people, event, and copyright owner (if applicable).
2. Quality check on the electronic file will be on 100 percent of the document.
3. All embedded fonts are identified publicly as being legally embeddable in a file.
4. Additional requirement for permanent records:
 - a) Lossless file compression technique is used (not lossy). Classified documents may be processed electronically so long as the computer systems which meet all classified security requirements are available to properly process them. Until the required computer systems are available to copy, log, process, transmit, and/or store classified documents, they should be processed as both hard copy and electronically.

- b) Records that are identified as Administrative Record documents will be provided in both hard copy and electronic formats.
5. The Contractor will implement new NARA requirements and guidelines as directed by the U.S. Department of Energy.
- c) Place all necessary documents in the Paducah Environmental Information Center, which is maintained by the Infrastructure Contractor on behalf of DOE. The current Paducah Environmental Information Center is located off-site at: 115 Memorial Drive, Barkley Center, Paducah, Kentucky.

C.1.10.7 Safeguards and Security

The Infrastructure Contractor is the Contractor Cognizant Security Authority (CSA) at the Paducah site and as such has the primary security function for DOE operations at the site consistent with the scope of their contract. In this regard the CSA is the primary contact with USEC regarding GFS&I security services provided by USEC. The CSA maintains the Site Security Plan for all DOE operations at the Paducah site and will prepare physical security plans and vulnerability assessments in support of all DOE programs (e.g., physical security, site visits, etc). Physical security plans supporting work by the Contractor will be prepared by the CSA in consultation with the Contractor who will also be a signatory to the documents. If specific subject matter experts are not resident within the CSA, the Contractor with the appropriate subject matter expert on staff will draft the specific plan and coordinate activities with the CSA. The CSA provides a site consolidated report on security infractions to DOE. The CSA provides personnel security and badging service for DOE Contractors at the site. The CSA is responsible for DOE information security at the site including both classified and unclassified sensitive information. The CSA maintains a Classification Officer and supporting staff for all DOE classification activities at the site. Site derivative classifiers are appointed by the CSA Classification Officer.

The Contractor shall perform all activities to:

- a) Comply with site requirements to ensure appropriate levels of protection against: unauthorized access; theft, diversion, loss of custody of special nuclear material; espionage; loss or theft of classified matter or Government property; and other hostile acts that may cause unacceptable adverse impacts on national security or the health and safety of DOE and Contractor employees, the public, or the environment. USEC currently provides the on-site protective force.
- b) Coordinate all requests for USEC security services through the CSA.
- c) Ensure operations are fully consistent with all approved security plans applicable to the Contractor programs including, but not limited to facility security, physical security, cyber security, Operations Security (OPSEC), and information security.
- d) Promptly prepare and submit requests for DOE authorization for personnel access to classified matter consistent with the provisions of the Contract Security Classification Specification (CSCS) approved for work under this contract. The Infrastructure Contractor provides the processing of the security clearance applications, and coordinates with federal security reviewers.

- e) Provide an information security program commensurate with the types of information available on-site, such as but not limited to, proprietary, privacy act, official use only, classified and Unclassified Controlled Nuclear Information (UCNI). The Contractor will coordinate all information security programs with the CSA who will adjudicate classification issues.
- f) Provide reports of security infractions to the CSA to be included in a single, consolidated site report to DOE.
- g) Provide a Nuclear Materials Control and Accountability (NMC&A) plan 30 days prior to the Initial Security Survey and implement a NMC&A program to manage all nuclear materials associated with contract requirements.
- h) Ensure an adequate number of Contractor personnel are designated as derivative classifiers and/or UCNI reviewers in support of the Contractor's project needs.
- i) Comply with security plans. The Contractor has the responsibility to recognize situations in which they will need to request or develop security plans and work with the Infrastructure Contractor/USEC as appropriate to get those plans in place.

C.1.10.8 Property Management

Administration of the real and personal property program is the responsibility of the Infrastructure Contractor including managing an automated database of all personal property actions related to acquisition, use and disposition. The Infrastructure Contractor is also responsible for the property inventories, disposition operations, and provides input to FIMS and the Property Information Database System (PIDS). The Contractor shall provide FIMS data to the Infrastructure Contractor and shall support the annual FIMS data verification.

The Contractor shall manage all assigned Government-owned accountable and non-accountable personal property in accordance with the requirements listed below and 41CFR101 and 41CFR109:

- i. Control classified equipment and material in accordance with DOE M 470.4-4 Chg 1, "Information Security."
- ii. Control high risk property in accordance with DOE Personal Property Letter (PPL) 970-3, Rev.1, dated February 3, 1998.
- iii. Destruction or "rendering useless" of any component, equipment, and material, which are both surplus to the DOE and identified in the Nuclear Suppliers Group Trigger List or are nuclear weapon component or weapon-like components, is the responsibility of the Contractor.

This includes establishing a system to track assignment and status of high risk property specifically assigned to the Contractor. Prior to providing property to the Infrastructure Contractor for disposition, the Contractor shall characterize the property and maintain

characterization records. The Contractor shall provide the characterization records at the time of property transfer to the Infrastructure Contractor.

C.1.10.9 Energy Efficiency

The Contractor shall assist DOE through direct participation and other support in achieving DOE's energy efficiency goals and objectives in electricity, water, and thermal consumption, conservation, and savings, including goals and objectives contained in Executive Order 13423, Strengthening Federal Environmental, Energy, and Transportation Management. The Contractor shall maintain and update, as appropriate, its documents to include detailed plans and milestones for achieving site-specific energy efficiency goals and objectives. With respect to this paragraph, the plan shall consider all potential sources of funds, in the following order: 1) the maximum use of private sector, third party financing applied on a life-cycle cost effective basis, particularly from Energy Savings Performance Contracts and Utility Energy Services Contracts awarded by DOE; and 2) only after third-party financing options are evaluated, in the event that energy efficiency and water conservation improvements cannot be effectively incorporated into a private sector financing arrangement that is in the best interest of the Government, then DOE funding and funding from overhead accounts can be utilized. Implement the Transformation Energy Action Management (TEAM) Goals and Initiatives. Report the progress on achieving these goals and initiatives upon request. At a minimum, the following initiatives shall be pursued:

- a) All new construction shall include plans for solar or other clean, secure on-site generation. All lighting systems and products shall utilize compact fluorescent /solid state/fluorescent lights where practical. All purchases of office equipment shall be ENERGY STAR or DOE Federal Energy Management Program top 25th percentile. All new construction and major renovations to achieve not less than Leadership in Energy and Environmental Design (LEED) Gold certification.
- b) Decrease water consumption where practical, in all applicable buildings, trailers, and other structures and facilities.
- c) Develop Green purchasing program and incorporate Executive Order 13423 into new subcontracts.
- d) Green and Sustainable Remediation and Innovative Technology

- It is the Department of Energy (DOE) Office of Environmental Management's (EM) goal to consider, to the extent practical, Green and Sustainable Remediation (GSR) and Innovative Technology practices in all phases of this Project Work Scope (PWS) and to implement such practices when they reduce costs, expedite project schedules, minimize risk, and maximize effectiveness. Please note that GSR and Innovative Technology practices should be evaluated for the phases of the PWS, and beyond, consistent with reducing activity impacts on future generations, resources, and the environment.

- Green remediation is the practice of considering the environmental effects of remedy implementation and incorporating options to minimize the detrimental footprint of cleanup technologies and actions.
- Sustainability is the holistic consideration of environmental, social, and economic impacts of an activity and evaluation of these impacts on future generations.
- Innovative technology refers to new and inventive methods, processes, or evaluation software used to improve the efficiency and effectiveness of characterization, treatment, monitoring, and disposal of hazardous and radioactive contamination and waste. Innovative Technology also includes emerging techniques to prevent and reduce pollution, as well as conserve energy as part of restoration and closure work performed.
- Statutory requirements (e.g., Comprehensive Environmental Response Compensation, and Liability Act; and Resource Conservation and Recovery Act evaluation criteria) for this PWS take precedence over the GSR/Innovative Technology initiative. However, they are generally consistent with the intent of the statutory requirements and should be evaluated as additional and equivalent criteria for remedy selection.
- All work performed under this contract shall be consistent with the following Executive and DOE Orders, Plans, and Federal or industry guidance/standards:
 - Executive Order 13423, Strengthening Federal Environmental, Energy, and Transportation Management
 - Executive Order 13514, Federal Leadership in Environmental, Energy, and Economic Performance
 - DOE Order 436.1, Departmental Sustainability
 - DOE 2012 Strategic Sustainability Performance Plan (SSPP)
http://www.eere.energy.gov/sustainability/pdfs/doe_sspp_20_12.pdf
- The Federal and/or industry guidance/standards listed below provide additional useful information:
 - ASTM International Standard Guides: Green (WK35161) and Sustainable (WK23495) Site Assessment and Cleanup (two drafts, in preparation for release June 2013)
<http://www.astm.org>
 - Interstate Technology & Regulatory Council, Green and Sustainable Remediation: State of the Science and Practice (GSR-I, 20 II)
<http://www.itrcweb.org/Guidance>

- protect and preserve land resources
- minimize, eliminate, or contain pollution at its source

• As part of the project planning and alternative analyses efforts, the contractor shall select an appropriate GSR/Innovative Technology practice to utilize to conduct the work scope. The contractor is to develop, plan, and implement GSR/Innovative Technology approaches, including examples of technologies listed as follows, but not limited to:

- Passive/no-flow sampling techniques
- Direct-push drilling
- Use of clean diesel or biofuels
- Remote data collection, multi-increment sampling
- Carbon offsets
- Renewable energy
- Field screening
- Mobile laboratories
- Waste minimization
- GSRBMPs
- Innovative approaches to public involvement

• The contractor shall develop and submit a life-cycle cost/benefit analysis demonstrating the pros and cons of each alternative analyzed and recommended for the project, including GSR/Innovative Technology practices. The contractor is encouraged to reference and quote, where possible, industry BMPs where costs and benefits are already known and published for expediency. The analysis should include the net cost or net savings to the project/program by implementing that particular element. The Government will review the analysis and make the final determination on whether to proceed with implementation of the GSR/Innovative Technology practice or technology.

• During all phases of the project/program, the contractor shall consider and implement GSR/Innovative Technology practices to achieve an overall sustainable remedy selection to:

- reduce costs
- expedite project schedules
- minimize risk
- maximize effectiveness

• For implemented GSR/Innovative Technology modifications which reduce cost to the Government, the contractor will receive incentive fee increases ***[The formula for fee will be delineated as part of the performance objectives in a future Award Fee Plan]*** for the cost savings which accrue during the contract period of performance. Please note that GSR/ Innovative Technology practices should be evaluated for the phases of the PWS, and beyond, consistent with reducing activity impacts on future generations, resources, and the environment. In some cases, a GSR/Innovative

Technology modification may actually increase project costs, but still be approved by the Government because it helps achieve other DOE EM goals of improving the community or environment. In these cases, the cost increase will not impact the contractor's incentive fee calculation.

All work plans and reports generated by the contractor in performance of this PWS contract shall document for the relevant scope of work ***[As applicable, DOE may provide a GSR/Innovative Technology tracking sheet to be used by the contractor as part of future performance objectives]:***

- the GSR/Innovative Technology that was considered
- the GSR/Innovative Technology that was implemented
- the reasons that considered GSR/Innovative Technology was, or was not, implemented (for example, the results of the cost benefit analysis)

Whether the contractor is proactive or negligent in proposing GSR/Innovative Technology will be factored into the contractor's performance ratings and evaluations.

GSR and Innovative Technology Award Fee: ***[DOE will establish project specific incentive goals, weighting factors, and award-fee amounts based on program requirements as part of future performance objectives in a future Award Fee Plan].***

This contract will include an award-fee for the incorporation of GSR and Innovative Technology in a future Award Fee Plan. The award fee will be defined later and will be measured and paid at appropriate milestone intervals. The incentive goals and weighting factors will include criteria such as:

- Waste minimization/diversion -- XX%
- Energy savings/green energy -- XX%
- Water savings - XX%
- Other -- XX%

With the appropriate milestone payment invoice, the contractor shall include a brief narrative documenting the level of goal achievement. When comparison of a reduction to a baseline is required for calculating the level of goal achievement, the industry standard/conventional practice shall be used as the baseline. ***[Other baseline impacts may be applicable, such as the current electrical consumption during operations.]***

For the "Other" category, the contractor may make a qualitative justification of the level of achievement; however, the final decision will be made by DOE's Contracting Officer. An example calculation is below:

- Total contract ~ \$1,000,000
- Potential award-fee ~ 2% * \$1,000,000 ~ \$20,000
- Goals achieved (c;) by contractor:
 - o Waste minimization - 50%
 - o Energy savings - 25%

o Water savings - 40%
 o Other - 80%
 - Paid award-fee ~ $I: W: (c / qJ) * \text{potential incentive } (0.3 * 50/50 + 0.1 * 25/50 + 0.1 * 40/50 + 0.5 * 80/100) * \$20,000 \sim \$16,600$

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C.1.10.10 Computer/Radio/Telephones

A Local Area Network (LAN) and a Wide Area Network (WAN) configured to allow multiple users will be provided for the Contractor's use at Paducah via a T-1 line. The T-1 line is only furnished for facilities on-site at PGDP and at the off-site Kevil facilities. The Contractor will have to furnish the T-1 line to any other off-site facilities. The Infrastructure Contractor will perform maintenance and repair of all installed T-1 lines. The system will be configured to allow separation of multiple users and provide basic operating software sufficient to allow input into DOE data systems. Computer support will be provided by the Infrastructure Contractor and will include network administration, customer service support, help desk support, servers for the Paducah Data Warehouse, computer repairs, and cyber security and basic security such as SPAM, adware, and spyware protection. Customer service support includes unpacking, installation, testing and removal of Personal Computers (PCs) and related components and software installation, removal, or upgrades as necessary; ensuring operability between PCs and peripheral devices, the LAN and WAN; and providing personal interface in assessing user needs through personal visits and telephone.

The Contractor shall install any additional ports necessary to support its own activities if a sufficient number of ports are not available in the work location. If additional facilities are brought on to house personnel (e.g. trailers) that are not sufficiently equipped, the Contractor is responsible to run lines, wire trailers, install ports and to perform any necessary preliminary work for connection to the site LAN or WAN. Any requests for additional computing resources either hardware or software must be submitted to DOE for approval including justification and detailed explanation of costs.

The Contractor is responsible to provide only peripheral activities related to the telephone system for its own personnel (i.e. individual phone unit replacements, and working with USEC for moving office phone numbers). If additional facilities are brought on to house personnel (e.g. trailers) that are not sufficiently equipped, the Contractor is responsible to run lines, wire the facilities, install phone systems and to perform any necessary preliminary work for connection to the site phone system.

USEC holds the license for the Federal Communications Commission (FCC) digital narrow band radio frequencies being used. USEC provides the narrow band radio frequency, the tower, transmission and radio repair services. At Paducah most of the radios are Enhanced Access Communication Systems (LPE-200) portable 800 MHz compliant with the narrow band frequency. Approximately 245 narrow band frequency radios are available for use by the Contractor. Additional radios may be available upon

request. Cell phones and other communication devices will not be provided and are the responsibility of the Contractor. Subcontractors are responsible for providing their own radios meeting the narrow band frequencies and subject to USEC guidelines and oversight.

C.1.10.11 DOE Consolidated Audit Program (DOECAP)

The DOECAP is a consolidated audit program with DOE complex-wide participation that conducts annual audits of analytical environmental laboratories and commercial treatment, storage, and disposal facilities (TSDFs) that have contracts or agreements to provide services to DOE. DOECAP audits are performed on behalf of, and with the participation of, sites throughout the DOE complex. The six DOECAP laboratory audit areas include Quality Assurance Management Systems and General Laboratory Practices, Data Quality for Organic Analyses, Data Quality for Inorganic and Wet Chemistry Analyses, Data Quality for Radiochemistry Analyses, Laboratory Information Management Systems and Electronic Data Management, and Hazardous and Radioactive Materials Management. The seven DOECAP TSDF audit areas include Quality Assurance Management Systems, Sampling and Analytical Data Quality, Waste Operations, Environmental Compliance/Permitting, Radiological Control, Industrial and Chemical Safety, and Transportation Management.

The Contractor shall perform all activities to:

- a) Provide qualified candidates to participate on at least one DOECAP audit team.
- b) Perform pre-audit activities, including but not limited to, requesting and reviewing pre-audit information from the audited facilities and participating in conference calls.
- c) Perform audit activities, including lead auditor activities during laboratory audits.
- d) Perform post-audit activities, including but not limited to, completing and issuing audit reports and notifying the audited facility of acceptance of the proposed CAP.
- e) Perform work in accordance with DOECAP procedure AD-1, DOECAP Policies and Practices.

Exhibit C.1.2 Waste Storage Facilities

Exhibit C.1.2 Waste Storage Facilities						
Building Number	Building Title	Square Feet	Bldg. Description	Waste Type		
				RCRA	RCRA/TSCA	TSCA LLW
C-301	LLW Waste Storage	2,802	Concrete pad with roof			X
C-331	Cascade Building		Leased to USEC for the uranium enrichment process. DOE waste is stored within these buildings.			X
C-333	Cascade Building		Leased to USEC for the uranium enrichment process. DOE waste is stored within these buildings.			X
C-335	Cascade Building		Leased to USEC for the uranium enrichment process. DOE waste is stored within these buildings.			X
C-337	Cascade Building		Leased to USEC for the uranium enrichment process. DOE waste is stored within these buildings.			X
C-733	Waste Oil and Chemical Storage Facility	4,224	Covered structure enclosed by a wall on one side and fencing on the other sides. This building is RCRA permitted and holds the flammable/ignitable hazardous material. Several large tanks are here for batching/transfer operations.	X	X	X
C-746-H3	Storage Area	56,150	Concrete slab for 90-day storage of RCRA material. Two clean shell structures are located on the pad for storing LLW and solid waste.	X		X
C-746-M	Waste Uranium Chip Storage	432	Prefabricated metal building. No uranium chips are currently stored here			X
C-746-Q	Hazardous and Low-Level Waste Storage Facility	33,165	Prefabricated metal building that stores RCRA and LLW. Material that requires nuclear criticality storage is located here. Some USEC waste is stored in the building.	X	X	X
C-746-V	Waste Staging Area	10,000	Outside gravel pad. LLW and solid waste is temporarily stored here.			X
C-752	Waste Holding Pad	8,800	Concrete slab for outside holding of waste material.			
C-752-A	Waste Storage Facility	43,600	Prefabricated metal building used for operations and storage of waste. This building is permitted for RCRA storage and treatment. The southeast corner of the building has a structure for waste treatment that can be isolated from the rest of the building and hooked to air containment systems. Treatment for wastewater occurs	X	X	X

Exhibit C.1.2 Waste Storage Facilities

Building Number	Building Title	Square Feet	Bldg. Description	Waste Type		
				RCRA	RCRA/TSCA	TSCA/LLW
C-753-A	TSCA Storage Facility	31,600	here by activated carbon or a low capacity ultraviolet light system. The building is also used for sorting and packaging waste. Prefabricated metal building used for storage of TSCA waste. Sorting and packing operations also occur here.			X

“X” indicates the type of waste that can be stored in the facility

Exhibit C.1.10.3 PGDP Underground Tank Summary

STATE ID #	PGDP ID #	DATE INST.	CAPACITY (gal)	CONTENT	MATL. OF CONSTR.	SERVICE	EVIDENCE OF LEAKS?	REGULATORY STATUS	CLOSURE SUMMARY
0009	C-751-W	1992	10,000	Diesel Fuel	Fiberglass-reinforced plastic	Gas station	No	In use.	Leased to and operated by USEC. To be turned over for closure to Contractor upon release.
0010	C-751-E	1992	10,000	Gasoline	Fiberglass-reinforced plastic	Gas station	No	In use.	Leased to and operated by USEC. To be turned over for closure to Contractor upon release.

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**PART I – THE SCHEDULE
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PACKAGING AND MARKING**

D.1 PACKAGING

Preservation, packaging and packing for shipment or mailing of all work delivered hereunder shall be in accordance with good commercial practices and adequate to ensure acceptance by common carrier and provide safe transportation at the most economical rate.

D.2 MARKING

- (a) Each package, report, or other deliverable required by the Schedule, Performance Work Statement or other parts of the contract shall be accompanied by a letter, cover page or other document which:
- (1) Identifies the contract by number under which the item is being delivered.
 - (2) Identifies the deliverable Item Number per Section J and/or Report Requirement which requires the delivered item(s).
 - (3) Indicates whether the Contractor considers the delivered item to be a partial delivery or one that fully meets the delivery requirement.
- (b) Except as agreed to in writing by the Contracting Officer (CO), for any package, report, or other deliverable being delivered to a party other than the CO, a copy of the document required in (a), above, shall be simultaneously provided to the CO or office administering the contract, as identified in Section G of the contract.

D.3 SECURITY REQUIREMENTS

The Contractor shall comply with the security requirements for packaging, marking, mailing, and shipping classified materials as prescribed by all applicable DOE safeguards and security directives (Section J, Attachment J2).

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**PART I – THE SCHEDULE
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E.1 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 reperformance, 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.2 INSPECTION AND ACCEPTANCE

- (a) Inspection of all items under this contract shall be accomplished by the DOE Contracting Officer's Representative (COR) identified by the Contracting Officer (CO) as responsible for the product, report, or service being delivered, or any duly authorized DOE representative identified by separate letter.

- (b) Acceptance of all work and effort under this contract (including deliverables in Section J, Attachment J4) shall be accomplished by the CO, COR, or any other duly authorized Government representative identified by separate letter. Items, services, and deliverables under this contract shall meet applicable contract quality and quantity standards to be accepted.

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**PART I – THE SCHEDULE
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F.1 FAR 52.242-15 STOP WORK ORDER (AUG 1989) - ALTERNATE 1 (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 TERM OF THE CONTRACT

- (a) The basic term of this contract is for a period of five years from the date the Contractor completes transition and assumes full responsibility for the Performance Work Statement.
- (b) The contract transition period will be a ninety (90) day period of time from the date of contract award to the date that the Contractor assumes full responsibility for the Performance Work Statement.

F.3 DELIVERIES

All products, reports, and deliverables (Section J) under this contract shall be delivered to the Contracting Officer shown in Section G, or duly authorized representative of the Contracting Officer, as designated in writing by the Contracting Officer.

F.4 PRINCIPAL PLACE OF PERFORMANCE

The principal place of performance shall be at the Paducah Gaseous Diffusion Plant, located near Paducah, Kentucky and such other facilities as may be leased or acquired from time to time.

F.5 CONTRACT TRANSITION PLAN

The Contractor shall provide a Contract Transition Plan to the CO within three (3) calendar days after contract award detailing its approach to accomplishing contract transition and any other activities the Contractor proposes to accomplish during the contract transition period. The plan shall include a schedule for contract transition period activities. Transition activities shall be conducted consistent with the Contract Transition Plan as approved by the CO.

F.6 TRANSITION ACTIVITIES

During the period of the contract transition specified in Clause F.2 entitled "Term of the Contract," the Contractor shall perform those activities necessary to be prepared to assume responsibility for the contract work. The Contractor shall coordinate its activities with DOE and the incumbent Contractor so as to accomplish these activities in a manner that will provide an effective transition of personnel and work activities while minimizing the cost of this effort.

F.7 CONTRACT CLOSE-OUT

The Contractor shall submit a separate plan including budget and schedule for close-out of the contract 60 days prior to the end of the period of performance as specified in Clause F.2 above. The Contract Close-out Plan shall include all remaining administrative matters necessary to close out the contract, including but not limited to: resolution of remaining and open litigation; audit of indirect costs; remaining records disposition required by the Government; or any other activities required by Section I, FAR 52.216-7, "Allowable Cost and Payment."

**PART I – THE SCHEDULE
SECTION G
CONTRACT ADMINISTRATION DATA**

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**PART I – THE SCHEDULE
SECTION G
CONTRACT ADMINISTRATION DATA**

G.1 CORRESPONDENCE PROCEDURES

To promote timely and effective administration, all correspondence, reports and other documents submitted under this contract shall be subject to the following procedures:

- (a) Technical Correspondence. Technical correspondence concerning performance of this contract shall be addressed to the Department of Energy (DOE) Contracting Officer's Representative (COR) with an information copy of the correspondence to the Contracting Officer (CO). Technical correspondence pertains to issues relating to work effort of the contract (i.e. requests interpretation of contractual requirements for performance) or requests approval of reports, drawings or other work products.
- (b) Patents/Technical Data Correspondence. The Chicago Operations Office, acting through the Intellectual Property Law Division of the Office of Assistant Manager for Legal Support/Chief Counsel, DOE, 9800 South Cass Avenue, Argonne, Illinois, 60439, is hereby designated to represent the CO in administering the Intellectual Property Clauses in this contract. Correspondence concerning patent and technical data issues shall be addressed to the Chicago Operations Office with a copy to the Environmental Management Consolidated Business Center (EMCBC) Office of Legal Services, the CO and the COR.
- (c) Non-technical Administrative Correspondence. All correspondence, other than technical correspondence, shall be addressed to the CO, with information copies of the correspondence to the COR.
- (d) Subject Line(s). All correspondence shall contain a subject line commencing with the contract number as illustrated below:

"SUBJECT: CONTRACT NO. DE-AC30-10CC40020"
(Insert subject topic after contract number, e.g., "Request for Subcontract Consent").
- (e) Electronic Media for Reports/Plans/Documents. All required reports, plans, and other documents will continue to be submitted to DOE in hard copy, but shall also be available electronically upon request by the CO or the COR. The Contractor will prepare the requested reports and documents via site standard software and provide a copy on diskette or

Compact Disk (CD-R, CD-RW) as required by the size of the document. The data shall be in a format that will allow conversion to Portable Document Format (PDF) or Hyper Text Markup Language (HTML) for potential posting on the Internet, Intranet, or in an electronic library. If other software is used, the documents shall be scanned and then provided on diskette or Compact Disk. Electronic data shall be available within five days of the DOE request.

G.2 CONTRACT ADMINISTRATION

The correspondence address of the DOE Contracting Officer is:

U.S. Department of Energy
 Portsmouth/Paducah Project Office
 Attn: Contracting Officer
 1017 Majestic Dr., Suite 200
 Lexington, KY 40513

The CO will designate in writing the name and correspondence address of the COR who is the only individual (outside of the Contracting Officer) that may give technical direction in accordance with the Section H clause entitled DEAR 952.242-70, "Technical Direction." Future revisions of the COR or the address may be accomplished by written notification from the CO to the Contractor, without a formal contract modification.

G.3 CONTRACTOR PAYMENT ADDRESS

If the Contractor's payment address is different than the Contractor's address specified on Standard Form 33, then provide it in the following space:

(Name)	<u>LATA Environmental Services of Kentucky, LLC</u>
(Address)	<u>999 Central Avenue, Suite 300</u>
(City/State)	<u>Los Alamos, NM 87544</u>
(Phone #)	<u>(505) 662-9080</u>
(Electronic address)	<u>cmanning@lata.com</u>

G.4 SUBMISSION OF VOUCHERS/INVOICES

- (a) VIPERS. The Contractor is required to submit payment invoices and supporting documentation electronically through the Oak Ridge Financial Service Center's (ORFSC) Vendor Inquiry Payment Electronic Reporting System (VIPERS) which is accessible at <http://finweb.oro.doe.gov/>. Detailed instructions on how to enroll and use the system are provided on the web page.

The website provides the vendor the following system capability, required EFT banking form/information and instructions:

- (a) Logon to VIPERs
 - (b) Request Access
 - (c) Vendor Banking Data Form
 - (d) Registration
 - (e) Invoice Status
 - (f) Electronic Invoicing
- (b) Cost Invoices. The Contractor shall submit invoices (Standard Form 1034 located at <http://www.gsa.gov/Portal/gsa/ep/formslibrary.do?formType=SF>) in accordance with the FAR payment clause in Section I of the contract. The Contractor may submit cost invoices, with supporting documentation, monthly. The Contractor is required to submit Project Performance Reports (PPR) on a monthly basis reconciled to the monthly invoice submitted for payment. The PPR period must match that of the invoice period and must be received by DOE at the same time as the submission of the monthly invoice.
- (c) Fee Invoices. The Contractor may submit invoices for quarterly fee payments based on DOE's fiscal year calendar concurrent with the PPRs. Fee payment will be made after the Contracting Officer determines whether adjustments/reductions are necessary.
- (d) Any basis for invoice withholding, adjustment or reduction which is discovered after payment will be corrected on subsequent invoices. If the Government discovers such defects, the Contracting Officer will notify the individual listed in clause G.5, Defective or Improper Invoices, in writing. The Contracting Officers' written notification will explain the nature of the basis for withholding, adjustment, or reduction, as well as specify the dollar amount of the withholding, adjustment or reduction.
- (e) Nothing in this provision shall affect the rights of either the Government or the Contractor under the Section I clause entitled FAR 52.232-25, "Prompt Payment," of this contract. The Government may notify and/or initiate withholding, adjustment of reduction any time prior to final payment under this contract.
- (f) The Contractor shall submit one copy of the invoices, including all supporting documentation to each of the following:

United States Department of Energy
Portsmouth/Paducah Project Office
ATTN: Contracting Officer

1017 Majestic Drive, Suite 200
Lexington, KY 40513-0066

United States Department of Energy
Portsmouth/Paducah Project Office
ATTN: Budget Analyst
1017 Majestic Drive, Suite 200
Lexington, KY 40513-0066

G.5 DEFECTIVE OR IMPROPER INVOICES

Name, title, phone number, office name, and complete mailing address of officials of the business concern who are to be notified when the Government receives a defective or improper invoice.

Randy Jennings, Accounting Manager
Phone Number: 505-880-3431
Los Alamos Technical Associates, Inc.
2424 Louisiana Blvd NE, Suite 400
Albuquerque, NM 87110

**PART I – THE SCHEDULE
SECTION H – SPECIAL CONTRACT REQUIREMENTS
Revision 7**

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PART 1- THE SCHEDULE
SECTION H - SPECIAL CONTRACT REQUIREMENTS

H.1 PROJECT CONTROL SYSTEMS AND REPORTING REQUIREMENTS

H.1.1 Project Control System

- (a) The Contractor shall propose a project structure that achieves safe and accelerated completion in the most cost-effective manner. The Contractor shall establish, maintain, and use a project control and management system that accurately reflects the project status relative to cost and schedule performance, and track changes to the baseline. This system shall be fully integrated with the Department of Energy's (DOE's) financial accounting systems to ensure consistent reporting of costs. The Contractor shall maintain a project management system in accordance with the following requirements documents, or any changes made in the requirements of these documents during the course of the project execution.
 - (1) DOE Order 413.3B, Program and Project Management for the Acquisition of Capital Assets, November 29, 2010;
- (b) The Contractor shall submit to the DOE Contracting Officer (CO) and the DOE Federal Project Director (FPD) a detailed written Project Control System Description (PCSD) of the proposed project control system and Project Management Plan (PMP) for review and approval within 90 calendar days after award of this contract. Cost effective, tailored application of controls will be a critical factor in determining acceptability of the proposed system.
- (c) DOE will conduct an Earned Value Management System (EVMS) compliance review and an independent review of the Contractor's proposed project control system per DOE Order 413.3B to determine if the description and procedures meet the requirements of this contract clause. The Contractor shall be prepared to successfully complete the EIR and to successfully gain Earned Value Management System certification six months after contract award.
- (d) The contractor shall utilize the Primavera 6.0 (P6) scheduling software (and updates to the 6.0 version) consistent with the May 1, 2008, HQ Memorandum, *Primavera Enterprise System*, that established it as the EM standard.
- (e) The contractor will provide monthly input into PARS II in accordance with DOE Order 413.1B. (Mod 003) Contractors must submit monthly project performance data no later than CD-2 for projects having a total project cost greater than or equal to \$20M. The required project performance data include: ANSI/ETA-748 earned value; earned value time-phased incremental cost and quantity;

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management reserve; schedule; variance analysis; and risk management data. For firm fixed-price contracts, the required project performance data include: schedule activity and relationship; and cost and quantity data (budget, actual, Estimate to Complete [ETC] and Estimate at Completion [EAC]) by Work Breakdown Structure (WBS) and Organizational Breakdown Structure (OBS). Data must be submitted electronically via the Project Assessment and Reporting System II (PARS-II) in accordance with the current version of the "Contractor Project Performance Upload Requirements" document maintained by OECM. Unless OECM has granted a temporary exemption, all requested data must be submitted. Data must be loaded into PARS-II no later than the last workday of every month, or as otherwise stipulated by OECM, and must be current as of the previous month's accounting period closed. Reporting by the contractor may be required earlier than CD-2 as specified by the Contracting Officer.

H.1.2 Baseline Development and Cost Collection

- (a) The Contractor shall develop and submit resource loaded baselines as described below within 120 calendar days after award of this contract. The baselines shall be developed in accordance with DOE requirements and be acceptable to DOE and compatible with DOE project control and management systems. All cost estimates for the baselines shall be 100% developed or prepared and verified by the Contractor.
- (1) Contract Remediation Baseline. Any changes needed to the existing certified Remediation shall be accomplished through Baseline Change Proposals (BCPs). This baseline shall be consistent with the Contractor's cost and technical proposal and the terms and conditions of this contract. The Contractor shall align the baseline to the total estimated cost, and base fee and total available award fee (or less) as described in Section B. This baseline shall include the detailed scope of work, schedule, and cost for all activities to be completed for the entire contract period of performance. A rigorous analysis and a detailed basis for cost and schedule estimates should support the Contract Remediation Baseline and any BCPs to the existing certified Remediation Baseline.
 - (2) Remediation Lifecycle Baseline. This baseline shall include the certified Remediation Baseline (FY 2007 – FY 2012), the new Contract Remediation Baseline (FY 2010 – FY 2015), and future remediation activities (post FY 2015). This lifecycle baseline shall include sensitivity analysis and value engineering studies. The activities outside the contract shall be sufficiently detailed in scope, cost and schedule to provide a reasonable estimate of the work to be performed.
 - (3) Integrated Site-wide Federal Lifecycle Baseline. The Contractor shall also develop, maintain and submit an Integrated Site-wide Federal

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Lifecycle Baseline as required by Section C, "Project Support," which includes all activities associated with the site. This baseline shall include the entire site-wide lifecycle (FY 2007 – FY 2019), as well as other DOE activities associated with the site (i.e., other DOE prime contractors such as Infrastructure Contractor and DUF6 Contractor). This site-wide baseline shall include sensitivity analysis and value engineering studies. The activities outside the contract shall be sufficiently detailed to a Planning Package level in scope, cost and schedule to provide a reasonable estimate of the work to be performed.

- (b) The Contractor shall be ready for a DOE internal compliance review of the baselines, as well as the IPR/External Independent Review (EIR) (if needed) and assessment of the baselines to determine if the costs and schedules for the project scope are reasonable, and that the project as planned and managed can be successfully executed. The Contractor shall fully support the baseline validation process, which is expected to last more than one year.
- (c) The Contractor shall within 120 calendar days after contract award develop and submit a Risk Management Plan for DOE review and approval that includes the risks identified in its proposal, as well as identify all other internal and external risks to achieving the baselines. The Risk Management Plan shall analyze possible alternative approaches to mitigate impacts and identify dates when events could occur. The plan shall identify the cost and schedule impacts and state preferred alternatives with associated cost and schedule impacts. Active project risk items shall be analyzed and addressed in the monthly reports with a formal update to the plan completed semiannually. The Contractor's Risk Management Plan shall be coordinated with the site's Federal Risk Management Plan to ensure there is no overlap or missing risks and to maintain consistency in the risk management process. The Contractor's Risk Management Plan shall utilize a Monte Carlo analysis to determine the amount of the contract budget that will be used as cost and schedule management reserve. Cost and schedule management reserve will be summarized at the Project Baseline Summary (PBS) and total project levels.
- (d) Work Breakdown Structure (WBS) development, cost estimates and project cost reports shall utilize ASTM International Designation E: 2150-04. Costs shall be discernable by Budget and Report (B&R) code, direct, indirect, and fee. The project management system must maintain capability to provide Total Estimated Cost (TEC), Total Project Cost (TPC), Estimates-to-Complete (ETC), and Estimates-at-Completion (EAC).
- (e) The Contractor shall develop a schedule that includes all its project work scope that integrates with the WBS. Each PBS will have assigned duration that will be based on work scope. Activity logic links shall depict all work

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scope constraints and decision points and shall be integrated into a total project network schedule. The project schedule shall clearly depict critical path activities and milestones. Activities shall be fully resource loaded at the lowest level of the WBS, but at least two levels below the PBS to develop time-phased budgets that are integrated with the schedule. The Contractor's schedule shall include all Government-Furnished Services and Items (GFSI) activities. The contractor shall maintain the integrated site-wide Federal schedules that support the Integrated Site-wide Federal Lifecycle Baseline.

- (f) The Contractor shall analyze any DOE proposed or directed funding changes for their impact on technical, schedule, and cost elements of the baselines.
- (g) Contractor requested changes or DOE directed changes shall be addressed through the established change control process detailed in Section H.1.4.
- (h) The Contractor shall submit budget allocations to each PBS for the upcoming fiscal year with a focus on differences to the work activities described in the baselines for that specific year. This deliverable is known as the PBS Budget Allocation Plan.
- (i) Each month, the Contractor shall provide a variance justification for plus or minus 10% differences between planned and actual performance against the baseline at a WBS level determined by DOE once the final WBS is established. Performance analysis techniques shall be commercially accepted and documented, and shall utilize earned-value methods and shall be reported to DOE at the WBS level determined by DOE once the final WBS is established, but at a minimum at the PBS level. Performance metrics (i.e., quantities) are preferred for all technical work scope unless otherwise approved by the CO. For variances greater than $\pm 10\%$, the analysis shall detail the causes for variance, impact on other PBSs and corrective action required.
- (j) The Estimate at Completion (EAC) for the project shall be evaluated monthly to ensure that it is consistent with observed trends in performance, emerging or resolved issues, and changes in the assessment of project risk.
- (k) All actual direct costs incurred for resources applied in the performance of work shall be recorded on a timely basis each month. Actual costs incurred must be recorded in the same accounting period that performance is measured and recorded. Any indirect costs shall also be collected and appropriately allocated to the PBSs.
- (l) Costs shall be collected at a charge number level and be able to be summed through the WBS, PBS, and by major Contractor functional organization. Mischarges on time cards or other administrative or accounting errors shall be corrected in a timely manner.

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H.1.3 Project Reporting

- (a) The Contractor shall provide a monthly Project Performance Report (PPR) that describes the status on each PBS and that is rolled up to the baseline in a format approved by the FPD. At a minimum, the report shall include justification of the cost variance and schedule variance at a suitable WBS level determined by DOE once the final WBS is established with rollup to the PBS, the status of major milestones, and critical technical or programmatic issues.
- (b) Earned Value data will be reported in the following five Office of Management and Budget Contract Performance Report Formats, consistent with the DOE HQ memorandum titled *Establishing the Requirements for an Earned Value Management System, Standardizing Minimal Reporting Requirements, and Implementing an Earned Value Management System Surveillance Program*, dated July 6, 2007 and in accordance with the clause in Section I entitled "FAR 52.234-4 Earned Value Management System (JUL 2006)."
- Format 1, DD Form 2734/1, Mar 05, Work Breakdown Structure
 - Format 2, DD Form 2734/2, Mar 05, Organizational Categories
 - Format 3, DD Form 2734/3, Mar 05, Baseline
 - Format 4, DD Form 2734/4, Mar 05, Staffing
 - Format 5, DD Form 2734/5, Mar 05, Explanations and Problem Analysis
- (c) Semi-Annual Critical Analysis Report (SACAR). Twice each year the Contractor shall prepare and submit a comprehensive review covering six months of PPRs that critically analyzes the overall status of the baseline, any key metrics, and total estimated cost. This review shall include overall narrative summaries, analysis of schedule trends and project float, critical path performance, analysis of critical manpower skills of other resources, budget and funding figures, and project risk updates.
- (d) Plans and reports shall be prepared in such a manner as to provide for consistency with the contract PWS, the baseline, and the approved WBS. The Contractor's reporting system shall be able to provide for the following at the PBS level:
- (1) Timely incorporation of contractual changes affecting estimated cost and schedule.
 - (2) Reconciliation of estimated costs for those elements of the WBS with current performance measurement budgets in terms of changes to the authorized work and internal re-planning.

- (3) Changes to records pertaining to work performed that will change previously reported costs for correction of errors and routine accounting adjustments.
- (4) Revisions to the contract estimated costs for DOE-directed changes to the contractual effort.
- (e) The Contractor shall provide the CO and the FPD, or designated authorized representatives, access to any and all information and documents comprising the Contractor's project control and reporting system. Generally, access will not be requested more than one level below the level chosen by the FPD for control and approval authority, except during compliance reviews.
- (f) The Contractor shall include tailored reporting requirements in all subcontracts adequate to fairly evaluate performance and support the Contractor reporting requirements.
- (g) The Contractor may also be required to report historical costs of completed activities in a historical cost database along with the cost driving parameters.
- (h) The Contractor shall implement and maintain a surveillance program to ensure continued compliance of the earned value management system in accordance with the clause in Section I entitled "FAR 52.234-4 Earned Value Management System (JUL 2006)."

H.1.4 Baseline Change Management

- (a) The baseline is the source document for all project control and baseline change management. The processes for managing and administering changes to all elements of the baseline shall be timely, formal, and documented.
- (b) The approval authority for any change is subject to PPPO configuration control and DOE Order 413.3B and associated guides.
- (c) Provided that the change does not affect any item subject to EM configuration control as stated above, the baseline change control thresholds for cost shall be the lesser of the following:

DOE Headquarters	An increase equal to or in excess of the lesser of \$10M or 10% (cumulative) of the original CD-2/3 EM total cost baseline and any change of \$100M or more that does not affect the original CD-2/3 EM total cost baseline.
Local DOE	An increase up to the lesser of \$10M or 10% (cumulative) of the original CD-2/3 EM total cost baseline and any

Contractor change of \$5M up to \$100M that does not affect the original CD-2/3 EM total cost baseline. Any change of up to \$5M that does not affect the original CD-2/3 EM total cost baseline (use of management reserve must be reported to the Federal Project Director).

Additional work scope can only be authorized by the CO with concurrence of the FPD regardless of the threshold level.

- (d) Each change control threshold level shall accommodate emergency changes. Retroactive changes that affect schedule and cost performance data are not allowed and should be made in the current period if necessary. A record of all approved changes, at any level, shall be maintained in a change log through the life of the project. Change control records shall maintain a clear distinction between approved changes in funding and baseline changes. A copy of the log shall be provided monthly to the CO and DOE Contracting Officer's Representative (COR).
- (e) Any changes to total estimated cost, base and available award fee shall be executed only through a contract modification by the CO pursuant to the contract terms and conditions. Baseline changes will not imply the need for changes to total estimated cost or base and award fee.

H.2 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 PWS.
 - (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 Government.
- (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 Performance Work Statement;
 - (2) Constitutes a change as defined in the contract clause entitled "Changes;"
 - (3) In any manner causes an increase or decrease in the total estimated 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 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 (5) 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 thirty (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 Government 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 to the technical direction will be subject to the provisions of the clause entitled "Disputes."

H.3 PERSONNEL SECURITY CLEARANCES

- (a) The Contractor is required to conduct pre-employment investigative screening of prospective employees in order to ensure trustworthiness and reliability. The Contractor shall provide certification to the Contracting Officer (CO) that an investigative screening has been completed prior to employment. The certification shall include verification of identity, previous employment and education, and the results of credit and law enforcement checks.
- (b) Personnel assigned by the Contractor to work at the DOE site will be required to obtain a security clearance. The levels of clearance are as follows:

Clearance level

- Q – sensitive
- Q – non-sensitive
- L – confidential/secret

Under this contract, contractor personnel shall be required to have an "L" clearance level at a minimum. Key management and certain other personnel will be required to have a "Q" clearance level. The Contractor shall seek opportunities to reduce the levels of clearance required for personnel based upon the site conditions.

- (c) This requirement may be waived by the CO for personnel not involved with classified information, while clearances are being processed, or for personnel associated with the program for short periods of time, such as consultants.
- (d) The Contractor shall retrieve and dispose of 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.

H.4 STANDARD INSURANCE REQUIREMENTS

In accordance with FAR clause 52.228-7, entitled "Insurance - Liability to Third Persons," the following kinds and minimum amounts of insurance are required during the performance of this contract:

- (a) Worker's compensation and employer's liability insurance:
 - (1) The amount required by the state in which work is performed under applicable workers' compensation and occupational disease statutes.

- (2) Employer's liability insurance in the amount of \$100,000.
- (b) General liability insurance. Bodily injury liability coverage written on the comprehensive form of policy of at least \$500,000 per occurrence.
- (c) Automobile liability insurance. Coverage shall be provided on a comprehensive basis. It shall provide for bodily injury and property damage liability covering the operation of all automobiles used in connection with performance of this contract. Policies covering automobiles operated in the United States shall provide coverage of at least \$200,000 per person and \$500,000 per occurrence for bodily injury and \$20,000 per occurrence for property damage.
- (d) The amount of liability coverage on other policies shall be commensurate with any legal requirements of the state and locality, plus sufficient to meet normal and customary claims.

H.5 NO THIRD PARTY BENEFICIARIES

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.6 KEY PERSONNEL

- (a) The personnel listed below are considered to be essential to the work being performed. Prior to diverting any of the specified individuals to other programs, the Contractor shall notify the CO reasonably in advance (not less than thirty (30) days) and shall submit justification (including proposed substitutions) in sufficient detail to permit evaluation of the impact on the program. No diversion shall be made by the Contractor without the written consent of the CO, provided that the CO may ratify in writing such diversion and such ratification shall constitute the consent of the CO required by this clause. Whenever, for any reason, one or more of the following employees is unavailable for assignment for work under the contract, the Contractor shall, with the approval of the CO, replace such employee with an employee of substantially equal abilities and qualifications with meritorious consideration of increasing opportunity to fully use the talents and capabilities of a diverse workforce. This clause may be amended from time to time during the course of the contract to either add or delete personnel, as appropriate.

NAME	TITLE
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Section H

<u>Mark Duff</u>		<u>Project Manager</u>
<u>Eddie Magness</u>		<u>Environment, Safety and Health Manager</u>
<u>Myrna Redfield</u>		<u>Regulatory Compliance Manager</u>
<u>Vacant</u>		<u>Project Integration and Operations Manager</u>
<u>Mark Cauley</u>	B	<u>Business Manager</u>

- (b) Anytime the Project Manager is replaced for any reason within two years of contract award, provisional and earned fee will be reduced by \$50,000. In addition, each time any of the other proposed key personnel are replaced for any reason within two years of contract award, provisional and earned fee will be reduced by \$25,000. The combined total maximum reduction to provisional and earned fee for such replacements shall be \$250,000. The Contractor may request in writing that the CO waive all or part of a reduction if special circumstances exist. The CO shall have unilateral discretion to waive all or part of a reduction.

H.7 IDENTIFICATION AND PROTECTION OF UNCLASSIFIED CONTROLLED NUCLEAR INFORMATION (UCNI)

Documents originated by the Contractor or furnished by the DOE 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 (Section J, Attachments J1 and J2).

H.8 DEPARTMENT OF LABOR WAGE DETERMINATIONS

- (a) In the event that the Service Contract Act is applicable to the performance of this contract, the Contractor shall comply with the requirements of U.S. Department of Labor Wage Determination Number 2005-2495, Rev. 7, dated 02/22/2008 and the CBA with United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union and its Local 550. Copies of the wage determinations are attached to this contract (Section J, U. S. Department of Labor Wage Determination). Revised wage determinations from the Department of Labor shall be incorporated into this contract. The Contractor and/or Subcontractor shall comply with the revised wage determination for Service Contract Act covered employees.
- (b) In the event that the Davis Bacon Act is applicable to the performance of this contract, the Contractor shall comply with the requirements of U.S. Department of Labor General Decision Number: KY080001.04/04/2008 KY1 and the CBA with United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union and its Local 550. Copies of the wage determinations are attached to this contract

(Section J, U. S. Department of Labor Wage Determination). Revised wage determinations from the Department of Labor shall be incorporated into this contract. The Contractor and/or Subcontractor shall comply with the revised wage determination for Davis Bacon Act covered employees.

H.9 LOBBYING RESTRICTION (ENERGY AND WATER DEVELOPMENT AND RELATED AGENCIES APPROPRIATIONS ACT, 2008)

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.

H.10 DISPOSITION OF INTELLECTUAL PROPERTY – FAILURE TO COMPLETE CONTRACT PERFORMANCE

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 anytime from

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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.11 PROHIBITION OF CONTRACTS WITH PERSONS FALSELY LABELING PRODUCTS AS MADE IN AMERICA

- (a) Pursuant to FAR 9.405(a), awards shall not be made to entities that are included on the List of Parties Excluded from Federal Procurement and Non-procurement Programs. If DOE or DOE contractor personnel become aware of a possible violation of the prohibition against falsely mislabeling products as made in America, and the entity is not on the List of Parties Excluded from Federal Procurement and Non-procurement Programs, the matter should be promptly reported through the CO.
- (b) The report of an entity in violation of the prohibition against falsely mislabeling products as American-Made shall be submitted to the DOE Office of Contract Management, Office of Procurement and Assistance Management, for potential debarment of the entity pursuant to FAR 9.406-2(a)(4) and 9.406-2(b)(1)(iii).

H.12 ALLOCATION OF LIABILITY FOR FINES AND PENALTIES TO RESPONSIBLE PARTY

- (a) Liability and responsibility for civil fines or penalties arising from or related to violations of environmental, safety, health or quality requirements shall be borne by the party that causes the violation. This clause resolves liability for fines and penalties though the regulatory authority may assess such fines or penalties upon a party or 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 a permit application, manifest, reports or other required documents, is a permittee, or is named subject of an enforcement action or assessment of a fine or penalty.
- (b) Regardless of which party to this contract is the named subject (Contractor or DOE) of an enforcement action for compliance with the environmental, safety, and health, or quality requirements by the cognizant regulatory authority, liability for payment of any fine or penalty as a result of the Contractor actions or inactions, is the responsibility of the Contractor and not reimbursable under this contract. Any fines and penalties incurred by DOE as a result of the

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Contractor actions or inactions will be reimbursed to DOE and are unallowable. Cost of fines and penalties resulting from violations of, or the Contractor's failure to comply with federal, state, local, or foreign laws, regulations, permits, orders and regulatory compliance agreements are unallowable except under the conditions stipulated at FAR 31.205-15. Other costs resulting from ES&H claims (fines, penalties, fees, judgments) made against DOE as a result of the Contractor's failure to comply with regulatory requirements, including costs associated with injunctive relief, shall also be unallowable.

H.13 PERMITS, APPLICATIONS, LICENSES, AND OTHER REGULATORY DOCUMENTS

- (a) Consistent with the FAR clause 52.236-7 "Permits and Responsibilities," in Section I, the Contractor must obtain any licenses, permits, other approvals or authorizations for conducting all activities under the contract. The Contractor shall be responsible for becoming a party to all regulatory compliance agreements/orders associated with scope under this contract including those previously executed. The Contractor is responsible for complying with all permits, licenses, certifications, authorizations and approvals from federal, state, and local regulatory agencies that are necessary for all activities under this contract (hereinafter referred to collectively as "permits"). Except as specifically provided in this section and to the extent not prohibited by law or cognizant regulatory authority, the Contractor (or, if applicable, its subcontractors) will be the sole applicant for any such permits required for its activities. The Contractor must take all appropriate actions to obtain transfer of existing permits, and DOE will use all reasonable means to facilitate transfer of existing permits. If DOE determines it is appropriate or if DOE is required by cognizant regulatory authority to sign permit applications, DOE may elect to sign as owner or similar designation, but the Contractor (or, if applicable, its subcontractors) must also sign as operator or similar designation reflecting its responsibility under the permit unless DOE waives this requirement in writing.
- (b) Unless otherwise authorized by the CO, the Contractor must submit to DOE for DOE's review and comment all permit applications, reports or other documents required to be submitted to regulatory authorities. Such draft documents must be provided to DOE within a time frame, identified by DOE, sufficient to allow DOE substantive review and comment; and DOE will use its best efforts to perform such substantive review and comment within such time frame. When providing DOE with documents that are to be signed or co-signed by DOE, the Contractor will accompany such document with a certification statement, signed by the appropriate Contractor corporate officer, attesting to DOE that the document has been prepared in accordance with all applicable requirements and the information is, to the best of its knowledge and belief, true, accurate, and complete.

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- (c) Except as specifically provided in this clause and to the extent not prohibited by law or cognizant regulatory authority, the Contractor (or, if applicable, its subcontractors) will be the signatory for reports, hazardous waste manifests, and other similar documents required under environmental permits or applicable environmental laws and regulations.
- (d) In the event of termination or expiration of this contract, DOE will require the new Contractor to accept transfer of all environmental permits executed by the Contractor, or DOE will accept responsibility for such permits and the Contractor shall be relieved of all future liability and responsibility resulting from the acts or omissions of the successor Contractor or DOE.

H.14 AWARD FEE PLAN

- (a) The determination of award fee shall be based upon an award fee plan, including the criteria to be considered under each area evaluated and the percentage of award fee, if any, available for each area. The award fee plan will be unilaterally established by the Government. A copy of the plan shall be provided to the Contractor 30 calendar days prior to the start of the first evaluation period.
- (b) The award fee plan will set forth the evaluation period and the criteria upon which the Contractor will be evaluated for performance relating to any (1) technical requirements if appropriate, (2) management requirements, and (3) cost functions as selected for evaluation. The Contractor shall submit a self-evaluation of performance for each period under consideration. While it is recognized that the basis for determination of the fee shall be the evaluation by the Government, the self-evaluation which is to be received within 15 days after the end of the period being evaluated will be given such consideration as the Fee Determination Official shall find appropriate.
- (c) The award fee plan may be revised unilaterally by the Government at any time during the period of performance. Notification of such changes shall be provided to the Contractor 30 calendar days prior to the start of the evaluation period to which the change will apply.

H.15 PRICE ANDERSON AMENDMENTS ACT NONCOMPLIANCE

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.16 ASSIGNMENT OF EXISTING AGREEMENTS AND SUBCONTRACTS

- (a) Existing agreements, subcontracts, and potential subcontracts under contract no. DE-AC30-06EW05001 are listed in Section J, Attachment J5. The Contractor shall accept assignment of existing subcontracts and agreements identified for the Contractor to assume in Section J, Attachment J5. The Contractor may identify additional subcontracts and agreements listed in Attachment J5 for assumption, which it may negotiate directly with the parties involved. The agreements and subcontracts may include, but not be limited to, subcontracts and purchase orders; memorandums of agreement; memorandums of understanding; licenses; agreements with local and state governments; user agreements; and other similar agreements.
- (b) DOE does not guarantee that the existing agreements and subcontracts not identified for assignment in Section J, Attachment J5, will be available for assignment or can be assigned.
- (c) The administration of all subcontracts entered into and/or managed by the Contractor, including responsibility for payment hereunder, shall remain with the Contractor unless assigned at the direction of DOE. DOE reserves the right to direct the Contractor to assign to DOE or another Contractor any subcontract awarded under this contract. The Contractor agrees to accept assignment of subcontracts and agreements as determined necessary by DOE.

H.17 GOVERNMENT-FURNISHED SERVICES AND ITEMS (GFSI)

- (a) The DOE will provide the GFSI listed in the table below. If DOE cannot provide GFSI committed to below, the Contractor may be entitled to pursue remedies in the manner and subject to the limitations set out in subparagraphs (d) and (i) of the Section I, FAR 52.245-1 "Government Property."
- (b) Government-Furnished Property is identified in Section J, "Paducah Remediation Accountable Property List." The Contractor shall evaluate the adequacy of GFSI and notify DOE when GFSI-supplied equipment or services do not meet contract or DOE Order requirements.
- (c) The Contractor shall provide the Contracting Officer a projection of when GFSI identified in the table below, are needed within thirty (30) calendar days after the effective date of the contract and quarterly thereafter. Amendments to the projection, if any, shall be provided to the Contracting Officer 45 calendar days in advance of the GFSI need date. DOE will review each Contractor submittal of GFSI needs and, within 15 calendar days, shall notify the Contractor whether it will provide the requested GFSI.

Scope	Requirements	Government-Furnished Services and Items
a. The Contractor shall develop and execute an Integrated Safety Management System Description (ISMSD).	DOE shall verify and approve the ISMSD.	DOE shall provide Phase I and Phase II verification, and approval of the ISMSD.
b. The Contractor shall perform activities as described in Section C, PWS.	DOE shall ensure Government controlled data systems are available for contractor access as needed.	DOE will ensure the following systems are available to the Contractor throughout the period of performance of this contract: Integrated Planning Accountability and Budget System (IPABS) Facility Information Management System (FIMS) Computerized Accident/Incident Reporting System (CAIRS) Non-Compliance Tracking System (NTS) database Occurrence Reporting and Processing System (ORPS) Foreign Access Central Tracking System (FACTS) database Oak Ridge Environmental Information System (OREIS) Geographical Information System (GIS) Paducah Project Environmental Measurement System (Paducah PEMS) Condition Assessment Information System (CAIS) Work Force Information system (WFIS)
c. The Contractor shall perform activities as described in Section C, PWS.	The Contractor shall interface with all site Contractors and DOE to ensure that information	After GDP turnover (de-lease) through direct agreement with Contractors throughout the period of performance of this contract, DOE will provide the

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Scope	Requirements	Government-Furnished Services and Items
	<p>and support required by any service providing Contractor or DOE is provided to on a schedule and in a format that enables the service provider to successfully perform.</p>	<p>following:</p> <p>From the Deactivation Contractor:</p> <p><u>Nuclear Materials Control and Accountability (NMC&A)</u>. Integration, development, maintenance, and implementation of the Paducah site Nuclear Materials Control and Accountability (NMC&A) program, including compliance with DOE Orders (e.g., NMC&A organizational independence from nuclear materials operations). Development and maintenance of the contractor NMC&A Plan and will assist other DOE/Paducah contractors, in the development of required NMC&A plans and procedures if requested. Conduct of assessments of the NMC&A program, development of corrective action plans for inclusion in the Annual Comprehensive Self-Assessment Report submitted to the ODFSA/CSA. Development of the NMC&A program section of the SSP. The Contractor provides information to the DOE site contractor about security arrangements and/or changes prior to new or changing operations commencing or configurations that might alter the performance of existing security system.</p> <p><u>CAAS</u>. Criticality Accident Alarm System to support DOE missions in all DOE retained facilities at</p>

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Scope	Requirements	Government-Furnished Services and Items
		<p>Paducah</p> <p><u>Shared Site Process.</u> Manage and host the Shared Site Process meetings.</p> <p><u>Lock & Tag.</u> Manage and maintain the Master Lock & Tag Program (a.k.a. lock-out/tag-out). Manage and coordinate utility outages with other site contractors.</p> <p><u>Emergency Management, Fire & Rescue.</u> Manage the Paducah Site Emergency Management Program including emergency response, communications and reporting. Provide response to fire, HAZMAT, rescue, medical, security emergencies in the form of incident commander, safety officer, operations officer, entry teams, decontamination, safety, and rehab.</p> <p><u>Emergency Operations.</u> Operation of the Emergency Operations Center (EOC), hazard surveys and hazard assessments, training of EOC staff, sitewide emergency exercises, and facility specific plans and procedures for emergency preparedness development, training, drills and assessments. The EOC activity also includes: Occurrence Notification Center to report environmental, safety, and health events and related information directly to DOE; Management of the EOC and related emergency operations for the site; Adoption,</p>

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Scope	Requirements	Government-Furnished Services and Items
		<p>development, maintenance; and Execution of the Emergency Management Program and Plan.</p> <p><u>Water Systems.</u> The management of the plant utility consisting of a system to distribute onsite fire suppression and potable water to the site facilities. Operate and maintain the following site-wide water systems on site in accordance with all the applicable State and federal codes and regulations: fire protection water system, domestic water systems.</p> <p><u>Wastewater Systems.</u> Operation of the wastewater systems on site in accordance with all the applicable State and federal codes and regulations.</p> <p><u>Electrical Transmission, Distribution, & Energy Management.</u> Coordination with contractors to obtain the following:</p> <p>Energy cost and consumption data for the Energy Management Annual Report and the quarterly energy cost and consumption data entry to EMS4 database; Protection of the systems against disruption and damage during performance of work; and Support for utility operations, maintenance, and closure of a service where appropriate.</p> <p><u>Natural Gas.</u> Coordination with contractors to obtain the following: Energy cost and</p>

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Scope	Requirements	Government-Furnished Services and Items
		<p>consumption data for the Energy Management Annual Report and the quarterly energy cost and consumption data entry to EMS4 database;</p> <p>Protection of the systems against disruption and damage during performance of work; and Supports utility operations, maintenance, and closure of a service where appropriate.</p> <p><u>Protective Force Program.</u> Optimization and provision of Protective Forces for facilities possessing critical Safeguards and Security interests. Management, maintenance, development, and supervision of the Protective (PF) Force Program. This includes: Posting of orders; provision of personnel and equipment required for support of the protective strategy developed by the CCSA; Ensuring PF personnel are trained and equipped to DOE requirements for the task; and Provision of operational procedures for the safe, efficient and effective implementation of the DOE-approved, CCSA Site Security Plan. The conduct of self-assessments of the PF program and provision of self-assessment reports and any resulting corrective action plans to the CCSA for inclusion in the Annual Comprehensive Site Assessment Report submitted to the DOE ODFSA/CSA. Coordination with the CCSA the contractor to develop and provide the PF</p>

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Scope	Requirements	Government-Furnished Services and Items
		<p>program section of the SSP. Optimization and provision of Protective Forces for facilities possessing critical Safeguards and Security interests.</p> <p>From the Infrastructure Contractor:</p> <p><u>Records Management and Document Control.</u> Maintain the central repository, process and track classified mail. Scan all records, and maintain and administer searchable database.</p> <p><u>Radio & Telephone.</u> Maintain the Federal Communications Commission (FCC) radio frequency license, tower, transmission and radio repairs. Radio services include engineering, maintenance and operations of radio communication services, including twoway, fire dispatch, safety and emergency preparedness, security systems and infrastructure. Manage radio services, including radio spectrum licensing and design, engineering integration, operations and maintenance, installation, upgrade and required system calibration services. Maintain registration of radio frequencies with the National Telecommunications and Information Administration. Maintain the telephone lines and hardware. Telephone Services function consists of the Telephone Exchange activities that encompass voice, data,</p>

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Scope	Requirements	Government-Furnished Services and Items
		<p>special circuits, 911 support, and attendant/operator services to programs, projects, and support organizations. Provides all required telephone services including maintaining telecommunications capability and capacity, data and network circuits, off premise stations, telephone service to offsite offices occupied by end-users, alerting and crash alarm systems, and other miscellaneous voice and data circuits.</p> <p><u>Railroad Services.</u> Manage overall rail maintenance, planning, operation, and coordination of rail movements on site. Determine requirements for future use on the site and coordinate with all site Contractors. Operate and maintain portions of the rail system within its facility boundary. Coordinate with appropriate shared-site contractors prior to and during any on-site rail movements, including placement of "flaggers" at necessary intersections, taking proper security actions, and making site notifications.</p>
<p>d. DOE contractual agreements provide utilities including electric, sanitary water, sewer, recirculating heating and cooling water, and plant dry air.</p>	<p>DOE shall maintain the contractual agreements that provide utility services to the Contractor.</p> <p>The USEC contractual agreements (Work</p>	<p>The DOE will provide utility services throughout the period of performance of this contract through direct agreement with USEC or through other means until turnover (de-lease), at which time DOE will provide utility services through direct agreement with other site contractors.</p>

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Scope	Requirements	Government-Furnished Services and Items
	<p>Authorizations) may be revised periodically during the period of performance of the remediation contract. The Contractor shall interface with USEC based upon the latest approved versions of the Work Authorizations.</p>	
<p>e. The Contractor shall perform activities as described in Section C, PWS.</p>	<p>The USEC contractual agreements (Work Authorizations) may be revised periodically during the period of performance of the remediation contract. The Contractor shall interface with USEC based upon the latest approved versions of the Work Authorizations.</p> <p>The Contractor shall evaluate the adequacy of available equipment and services and supplement equipment and services to meet the applicable requirements.</p>	<p>Through direct agreement with USEC throughout the period of performance of this contract, DOE will provide the following until turnover (de-lease), at which time DOE will provide utility services through direct agreement with other site contractors:</p> <ol style="list-style-type: none"> 1. Criticality Accident Alarm System to support DOE missions in all DOE retained facilities at Paducah 2. Electronic maintenance support for the fire alarm system in DOE space. 3. Limited Fire Protection and Prevention Equipment and Services; Emergency Management Services; Emergency Medical Technician, Emergency Management and Plant Shift Superintendent, Incident Commander 4. Fire and Utilities Inspections to comply with RCRA Part B Permit Inspection Requirements

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Scope	Requirements	Government-Furnished Services and Items
		<p>5. USEC Records Management, Documents Controls and Information Management to include technical library support, imaging services, central files support of engineering data and drawings.</p> <p>6. Safeguards and Security: Nuclear Materials Control and Accountability Program (control and account for nuclear material present in DOE facilities); Armed protective forces operations; Heightened Security Program; Physical Barriers; Computer Security (COMSEC).</p> <p>7. USEC records retrieval services for EEOICPA, Title D, Doctor Panel Claims and Legacy Workers' Compensation Claims.</p> <p>8. Narrow band radio frequency tower, transmission and radio repair services.</p>
<p>f. The Contractor shall perform activities to store, characterize, process, package, and ship TRU/MTRU waste.</p>		<p>DOE will:</p> <ol style="list-style-type: none"> 1. Provide Waste Isolation Pilot Plant (WIPP) shipping casks (TRUPACT II or HalfPACT). 2. Bear the cost of transportation of TRU waste to another DOE site/WIPP and cost of waste disposal at WIPP.
<p>g. Services provided by the Infrastructure contractor(s).</p>		<ol style="list-style-type: none"> 1. LAN and WAN configured for multiple users and basic operating software, network administration, customer service support, help desk support, and computer repairs. 2. Safeguards and security: Lock

Scope	Requirements	Government-Furnished Services and Items
		<p>and Key Program; Security Management Program (plans, procedures, etc); Facility Registration; Information Security Program; Classified and unclassified computer security; Personnel Security; Classification Program.</p> <p>3. General site grounds maintenance: road/parking lot maintenance, snow removal, grass cutting, pest controls, and janitorial services for facilities as listed in FIMS and identified elsewhere in the PWS.</p> <p>4. Calibration and maintenance of all radiation monitoring and surveying equipment as required by 10 CFR 835.</p> <p>5. Provide project-specific training for both the Contractor's and the DOE employees as required by the Occupational Safety and Health Administration, DOE and the Department of Transportation. The Infrastructure Contractor shall provide the following training: Consolidated Annual Training, Radiation Worker I and II, General Employee Training, Annual Security Refresher, Workplace Violence Prevention, Diversity Awareness, Employee Conduct Training, Business Ethics/Standards of Conduct, and Fire Extinguisher Training, DOE Orders/Work Smart Standards and ISMS. The training for Work Smart</p>

Scope	Requirements	Government-Furnished Services and Items
		<p>Standards and ISMS shall be general introductory courses, not specific to any Contractor's program.</p> <p>6. Provide Emergency Management Program support.</p> <p>7. Vehicle and equipment fleet management program.</p>

NOTE: If actual costs for the services provided in paragraphs c, d, e, f or g above, increase or decrease as a direct result of Contractor actions or inactions (i.e., usage changes), the CO may share such savings or overruns with the Contractor in terms of additional fee or reduction of earned fee pursuant to Section B.

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H.18 DEFINITIONS

For purposes of Clause H.19, Workforce Transition and Employee Hiring Preferences, Clause H.20, Employee Compensation: Pay and Benefits, Clause H.21, Special Provisions Applicable to Workforce Transition and Employee Compensation: Pay and Benefits, Clause H.22, Workforce Transition and Benefits Transition: Plans and Timeframes, Clause H.23, Post-Contract Responsibilities for Pension and Other Benefit Plans, and Clause H.24, Labor Relations, the following definitions are applicable (unless otherwise specified):

- (a) "Workforce Transition Period" means the six month period following the date of contract award.
- (b) "Grandfathered Employees" means employees who are defined as Grandfathered Employees under the multi-employer pension plan sponsored by the Bechtel Jacobs Company, LLC (BJC) (Bechtel Jacobs Company LLC Pension Plan For Grandfathered Employees) (hereinafter "BJC MEPP"), in accordance with the terms of the BJC MEPP and applicable law.
- (c) "PRS Incumbent Contractor" means Paducah Remediation Services, LLC (PRS LLC) and its first and second tier subcontractors under DOE Contract DE-AC30-06EW05001.
- (d) "PRS Incumbent Employees" means employees (1) who hold regular appointments or who are regular employees on the rolls of PRS LLC and Grandfathered Employees on the rolls of PRS LLC's first and second tier

subcontractors; and (2) who are employed at the Paducah Gaseous Diffusion Plant site under DOE Contract DE-AC30-06EW05001 during the Workforce Transition Period.

- (e) "USEC" means the United States Enrichment Corporation.
- (f) "USEC Employees" means employees who hold regular appointments or who are regular employees on the rolls of USEC at either the Portsmouth or Paducah Gaseous Diffusion Plant site. The applicable site will be identified in the relevant paragraphs and/or clause(s). If employment at a specific site is not identified, the clause(s) or paragraphs are applicable to USEC Employees employed at both Gaseous Diffusion Plant sites.
- (g) "Non-Grandfathered Employees" means employees who are not defined as Grandfathered Employees under the BJC MEPP in accordance with the terms of the BJC MEPP and applicable law.
- (h) "SST" means Swift & Staley Mechanical Contractors, Inc (SST Inc) and its first and second tier subcontractors under DOE Contract DE-AC24-05OH20178.
- (i) "SST Employees" means employees (1) who hold regular appointments or who are regular employees on the rolls of SST Inc and Grandfathered Employees on the rolls of SST Inc's first and second tier subcontractors; and (2) who are employed at the Paducah Gaseous Diffusion Plant site under DOE Contract DE-AC24-05OH20178 during the Workforce Transition Period.
- (j) "UDS" means Uranium Disposition Services, LLC (UDS LLC) and its first and second tier subcontractors at the Paducah Gaseous Diffusion Plant site under Contract DOE DE-AC-05-02OR22717.
- (k) "UDS Employees" means employees (1) who hold regular appointments or who are regular employees on the rolls of UDS LLC and Grandfathered Employees on the rolls of UDS LLC's first and second tier subcontractors; and (2) who are employed at the Paducah Gaseous Diffusion Plant site under DOE Contract DE-AC05-02OR22717 during the Workforce Transition Period.
- (l) "Paducah Contractors" means the PRS Incumbent Contractor, SST, UDS, and USEC.

H.19 WORKFORCE TRANSITION AND EMPLOYEE HIRING PREFERENCES

- (a) Hiring Preferences. Employees will receive a right of first refusal and/or other preference in hiring for vacancies for non-managerial positions (i.e. all those below the first line of supervision) in non-construction activities in Section C,

Performance Work Statement (PWS), in accordance with this clause, and any applicable collective-bargaining agreement(s) and site seniority, as set forth below.

- (1) During the Workforce Transition Period, the Contractor shall provide the right of first refusal and preferences in hiring in the following order of precedence:
 - (i) The Contractor shall give a right of first refusal for vacancies in non-managerial positions under this contract to individuals (1) who are PRS Incumbent Employees, USEC Employees who have been identified by their employer as being at risk of being involuntarily separated, SST Employees who have been identified by their employer as being at risk of being involuntarily separated, and UDS Employees who have been identified by their employer as being at risk of being involuntarily separated; (2) who are employed at the Paducah Gaseous Diffusion Plant site; and (3) who hold positions or perform functions during the Workforce Transition Period that are substantially equivalent to the vacancies in such non-managerial positions under this contract and also to individuals who held positions or performed functions during the six months preceding the first day of the Workforce Transition Period that are substantially equivalent to the vacancies in such non-managerial positions under this contract.
 - (ii) The Contractor shall give a preference in hiring for vacancies in non-managerial positions under this contract to individuals (1) who are PRS Incumbent Employees, USEC Employees who have been identified by their employer as being at risk of being involuntarily separated, SST Employees who have been identified by their employer as being at risk of being involuntarily separated, and UDS Employees who have been identified by their employer as being at risk of being involuntarily separated; (2) who are employed at the Paducah Gaseous Diffusion Plant site; and (3) who meet the qualifications for a particular position.
 - (iii) The Contractor shall give a preference in hiring for vacancies in non-managerial positions under this contract to individuals (1) who are PRS Incumbent Employees, USEC Employees who have been identified by their employer as being at risk of being involuntarily separated, SST Employees who have been identified by their employer as being at risk of being involuntarily separated, and UDS Employees who have been identified by their employer as being at risk of being involuntarily separated; (2) who are employed at the Paducah Gaseous Diffusion Plant site; and (3) who may not meet the qualifications for a particular position, but

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who agree to become qualified and can become qualified by the commencement of active employment under this contract with the training provided pursuant to Clause H.21(a).

- (iv) Subsequent to the application of the right of first refusal in Paragraph (a)(1)(i) and the preferences in hiring in Paragraphs (a)(1)(ii) and (iii) above, the Contractor shall give a preference in hiring for vacancies pursuant to Paragraph (a)(3) below.
- (2) After the Workforce Transition Period and continuing throughout the remaining period of performance under this contract, the right of first refusal and/or other preferences in hiring shall be provided in the following order of precedence:
- (i) The Contractor shall give a right of first refusal in hiring for vacancies in non-managerial positions under this contract to USEC Employees (1) who are employed at the Paducah Gaseous Diffusion Plant site; (2) who have been identified by their employer as being at risk of being involuntarily separated; and (3) who hold or have held positions or perform or have performed functions which are substantially equivalent to vacancies in such non-managerial positions or functions under this contract.
 - (ii) The Contractor shall give a preference in hiring for vacancies in non-managerial positions under this contract, to USEC Employees (1) who are employed at the Paducah Gaseous Diffusion Plant site; and (2) who have been identified by their employer as being at risk of being involuntarily separated, in the following order of precedence:
 - (A) USEC Employees who meet the qualifications for a particular position.
 - (B) USEC Employees 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 with the training provided pursuant to Clause H.21(a).
 - (iii) The Contractor shall give a preference in hiring for vacancies in non-managerial positions under this contract to SST Employees and UDS Employees (1) who are employed at the Paducah Gaseous Diffusion Plant site at the time of the vacancies; and (2) who have been identified by their respective employers as being at risk of being involuntarily separated, in the following order of precedence:

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- (A) SST Employees and UDS Employees who hold positions or perform functions at the time the vacancy arises that are substantially equivalent to the vacancies in such non-managerial positions under this contract.
- (B) SST Employees and UDS Employees who meet the qualifications for particular positions.
- (C) SST Employees and UDS Employees 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 for the particular positions with the training provided pursuant to Clause H.21(a).

For purposes of this Paragraph (a)(2)(iii), the phrase "during the Workforce Transition Period" contained in Clause H.18(i)(2) and (k)(2) is not applicable. The respective employees are to be employed at the Paducah Gaseous Diffusion Plant site at the time of the vacancy.

- (iv) Subsequent to the application of the right of first refusal in Paragraph (a)(2)(i) and the preferences in hiring in Paragraphs (a)(2)(ii) and (iii) above, the Contractor shall give a preference in hiring for vacancies in the order of precedence as set forth in Paragraph (a)(3) below.
- (3) During the entire period of performance under this contract, but subordinate to the preferences set out in Paragraphs (a)(1)(i) – (iii) and (a)(2)(i) – (iii) above, the Contractor shall provide preferences in hiring in the following order of precedence:
- (i) The Contractor shall give a preference in hiring for vacancies in non-managerial positions under this contract to USEC Employees employed at the Paducah Gaseous Diffusion Plant site (1) who have been identified by their employer as being at risk of being involuntarily separated from employment by a plant closing or mass layoff (as such terms are defined in Section 2101(a)(2) and (3) of Title 29 of the United States Code) at the Paducah Gaseous Diffusion Plant site; and (2) who are qualified and/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 with the training provided pursuant to Clause H.21(a).

- (ii) The Contractor shall give a preference in hiring for vacancies in non-managerial positions under this contract to individuals (1) who are former employees of USEC, former employees of the PRS Incumbent Contractor, and former employees of the PRS Incumbent Contractor's first and second-tier subcontractors; and (2) who are entitled to recall rights consistent with any applicable site seniority and any applicable collective bargaining agreement(s) at the Paducah Gaseous Diffusion Plant site.
- (iii) The Contractor shall give a preference in hiring for vacancies in non-managerial positions under this contract to individuals (1) who are Grandfathered Employees and who are former employees of the PRS Incumbent Contractor, SST, UDS, and USEC at the Paducah Gaseous Diffusion Plant site; (2) who have been involuntarily separated (other than for cause) from employment; and (3) 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" and with the provisions of any applicable Work Force Restructuring Plan, as amended from time to time, regarding the preferential hiring of employees.
- (iv) The Contractor shall give a preference in hiring for non-managerial positions under this contract to individuals (1) who are former employees of the PRS Incumbent Contractor, SST, UDS, and USEC; and any other DOE contractor at the Paducah Gaseous Diffusion Plant site; (2) who were involuntarily separated (other than for cause) from employment; and (3) 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" and with the provisions of any applicable Work Force Restructuring Plan, as amended from time to time, regarding the preferential hiring of employees.
- (v) The Contractor shall give a preference in hiring for vacancies in non-managerial positions under this contract to individuals (1) who were formerly employed by any other DOE contractor at a DOE defense nuclear facility; and (2) who are eligible for the hiring preference contained in the clause in Section I of this contract entitled "DEAR 952.226-74, Displaced Employees Hiring Preference" as provided in that clause and with the provisions of any applicable Work Force Restructuring Plan, as amended from time to time, regarding the preferential hiring of employees.
- (vi) The Contractor shall give a preference in hiring for vacancies in non-managerial positions under this contract to individuals (1) who were formerly employed at the Paducah Gaseous Diffusion Plant

site by the PRS Incumbent Contractor, SST, UDS, and USEC; (2) who were involuntarily separated (other than for cause) from their employment at the Paducah Gaseous Diffusion Plant site; and (3) who are qualified for the 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.

- (vii) The Contractor shall give a preference in hiring for vacancies in non-managerial positions under this contract to individuals (1) who have separated from employment at the Paducah Gaseous Diffusion Plant site; (2) who are not barred from seeking employment at the Paducah Gaseous Diffusion Plant site by the terms of employee waivers or releases of claims they executed; and (3) 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.
- (4) Clauses H.19(a)(1), (2), and (3) do not prohibit the Contractor from selecting the Contractor's existing employees at the Paducah Gaseous Diffusion Plant site for positions or functions under this contract.
- (b) Costs. Any costs incurred by the Contractor as a result of the Contractor's failure to comply with the hiring preferences as set forth in this contract will be unallowable, unless such costs were incurred as the result of the Contracting Officer's direction.

H.20 EMPLOYEE COMPENSATION: PAY AND BENEFITS

(a) Contractor Employee Compensation Plan

The Contractor shall submit, for Contracting Officer approval, by the end of the 90 day contract transition period identified in Section F.2(b), a Contractor Employee Compensation Plan (to be submitted during contract transition only) 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;

- a. Philosophy and strategy for all pay delivery programs.
- b. System for establishing a job worth hierarchy.

- c. Method for relating internal job worth hierarchy to external market.
- d. System that links individual and/or group performance to compensation decisions.
- e. Method for planning and monitoring the expenditure of funds.
- f. Method for ensuring compliance with applicable laws and regulations.
- g. System for communicating the programs to employees.
- h. System for internal controls and self-assessment.
- i. 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" ("Total Compensation System"). 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.
- (2) A list of the top five most highly compensated executives as defined in FAR 31.205-6(p)(2)(ii) and their total cash compensation at the time of Contract award, and at the time of any subsequent change to their total cash compensation. This should be the same information provided to the Central Contractor Registration (CCR) per FAR 52.204-10.
- (3) An Annual Report of Contractor Expenditures for Employee Supplemental Compensation no later than March 1 of each year.

(d) Pay and Benefit Programs

The Contractor shall establish pay and benefit programs for employees in accordance with applicable law, any applicable collective bargaining agreement(s), the terms and conditions of this contract, including Clause H.21, Special Provisions Applicable to Workforce Transition and Employee Compensation: Pay and Benefits, and the following requirements as set forth below; 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) Pay.

- (i) The Contractor shall provide equivalent pay to the following Employees hired by the Contractor as compared to pay provided to Those employees by the PRS Incumbent Contractor, SST, UDS, and/or USEC for at least the first year of the term of this contract.
 - (A) PRS Incumbent Employees hired by the Contractor;
 - (B) USEC Employees hired by the Contractor for positions or to perform functions for the Contractor that are substantially equivalent to the positions held or functions they performed for ISEC at the Paducah Gaseous Diffusion Plant site; and
 - (C) SST Employees and UDS Employees hired by the Contractor for positions or to perform functions for the Contractor that are substantially equivalent to the positions held or functions they performed for their respective employers at the Paducah Gaseous Diffusion Plant site.
- (ii) All other employees hired by the Contractor shall receive pay which is competitive with the industry from which the Contractor recruits its employees, and in accordance with the terms and conditions of this contract, any applicable collective bargaining agreement(s), and applicable law, including Section 4(c) of the Service Contract Act, as applicable.

- (2) Pension and Other Benefits. The Contractor shall provide a total package of benefits to PRS Incumbent Employees, USEC Employees, SST Employees, and UDS Employees, and all other employees who are hired by the Contractor in accordance with the terms and conditions of this contract, any applicable collective bargaining agreement(s) and applicable law. Comparability of the total benefit package shall be determined by the CO in his/her sole discretion.

(3) Cash Compensation

- (i) The Contractor shall submit the following to the Contracting Officer

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for a determination of cost allowability for reimbursement under the Contract:

- (A) Any proposed major compensation program design changes prior to implementation.
- (B) An Annual Compensation Increase Plan (CIP). The Compensation Increase Plan (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 plan 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.
- (C) 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).

- (ii) 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 (e)(3)(A)(iii) above. The base salary reimbursement level for the top contractor official establishes the maximum allowable 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.
 - (iii) 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.
 - (iv) 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.
- (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 until the Contracting Officer makes a determination of cost allowability for reimbursement for new or changed benefit plans.
 - (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 (i) and (ii) below. The studies shall be used by the Contractor in calculating the cost of benefits under existing benefit plans. An Employee Benefits Value (Ben-Val) Study Method using no less than 15 comparator organizations and an Employee Benefits Cost Survey comparison Method 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.

- (i) The Ben-Val, 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 comparator companies approved by the Contracting Officer. 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 the post retirement benefits other than pensions using external benchmarks derived from nationally recognized and Contracting Officer approved survey sources and,
 - (ii) An Employee Benefits Cost Study Comparison, 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 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 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 pension 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.
- (e) 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) Except for Commingled Plans in existence as of the effective date of the contract, 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. When deemed appropriate by the Contracting Officer, Commingled Plans shall be converted to separate plans at the time of new contract award or the extension of a contract.
- (f) 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 pension and other benefit plans (or comparable successor plans), 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). 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) DOE approval is required prior to implementing any change to a pension plan covering prime cost reimbursement contracts for management and operation of

DOE facilities and other contracts when designated. Changes shall be in accordance with and pursuant to the terms and conditions of the contract.

- (3) Each contractor 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 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.
- (4) For existing Commingled Plans, the Contractor shall maintain and provide annual Separate Accounting of DOE liabilities and assets as for a Separate Plan.
- (5) 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.
- (6) The Contractor shall comply with the requirements of ERISA if applicable to the pension plan and any other applicable laws.
- (7) The Pension Management Plan shall include the following:
 - (A) A Pension Management Plan (PMP) discussing the Contractor's plans for management and administration of all pension plans consistent with the terms of this contract. The PMP shall be updated and submitted to the Contracting Officer in draft annually no later than 45 days after the last day of the Plan year along with its draft actuarial valuation.
 - (B) Within thirty (30) days after the date of the submission, appropriate Contractor representatives shall meet with the Contracting Officer to discuss the Contractor's proposed draft annual update of the PMP to specifically discuss any anticipated changes in the projected pension contributions from the prior year's contributions and any discrepancies between the actual contributions made for the most recent year preceding that meeting and the projected contributions for that year which the Contractor had submitted to the Contracting Officer the prior year. The annual revision of the PMP shall include:
 - (i) The Contractor's best projection of the contributions which it will be legally obligated to make to the pension plan(s), beginning with the required contributions for the coming fiscal year, based on the latest actuarial valuation, and continuing for the following four years. This estimate will be based upon compliance with all applicable legal

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requirements relating to the determination of contributions and upon the assumptions set out in the plan document(s).

- (ii) If the actuarial valuation submitted pursuant to the annual PMP update indicates that the sponsor of the pension plan must impose pension plan benefit restrictions, the Contractor shall provide the following information:
 - (aa) The type of benefit restriction that will take place,
 - (bb) The number of Contractor employees that potentially could be impacted and the nature of the restriction (e.g., financial impact) by imposition of the required benefit restriction, and
 - (cc) The amount of money that would need to be contributed to the pension plan to avoid legally required benefit restrictions.
- (iii) A detailed discussion of how the Contractor intends to manage the pension plan(s) to maximize the contribution predictability (i.e. forecasting accuracy) and contain current and future costs, to include rationale for selection of all plan assumptions that determine the required contributions and which impact the level and predictability of required contributions. The Contractor is required to annually establish a long term (e.g. five year) plan that outlines the projected retirement plan costs, and any planned action steps to be taken to better manage predictability. The contractor must also share the following information with the Department during the meeting:
 - (aa) Strategy for achieving and maintaining fully-funded status of the plan(s)
 - (bb) Investment policy statement for the plan, with any recent updates
 - (cc) Results of recent asset liability studies (required to be performed every 3 years or after a significant event) including rationale for maintaining current asset allocation strategy.
 - (dd) Comparison of budget projections submitted to the Department to actual contributions
 - (ee) Any recent reports, findings, or recommendations provided by plan's investment consultant.
 - (ff) Actuarial experience studies to set the plan's actuarial assumptions (required to be performed every 3-5 years)
- (iv) An assessment to evaluate the effectiveness of the Contractor's pension plan(s) investment management/results. The assessment shall include at a minimum: a review and analysis of pension plan investment objectives; the strategies employed to achieve those objectives; the methods used to monitor execution of those strategies

and the achievement of the investment objectives; and a comparative analysis of the objectives and performance of other comparable pension plans. The Contractor shall also identify its plans, if any, for revising any aspect of its pension plan management based on the results of the review.

(h) Reimbursement of Contractors for Contributions to Defined Benefit Pension Plans

- (1) 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. Reimbursement above the annual minimum required contribution will require prior approval of the Contracting Officer. Reimbursement amounts will take into consideration all pre-funding balances and funding standard carryover balances.
- (2) Contractors that sponsor multi-employer DB pension plans will be reimbursed for pension contributions in the amounts necessary to ensure that the plans are funded to meet the annual minimum requirement under ERISA, as amended by the PPA. However, reimbursement for pension contributions above the annual minimum contribution required under ERISA, as amended by the PPA, will require prior approval of the Contracting Officer and will be considered on a case by case basis. Reimbursement amounts will take into consideration all pre-funding balances and funding standard carryover balances.

(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, as applicable, to the Contracting Officer for approval or disapproval and 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. 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.

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- (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 effect 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.

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(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 DOL 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."

H21. SPECIAL PROVISIONS APPLICABLE TO WORKFORCE TRANSITION AND EMPLOYEE COMPENSATION: PAY AND BENEFITS

- (c) Training. The Contractor will establish a training program specifically for the purpose of training individuals pursuant to Clauses H.19(a)(1)(iii), H.19(a)(2)(ii)(B) and (iii)(C), and H.19(a)(3)(i). The one-time training program will be provided to individual employees and will not exceed six months in duration and \$5,000 in cost (subject to availability of funding) per person, in addition to wages and benefits.
- (d) Benefit Plans. The Contractor shall provide pension and other benefit plans, to Grandfathered Employees and Non-Grandfathered Employees hired by the Contractor and service credit for leave as set forth below:
- (1) Grandfathered Employees. Grandfathered Employees shall be provided pension and other benefits in accordance with applicable law and the provisions of the BJC MEPP, the BJC Multiple Employer Welfare Arrangement (MEWA) and other existing benefit plans for Grandfathered Employees. Within 90 days after the award of this contract, the Contractor shall become a sponsor/participating employer of the BJC MEPP, the BJC MEWA, and other existing benefit plans (or comparable successor plans if continuation of the existing plans is not practicable) including post retirement benefit (PRB) plans, as applicable, for Grandfathered Employees and retired plan participants, with primary responsibility for management and administration of these plans. The Contractor shall also have responsibility for maintaining the qualified status of the plans. No employee who qualifies as a Grandfathered Employee under the BJC MEPP shall lose the right to participate in the BJC MEPP as a result of this transition.
 - (2) Non-Grandfathered Employees. Non-Grandfathered Employees shall receive a 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 this contract, any applicable collective bargaining agreement(s), and applicable law, including Section 4(c) of the Service Contract Act.
 - (3) Service Credit For Leave.
 - (i) For PRS Incumbent Employees, SS I Employees, and UDS Employees hired by the Contractor pursuant to Clause H.19 (a)(1)(i), (ii), and (iii), and (a)(2)(iii), the Contractor shall carry over the length of service credit for leave as well as leave balances accrued as of the date these employees are hired by the Contractor. Service credit for the represented workforce shall be

applied consistently with any applicable collective bargaining agreement(s) and applicable law.

- (ii) For USEC Employees hired by the Contractor, the Contractor shall carry over the length of service credit from USEC 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.
- (4) Service Credit for Fringe Benefits Other Than Leave. Consistent with the terms of the applicable benefit plan(s), the Contractor shall credit all PRS Incumbent Employees, SST Employees, and UDS Employees hired by the Contractor under this contract with their current length of service toward fringe benefits, which also includes retirement benefits and severance pay. Consistent with the terms of the plan(s), the transition of the employees during the first six months of the contract from the PRS Incumbent Contractor, SST, UDS, and USEC shall not constitute a break in service under the plan(s). Service credit for all individuals hired by the Contractor shall be determined and 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 H.20.(e)(3)(iv).
- (e) Administrative Agreements with Lead Sponsor. The lead sponsor (BJC) or a lead sponsor successor of the BJC MEPP, BJC MEWA and other benefit plans in which the Contractor and BJC or a lead sponsor successor are participating employers/sponsors, shall have primary responsibility for management and administration of these plans. BJC or a lead sponsor successor shall provide management and administrative services for the Contractor for the BJC MEPP, BJC MEWA, and other benefit plans in which the Contractor and BJC are participating employers/sponsors. The Contractor shall enter into administrative agreements with the lead sponsor, BJC, or a lead sponsor successor, for the management and administration of these plans. The agreements and costs contained therein shall be subject to the approval of the Contracting Officer.
 - (f) 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. 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

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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. The Contractor shall closely monitor each of its individual subcontractor employer segments participating in the BJC MEPP. With the approval of the Contracting Officer, the Contractor shall establish threshold factors that – based upon the experience of the BJC MEPP regarding the testing requirements – indicate when the Contractor and/or its individual subcontractor employer segments may not meet testing requirements within the next two plan years. Every six months the Contractor shall identify any employer plan segments for the Contractor and its individual subcontractor employer segments that may not meet testing requirements for the current plan year and the following plan year.
- (2) Failure to Meet Test Requirements. In the case of employer segments for which the approved threshold factors described in Paragraph (d)(1) above and other factors as approved or requested by the Contracting Officer indicate that the employer segments may not meet testing requirements, the Contractor, in conjunction with the lead sponsor, 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 segment's 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 segment's status for testing purposes.
- (g) Withdrawal from the BJC MEPP. In addition to the requirement in Clause H.20 (g)(7), the Contractor shall not withdraw from the BJC MEPP or the BJC MEWA without the consent of the Contracting Officer. If the Contractor withdraws without the consent of the Contracting Officer, all costs associated with such withdrawal may be determined to be unallowable and the Government retains the right to assert a claim against the Contractor for any costs of the Department associated with such withdrawal.
- (h) Changes to the BJC MEPP. In addition to any other provisions of this contract, including but not limited to Clauses H.20(g)(6) and (7), any changes or amendments to the BJC MEPP are subject to Contracting Officer prior approval and shall be in accordance with applicable laws, including compliance with any applicable collective bargaining agreement(s).

- (i) Equivalent Benefits to the BJC MEWA. Subject to the approval of the Contracting Officer and to the extent consistent with any applicable collective bargaining agreement(s) and applicable law, the Contractor may provide equivalent benefits to those benefits provided under the BJC MEWA to Grandfathered Employees.
- (j) Change in Name. The name(s) of the BJC MEPP, the BJC MEWA, and other benefit plans in which the Contractor and BJC are sponsors/participating employers may change as a result of a change in lead sponsorship of the above plans. Any references and requirements in this contract applicable to the BJC MEPP, the BJC MEWA, and other benefit plans contained in this contract apply to these plans as renamed.

H22. WORKFORCE TRANSITION AND BENEFITS TRANSITION: PLANS AND TIMEFRAMES

- (k) Workforce Transition Plan. In addition to the contract transition plan required by Section F.5, Contract Transition Plan, of this contract, the Contractor shall submit a written Workforce Transition Plan (WF Transition Plan) describing in detail the Contractor's plans and procedures as to how the Contractor will comply with the requirements in this paragraph (a), the hiring preferences set forth in Clause H.19, Workforce Transition and Employee Hiring Preferences, and Clause H.21(a). Notwithstanding timeframes identified elsewhere in this contract, the Contractor shall perform the following activities in the specified timeframes:
 - (1) Within ten days after contract award, the Contractor shall:
 - (i) Submit to the Contracting Officer a description of any and all transition agreements that it intends to enter into with the Paducah Contractors to ensure compliance with Clauses H.19(a)(1) and (3) during the first 90 days after contract award and during the six month Workforce Transition Period identified in Clause H.18(a);
 - (ii) Establish and submit to the Contracting Officer a written communication plan that details the communication that the Contractor and its subcontractors will engage in with the Paducah Contractors regarding implementation of the hiring preference requirements set forth in Clauses H.19(a)(1) and (3); and
 - (iii) Provide estimated costs and detailed breakouts of the costs to accomplish workforce transition activities within the timeframes specified.
 - (iv) Obtain information from the Paducah Contractors identifying their employees that have initially been identified as being at risk of

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being involuntarily separated. Provide and define a process as part of the transition agreements required in Paragraph (a)(1)(i) above for obtaining updated and continuous information throughout the Workforce Transition Period regarding the identification of employees by the Paducah Contractors that have been identified as being at risk of being involuntarily separated.

- (2) Within 15 days after contract award, the Contractor shall:
 - (i) 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 Clauses H.19(a)(1) and (3); and
 - (ii) Establish a written communication plan with the PRS Incumbent Employees, SST Employees, UDS Employees, and USEC Employees regarding the implementation of the hiring preferences in Clauses H.19(a)(1) and (3) and provide a copy to the Contracting Officer.
- (3) Within 30 days after contract award, the Contractor shall provide to the Contracting Officer copies of the final Workforce Transition Plan and the draft transition agreements it proposes to enter into consistent with requirements of Clauses H.19 (a)(1) and (3) and Paragraphs (a)(1) and (2) above.
- (4) Within 60 days after contract award, the Contractor shall provide to the Contracting Officer copies of the final transition agreements described in Paragraph (a)(1)(i) 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.19, Workforce Transition and Employee Hiring Preferences, in accordance with the timeframes set forth below. These reports shall include at a minimum the following information: employee hire dates or anticipated hire dates, employee salary levels, and the names of the former employers of the employees hired by the Contractor and/or hired by the Contractor's first and second tier subcontractors.
 - (i) During the 90 day contract transition period, such reports shall be provided to the Contracting Officer on a weekly basis.

- (ii) During the remainder of the six-month Workforce Transition Period, such reports shall be provided to the Contracting Officer on a biweekly basis.
 - (iii) After the Workforce Transition Period as defined in H.18(a), such reports shall be provided within the timeframes as requested by the Contracting Officer.
 - (6) Within six months after contract award, the Contractor shall provide a written description of the process that it will utilize in obtaining information from USEC, SST, and UDS regarding their respective employees that have been identified by their employer as being at risk of being involuntarily separated in order for the Contractor to ensure compliance with Clauses H.19(a)(2) and (a)(3)(i). The Contractor shall provide copies of all and any written agreements into which it has entered with USEC, SST (Clause H.19(a)(2)(iii)) and UDS (Clause H.19(a)(2)(iii)) for transitioning their respective employees pursuant to Clauses H.19(a)(2) and (a)(3)(i).
- (l) Benefits Transition. The Contractor shall submit a written draft Benefits Transition Plan within 20 days after contract award describing in detail the Contractor's plans and procedures as to how the Contractor will comply with Clause H.20, Employee Compensation: Pay and Benefits, Clause H.21, Special Provisions Applicable to Workforce Transition and Employee Compensation: Pay and Benefits, and this Paragraph (b). The Contractor shall provide a final written Benefits Transition Plan to the Contracting Officer within 30 days after contract award. All transitions of the BJC MEPP, the BJC MEWA and other existing benefit plans, as well as establishment of any new plans, shall be completed within 90 days after contract award.
- (1) The Contractor shall perform the following activities within the specified timeframes:
 - (i) Within ten days after contract award, the Contractor shall:
 - (A) Provide the Contracting Officer with a list of Contractor personnel who will be responsible for transition of the BJC MEPP, the BJC MEWA, and other existing benefit plans and/or development of new benefit plans, including specifically the personnel responsible for ensuring that the Contractor becomes a sponsor/participating employer of the BJC MEPP and the BJC MEWA by the Contractor and contact information for the above personnel;
 - (B) Request the Paducah Contractors and BJC to provide information and documents necessary for the Contractor to

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adhere to the requirements set forth in this contract pertaining to the Contractor becoming a sponsor/participating employer of the BJC MEPP, the BJC MEWA, and other existing benefits plans or establishment of any new benefits plans, including but not limited to the transition of the existing pension and other benefit plans or establishment of any new benefits plans on or before the end of the 90-day contract transition period; and

- (C) 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.
- (ii) Within 15 days after contract award, the Contractor shall provide to the Contracting Officer a list of the information and documents that the Contractor has requested from BJC and the Paducah Contractors pertaining to the transition of the BJC MEPP, the BJC MEWA, and other 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 BJC or any of the Paducah Contractors. 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 Clause H.19, Workforce Transition and Employee Hiring Preferences, Clause H.20, Employee Compensation: Pay and Benefits, and Clause H.21, Special Provisions Applicable to Workforce Transition and Employee Compensation: Pay and Benefits.
- (iii) Within 20 days of contract award, the Contractor shall:
 - (A) 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 Clauses H.20 (e) and H.21(b), including requirements pertaining to the transition of employee benefit plans; and
 - (B) Meet via televideo, teleconference, and/or in person with relevant personnel who administer the benefit plans for the PRS Incumbent Contractor and BJC. 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

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necessary by the Contractor. During such meeting, the Contractor shall discuss all matters necessary to ensure the Contractor adheres to its sponsorship obligations under Clauses H.20(e)(2) and H.21, Special Provisions Applicable to Workforce Transition and Employee Compensation: Pay and Benefits, including execution of transition agreements with BJC and the Paducah Contractors, as applicable. 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.

- (iv) Within 30 days after contract award and as part of the written Benefits Transition Plan, the Contractor shall provide a written description of how the existing pension and other benefit plans provided to employees pursuant to Clause H.20, Employee Compensation: Pay and Benefits, and Clause H.21, Special Provisions Applicable to Workforce Transition and Employee Compensation: Pay and Benefits, will be amended or restated on or before the last day of the 90 day contract transition period. If an asset transfer(s) and/or the creation of a new benefit plan(s) are necessary in order for the Contractor to adhere to the benefits sponsorship requirements set forth in this contract, the Contractor shall provide a description of the necessary transactions, including but not limited to how the Contractor proposes to comply with this contract and applicable law governing such transactions.
- (v) Within 45 days after contract award, the Contractor shall:
 - (A) Submit to the Contracting Officer a draft Contractor Employee Compensation Plan demonstrating how the Contractor will comply with the requirements of this contract regarding employee compensation. The draft 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.
 - (B) Submit to the Contracting Officer drafts of all amendments to or restatements of the pension and other benefit plans presently sponsored by BJC and the PRS Incumbent Contractor, including but not limited to amendments effectuating the Contractor becoming a sponsor/participating employer in the BJC MEPP. If applicable, the Contractor shall also submit all draft restated benefit plans and draft

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Summary Plan Descriptions (SPDs) for pension and other benefit plans sponsored by BJC or lead sponsor successor and/or the PRS Incumbent Contractor. Any and all such amendments shall comply with applicable law governing such transactions and changes in sponsorship of the plans.

- (C) Submit to the Contracting Officer drafts of any new benefit plan(s) as well as draft SPDs that the Contractor proposes to sponsor.
 - (D) Provide draft copies of the transition agreements which the Contractor will enter into with BJC or lead sponsor successor and the Paducah Contractors to ensure the Contractor's compliance with the pay and benefits requirements set forth in Clauses H.20, Employee Compensation: Pay and Benefits, and H.21 Special Provisions Applicable to Workforce Transition and Employee Compensation: Pay and Benefits. Copies of these executed final transition agreements shall be provided within one day after execution but no later than the last day of the contract transition period.
- (vi) No later than 60 days after contract award and prior to the adoption of the documents identified in Paragraphs (b)(1)(v)(B) and (C) above, the Contractor shall submit to the Contracting Officer the proposed final versions of these documents for approval.
 - (vii) 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.
- (2) After the six month Workforce 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:
- (i) 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
 - (ii) Any and all other documents pertaining to implementation of and compliance with implementation of the compensation and benefit programs identified in Clause H.20, Employee Compensation: Pay

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and Benefits, and Clause H.21, Special Provisions Applicable to Workforce Transition and Employee Compensation: Pay and Benefits.

H.23 POST CONTRACT RESPONSIBILITIES FOR PENSION AND OTHER BENEFIT PLANS

- (a) If this contract expires or terminates and DOE has awarded a contract under which the new contractor becomes a sponsor/participating employee and assumes responsibility for management and administration of the BJC MEPP, the BJC MEWA, or any other benefit plans (collectively, the "Plans"), covering active or retired Grandfathered Employees with respect to employees at the Paducah and Paducah Gaseous Diffusion Plant sites and Non-Grandfathered Employees at the Paducah Gaseous Diffusion Plant site, 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 facility 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 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.
- (c) In the event a transfer of assets in the BJC MEPP is determined to be necessary, the Contractor shall cooperate fully in the transfer of any assets in a manner consistent with any fiduciary duty, applicable law and subject to the approval and direction of the Contracting Officer.

H24. LABOR RELATIONS

- (m) The Contractor shall respect the right of employees to organize and to form, join, or assist labor organizations, to bargain collectively through their chosen labor representatives, to 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.
- (n) The Contractor shall meet with the Contracting Officer or designee(s) for the purpose of reviewing the Contractor's bargaining objectives prior to negotiations of any collective bargaining agreement or revision thereto and shall consult with and obtain the approval of the Contracting Officer regarding appropriate economic bargaining parameters, including those for pension and medical benefit costs, prior to the Contractor entering into the collective bargaining process. During the collective bargaining process, the Contractor shall notify the Contracting Officer before submitting or agreeing to any collective bargaining proposal which can be calculated to affect allowable costs under this contract or which could involve other items of special interest to the Government. During the collective bargaining process, the Contractor shall obtain the approval of the Contracting Officer before proposing or agreeing to changes in any pension or other benefit plans.

- (1) 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 and DEAR Subpart 970.2201 and all applicable Federal and state labor relations laws.
 - (2) The Contractor will notify the Contracting Officer or designee in a timely fashion of all labor relations issues and matters of local interest including organizing initiatives, unfair labor practice, work stoppages, picketing, labor arbitrations, and settlement agreements and will furnish such additional information as may be required from time to time by the Contracting Officer.
- (o) Consistent with applicable labor laws and regulations for that work that is being performed by members of United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers Union (USW) on the effective date of this contract, the Contractor agrees to initially consult with USW regarding the initial terms and conditions of employment and to recognize USW as the collective-bargaining representative for employees performing work that has historically and traditionally been performed by USW members and is covered in the scope of this contract, and to bargain in good faith to a collective bargaining agreement that gives due consideration to applicable terms and conditions of the existing PRS, SST, UDS, and USEC collective bargaining agreements for work at the Paducah Gaseous Diffusion Plant site.

H25. WORKFORCE RESTRUCTURING

Notwithstanding any other provision in this contract, when the Contractor determines that a reduction of force is necessary, the Contractor shall notify the Contracting Officer in writing in accordance with DOE O 350.1 and other related guidance. The Contractor shall provide information as directed by the Contracting Officer related to workforce restructuring activities and to enable compliance with Section 3161 of the *National Defense Authorization Act for Fiscal Year 1993* and any other DOE guidance pertaining to employees who may be eligible for provisions of the Act. The Contractor shall supply workforce restructuring related information and reports as needed by DOE. The Contractor shall extend displaced employee hiring preference in accordance with the Section I Clause entitled, *DEAR 952.226-74, Displaced Employee Hiring Preference* and Clause H.19, *Workforce Transition and Employee Hiring Preferences*.

H26. STOP-WORK AND SHUTDOWN AUTHORIZATION

- (p) 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

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- 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.
- (q) Stop-Work. 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 from the Contracting Officer.
- (r) 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 by independent oversight organizations, 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 Portsmouth/Paducah Project Office (PPPO) Manager. Any written direction to suspend operations shall be issued by the Contracting Officer, pursuant to the Section F Clause entitled, "FAR 52.242-15, Stop Work Order."
- (s) 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

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- (3) Could result in the release of radiological or chemical hazards to the environment in excess of regulatory limits.
- (t) 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.

H27. COOPERATION WITH OTHER SITE CONTRACTORS

- (a) The DOE has/or will have prime contracts or agreements in place with the following entities: Depleted Uranium Hexafluoride Contractor, Infrastructure Services Contractor, United States Enrichment Cooperation (USEC), and other entities that provide support to the DOE Portsmouth/Paducah Project Office.
- (b) In the event that DOE awards other contracts or establishes agreements with additional entities whose work affects the contract, all terms and conditions of this provision apply to the Contractor's relationship with such entities.
- (c) The Contractor is not authorized to direct any other DOE prime contractor or other entities, except as specified elsewhere in this contract or directed by the CO in writing.
- (d) The Contractor shall not commit or permit any act, which will interfere with the performance of work by any other DOE Contractor or by Government employees. If DOE determines that the Contractor's activities may interfere with another DOE Contractor, the CO shall provide instructions.

H28. UNALLOWABLE COSTS

The following types of costs are examples of costs specific to this contract that may be determined to be unallowable in accordance with FAR subpart 31.2. The examples are not all inclusive.

- (a) Unreasonable costs resulting from Contractor re-work (e.g., cost associated with disposal and retrieval of unacceptable material in any landfill).
- (b) Costs associated with correcting poor quality document preparation, including costs associated with delays.

H29. STRENGTHENING FEDERAL ENVIRONMENTAL, ENERGY, AND TRANSPORTATION MANAGEMENT

The Contractor shall assist DOE through direct participation and other support in achieving DOE's energy efficiency goals and objectives in electricity, water, and

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thermal consumption, conservation, and savings, including goals and objectives contained in Executive Order 13423, Strengthening Federal Environmental, Energy, and Transportation Management. The Contractor shall maintain and update, as appropriate, its documents to include detailed plans and milestones for achieving site-specific energy efficiency goals and objectives. With respect to this paragraph, the plan shall consider all potential sources of funds, in the following order: 1) the maximum use of private sector, third party financing applied on a life-cycle cost effective basis, particularly from Energy Savings Performance Contracts and Utility Energy Services Contracts awarded by DOE; and 2) only after third-party financing options are evaluated, in the event that energy efficiency and water conservation improvements cannot be effectively incorporated into a private sector financing arrangement that is in the best interests of the Government, then DOE funding and funding from overhead accounts can be utilized.

The Contractor shall provide information to the Infrastructure Contractor as necessary to support DOE O 430.2B projects and initiatives.

H30. ADDITION AND ALTERATIONS TO IMPLEMENT EXECUTIVE ORDER 13423, STRENGTHENING FEDERAL ENVIRONMENTAL, ENERGY, AND TRANSPORTATION MANAGEMENT AND ITS IMPLEMENTING INSTRUCTIONS

This contract involves contractor operation of Government-owned facilities and/or vehicles and 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 vehicles. Information on the requirements of the Executive Order and its Implementing Instructions may be found at http://ofee.gov/eo/eo13423_main.asp. This requirement includes the Electronics Stewardship requirements of Implementing Instruction XII. When acquiring desktop or laptop computers and computer monitors, the Contractor shall acquire Electronic Product Environmental Assessment Tool registered products conforming to IEEE 1680-2006 Standard and ranked at least bronze, provided such products are life cycle cost efficient and meet applicable performance requirements. Information on EPEAT-registered computer products is available to www.epeat.net.

H31. PAPERLESS DIRECTIVE PROCESSING SYSTEM

- (u) The Contractor, in addition to complying with applicable laws, rules, and other regulations, shall comply with those DOE Orders and other Directives applicable to Contractors, with the applicable departmental policies, plans, programs, and management Directives, and with all changes to assigned work as agreed to by the Contractor and the CO or designee.
- (v) DOE has developed a list of applicable DOE Directives, and is appended to the contract as Section J, Attachment J2. The Contractor shall comply with the Directives identified in such list. The Contractor shall make no claim, including a claim for equitable adjustment under the Changes clauses of this

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contract, for additional costs, fee or extension of time of performance relating to compliance with the Directives in such list.

- (w) The Baseline List of Directives Applicable to the contract will be revised and issued, by the DOE CO, as a contract modification, as necessary. The CO may direct the Contractor to comply with additional DOE Directives and local Directives and revisions thereto, as follows:
 - (1) Pursuant to and in accordance with the Changes clause of the contract with respect to changes in Directives within the general scope of this contract.
 - (2) Pursuant to any Environment, Safety, and Health provisions of this contract, and in accordance with the Changes clause of this contract with respect to changes in Directives involving safety, environment, health, and quality.

- (d) At least once a month, the Contractor will extract Directives from the DOE Paperless Directive System utilizing the Internet as notification of their availability by DOE electronic prompting. Copies of DOE Directives may be obtained without charge from the CO or by citing the number of this contract in a written request sent to the following address:

U.S. DOE
Distribution Section
Forrestal Building
Washington, DC 20585

- (e) The CO and his/her representative(s) expressly authorized in writing to do so are the only Government officials authorized to provide explanations as to the applicability of Directives. The CO is the only Government Official authorized to resolve possible conflicting requirements involving Directives.

- (f) Upon receipt of a new or revised Directive, the Contractor shall review it for consistency with the other terms of this contract and for impacts on funding, manpower and other provisions of the contract. If the Contractor considers the Directive to be consistent with the other terms of this contract and it can be implemented within existing funds, manpower, and other provisions of the contract and the implementation will not have a negative impact on the cost, schedule, or other obligations of the Contractor, the Contractor shall establish an implementation schedule, and so advise the CO within 30 calendar days of receipt. In the event the Contractor considers the Directive to be inconsistent with the other terms of this contract or the requirements of the Directive cannot be implemented within existing funding, manpower, and other provisions of the contract, the Contractor shall so advise the CO within 30 calendar days of receipt. Such notice shall include the basis for the claimed

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inconsistency and the projected cost of implementation in excess of current funding, manpower, and other provisions of the contract. After evaluation of the Contractor's position, the CO shall issue direction to the Contractor, pursuant to the clause entitled Changes concerning appropriate implementation of the Directive.

- (g) The Contractor will, at least quarterly, notify DOE of those Directives extracted from the DOE Paperless Directive System. The Contractor cognizant personnel will review these Directives and recommend for concurrence disposition of the Directives to DOE-PPPO.
- (h) Upon agreement between the Contractor and DOE, the Directive will be implemented as outlined in a Contractor Management Summary or Implementation Plan, whichever is appropriate, and the Directive added to the Baseline List of Directives Applicable to the Contractor and issued by the CO. The same process will be utilized for deletion of Directives.
- (i) The Contractor shall incorporate the substance of this clause with respect to applicable Directives, excluding any reference to the Changes clause, in subcontracts for performance of work at the site and as directed by the CO.

H32. POST CONTRACT RESPONSIBILITIES FOR PENSION AND OTHER BENEFIT PLANS

- (a) If this contract expires, terminates, and/or is terminated partially or completely and DOE has awarded a contract under which a new contractor becomes a primary sponsor and assumes responsibility for management and administration of the pension or any other benefit plans (collectively, the "Plans"), with respect to employees at the Paducah Gaseous Diffusion Plant site, the Contractor shall cooperate with and transfer to the new contractor responsibility for sponsorship, and/or management and administration of such pension plan (MEPP) and/or other benefit plans consistent with direction from the Contracting Officer.
- (b) If this contract expires, terminates and/or is terminated partially or completely and DOE has not awarded a contract to a new contractor under which a new contractor becomes a sponsor and/or primary sponsor and/or assumes partial or primary 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 primary sponsor or participating sponsor/employer 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 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.
- (c) In the event a transfer of assets from the BJC MEPP is determined to be necessary by the DOE, the Contractor shall cooperate fully in the transfer of any assets in a manner consistent with any fiduciary duty and the IRC and ERISA and the direction of the Contracting Officer.

H33. LEGAL MANAGEMENT PLAN

- (a) The Contractor shall comply with all requirements of 10 CFR 719. As part of that compliance, the Contractor shall submit a Legal Management Plan in accordance with 10 CFR 719, and include the item set forth in 10 CFR 719.10 to the Contracting Officer for approval within sixty (60) days of contract award.
- (b) The Plan shall describe the Contractor's practices for managing legal costs and matters for which it procures the services of retained legal counsel. In doing so, the plan shall describe the matters in-house counsel will perform as well as anticipates performing throughout the life of the contract. The Contractor should not retain outside counsel for matters that can be performed by in-house counsel. Once approved by the Contracting Officer, the Plan, as well as applicable regulations and contract provisions, forms the basis for approvals by the Contracting Officer to reimburse litigation and other legal expenses performed by retained legal counsel. The Plan may be revised from time to time to conform to legal management rules or policies established or adopted by the Department of Energy.

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H34. RESPONSIBLE CORPORATE OFFICIAL

The Contractor shall provide a Guarantee of performance from its parent company in the form set forth in the Section J Attachment entitled, *Performance Guarantee Agreement*. If the Contractor is a joint venture, newly-formed Limited Liability Company (LLC), or other similar entity where more than one company is involved in a business relationship created for the purpose of this procurement, the parent companies of all the entities forming the new entity shall each provide Guarantees for joint and severable liability for the performance of the Contractor. In the event any of the signatories to the Guarantee of performance enters into proceedings relating to bankruptcy, whether voluntary or involuntary, the Contractor agrees to furnish written notification of the bankruptcy to the Contracting Officer. Notwithstanding the provisions of this Clause, the Government may contact, as necessary, the single responsible corporate official identified below, who is at a level above the Contractor and who is accountable for the Contractor regarding Contractor performance issues:

Name: Robert J. Kingsbury
Position: President, Member
Company/Organization: Los Alamos Technical Associates, Inc.
Address: 2424 Louisiana Blvd NE, Suite 400, Albuquerque, NM 87110
Phone: (505) 884-3800
Facsimile: (505) 880-3560
Email: rkingsbury@lata.com

Should the responsible corporate official change during the period of the contract, the Contractor shall promptly notify the Contracting Officer in writing of the change.

H35. SPECIAL PROVISIONS RELATING TO WORK FUNDED UNDER AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009 (APR 2009)

Preamble:

Work performed under this contract will be funded, in whole or in part, with funds appropriated by the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, (Recovery Act or Act). The Recovery Act's purposes are to stimulate the economy and to create and retain jobs. The Act gives preference to activities that can be started and completed expeditiously, including a goal of using at least 50 percent of the funds made available by it for activities that can be initiated not later than June 17, 2009.

Contractors should begin planning activities for their first tier subcontractors, including obtaining a DUNS number (or updating the existing DUNS record), and registering with the Central Contractor Registration (CCR).

Be advised that Recovery Act funds can be used in conjunction with other funding as necessary to complete projects, but tracking and reporting must be separate to meet the reporting requirements of the Recovery Act and related Guidance. For projects funded by sources other than the Recovery Act, Contractors should plan to keep separate records for Recovery Act funds and to ensure those records comply with the requirements of the Act.

The Government has not fully developed the implementing instructions of the Recovery Act, particularly concerning the how and where for the new reporting requirements. The Contractor will be provided these details as they become available. The Contractor must comply with all requirements of the Act. If the contractor believes there is any inconsistency between ARRA requirements and current contract requirements, the issues will be referred to the Contracting Officer for reconciliation.

Be advised that special provisions may apply to projects funded by the Act relating to:

- Reporting, tracking and segregation of incurred costs;
- Reporting on job creation and preservation;
- Publication of information on the Internet;
- Protecting whistleblowers; and
- Requiring prompt referral of evidence of a false claim to the Inspector General.

Definitions:

For purposes of this clause, "Covered Funds" means funds expended or obligated from appropriations under the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5. Covered Funds will have special accounting codes and will be identified as Recovery Act funds in the contract and/or modification using Recovery Act funds. Covered Funds must be reimbursed by September 30, 2015.

Non-Federal employer means any employer with respect to Covered Funds – the contractor or subcontractor, as the case may be, if the contractor or subcontractor is an employer; and any professional membership organization, certification of other professional body, any agent or licensee of the Federal government, or any person acting directly or indirectly in the interest of an employer receiving Covered Funds; or with respect to Covered Funds received by a State or local government, the State or local government receiving the funds and any contractor or subcontractor receiving the funds and any contractor or subcontractor of the State or local

government; and does not mean any department, agency, or other entity of the federal government.

A. Flow Down Provision

This clause must be included in every first-tier subcontract.

B. Segregation and Payment of Costs

Contractor must segregate the obligations and expenditures related to funding under the Recovery Act. Financial and accounting systems should be revised as necessary to segregate, track and maintain these funds apart and separate from other revenue streams. No part of the funds from the Recovery Act shall be commingled with any other funds or used for a purpose other than that of making payments for costs allowable for Recovery Act projects. Where Recovery Act funds are authorized to be used in conjunction with other funding to complete projects, tracking and reporting must be separate from the original funding source to meet the reporting requirements of the Recovery Act and OMB Guidance.

Invoices must clearly indicate the portion of the requested payment that is for work funded by the Recovery Act.

For contractors currently using drawdown on a letter of credit, the current procedure remains in effect and is used for ARRA activity in lieu of invoicing.

C. Prohibition on Use of Funds

None of the funds provided under this agreement derived from the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, may be for any casino or other gambling establishment, aquarium, zoo, golf course, or swimming pool.

D. Wage Rates

All laborers and mechanics employed by contractors and subcontractors on projects funded directly by or assisted in whole or in part by and through the Federal Government pursuant to the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, shall be paid wages at rates not less than those prevailing on projects of a character similar in the locality as determined by the Secretary of Labor in accordance with subchapter IV of chapter 31 of title 40, United States Code. With respect to the labor standards specified in this section, the Secretary of Labor shall have the authority and functions set forth in Reorganization Plan numbered 14 of 1950 (64 Stat.1267, 5 U.S.C. App.) and section 3145 of title 40 United States Code. See <http://www.dol.gov/esa/whd/contracts/dbra.htm> .

E. Publication

Information about this contract will be published on the Internet and linked to the website www.recovery.gov, maintained by the Accountability and Transparency Board (the Board). The Board may exclude posting contractual or other information on the website on a case-by-case basis when necessary to protect national security or to protect information that is not subject to disclosure under sections 552 and 552a of title 5, United States Code.

F. Registration requirements

Contractor shall ensure that all first-tier subcontractors have a DUNS number and are registered in the Central Contractor Registration (CCR) no later than the date the first report is due under FAR 52.201-11 American Recovery and Reinvestment Act – Reporting Requirements.

G. Utilization of Small Business

Contractor shall to the maximum extent practicable give a preference to small business in the award of subcontracts for projects funded by Recovery Act dollars.

H.36 Green Purchasing Under DOE Service Contracts (Mod 002)

Pursuant to Executive Order 13423, Strengthening Federal Environmental, Energy and Transportation Management, the Department of Energy is committed to managing its facilities in a manner that will promote the natural environment and protect the health and well being of 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 employees, contract service providers and visitors using the facility. Green purchasing or environmentally preferable contracting includes the initiatives described below:

- Alternative Fuels and Vehicles are described at <http://www.afdc.energy.gov/afdc/>
- Biobased Products are described at <http://www.biopreferred.gov/>
- Energy efficient products are described at <http://energystar.gov/products> for Energy Star products and at <http://www.eere.energy.gov/femp/procurement> for FEMP designated products
- Environmentally Preferable Computers are described at <http://www.epeat.net>
- Non-Ozone Depleting Products are described at <http://www.epa.gov/Ozone/snap/index.html>
- Recycled Products are described at <http://epa.gov/cpg>
- Water efficient products are described at <http://epa.gov/watersense/>

To the extent that the services provided by the Contractor require the provision of any of the

above types of products, the environmentally preferable type of product is to be furnished 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 require the use of products that have biobased content, are energy efficient, or have recycled content.

H.37 Green Purchasing under Contracts for Personal Computers (Desktops, Laptops and Monitors) (Mod 002)

Pursuant to Executive Order 13423, Strengthening Federal Environmental, Energy and Transportation Management, the Department of Energy 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. Any personal computer equipment (i.e., desktops, laptops, or monitors) delivered hereunder shall be energy efficient such that it compliant with EnergyStar or FEMP standards as set forth at 48 CFR 52.223-15. Likewise, when supplying personal computer equipment hereunder, the contractor shall ensure that the equipment is rated at least silver pursuant to IEEE 1680 Standard for the Environmental Assessment of Personal Computer Products as set forth at 48 CFR 52.223-16 Alternate 1.

H38 PARTNERING

- (a) 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.
- (a) Participation in the partnership will be totally voluntary by the parties. Any cost associated with effectuating this partnership will be agreed to by both parties during Contract performance. The U.S. Army Corps of Engineers has championed partnering and their guidelines will be utilized in organizing partnering meetings and establishing a partnering agreement.

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H. 39. REPORT AND APPROVAL REQUIREMENTS FOR CONFERENCE RELATED ACTIVITIES

The contractor is required to report and obtain approval from the contracting officer before incurring any costs associated with conference related activities. Conference expenses are defined as follows: Conference expenses are defined as all direct and indirect conference costs paid by the Government, whether paid directly by agencies or reimbursed by agencies to contractors, travelers or others associated with the conference, but do not include funds paid under Federal grants to grantees. Conference expenses include any associated authorized travel and per diem expenses, rental of rooms for official business, audiovisual use, light refreshments, registration fees, ground transportation, and other expenses as defined by the Federal Travel Regulations (FTR). All outlays for conference preparation and planning should be included, but employee time for conference preparation should not be included. The FTR provides some examples of direct and indirect conference costs included within conference expenses. See 41 CFR 301- 74.2. Conference expenses should be net of any fees or revenue received by the agency or contractor through the conference.

40. WORKERS' COMPENSATION INSURANCE

- (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. 41: RISK MANAGEMENT AND INSURANCE PROGRAMS

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.

I. 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 950.5070, 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; and FAR 31.205-19, DEAR 931.205-19, and DEAR 970.3 I 02-05- I 9, Insurance and Indemnification.

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 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

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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.

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- (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 \$1 00,000 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.

End of Clause

SECTION H.42 ACCESS CONTROLS FOR VISITING MINORS

Access of minors to PPPO areas and facilities controlled for radiologic purposes is not permitted for minors under the age of 18 under any circumstance. Visiting minors may only be permitted into Controlled Access Areas when approved by the PPPO Health Physicist, the appropriate Site Lead and the PPPO Deputy Manager and Manager, or Designee. Such approval shall be documented in writing. Visiting minors must be accompanied by, and under the supervision of, a parent, legal guardian or chaperone. In addition, a Parental Consent for Minors Visiting PPPO must be completed for each visiting minor. This policy is not applicable to workers, who are under the age of 18, including the U.S. Department of Energy (DOE) contractors and their subcontractors and persons working under DOE grants.

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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 this address: <http://www.arnet.gov/far>

I.2 FAR 52.202-1 DEFINITIONS (JUL 2004)**I.3 FAR 52.203-3 GRATUITIES (APR 1984)****I.4 FAR 52.203-5 COVENANT AGAINST CONTINGENT FEES (APR 1984)****I.5 FAR 52.203-6 RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT (SEP 2006)****I.6 FAR 52.203-7 ANTI-KICKBACK PROCEDURES (JUL 1995)****I.7 FAR 52.203-8 CANCELLATION, RECISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997)****I.8 FAR 52.203-10 PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997)****I.9 FAR 52.203-12 LIMITATIONS ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (SEP 2007)****I.10 FAR 52.203-13 CONTRACTOR CODE OF BUSINESS ETHICS AND CONDUCT (DEC 2008)****I.11 FAR 52.203-14 Display of Hotline Posters****I.12 FAR 52.204-4 PRINTED OR COPIED DOUBLE-SIDED ON RECYCLED PAPER (AUG 2000)****I.13 FAR 52.204-7 CENTRAL CONTRACTOR REGISTRATION (APR 2008)**

I.14 FAR 52.204-9 PERSONAL IDENTIFY VERIFICATION OF CONTRACTOR PERSONNEL (JAN 2011)

(a) The Contractor shall comply with agency personal identity verification procedures identified in the contract that implement Homeland Security Presidential Directive-12 (HSPD-12), Office of Management and Budget (OMB) guidance M-05-24 and Federal Information Processing Standards Publication (FIPS PUB) Number 201.

(b) The Contractor shall account for all forms of Government-provided identification issued to the Contractor employees in connection with performance under this contract. The Contractor shall return such identification to the issuing agency at the earliest of any of the following, unless otherwise determined by the Government:

- (1) When no longer needed for contract performance.
- (2) Upon completion of the Contractor employee's employment.
- (3) Upon contract completion or termination.

(c) The Contracting Officer may delay final payment under a contract if the Contractor fails to comply with these requirements.

(d) The Contractor shall insert the substance of this clause, including this paragraph (d), in all subcontracts when the subcontractor's employees are required to have routine physical access to a Federally-controlled facility and/or routine access to a Federally-controlled information system. It shall be the responsibility of the prime Contractor to return such identification to the issuing agency in accordance with the terms set forth in paragraph (b) of this section, unless otherwise approved in writing by the Contracting Officer.

I.15 FAR 52.209-6 PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED OR PROPOSED FOR DEBARMENT (SEP 2006)**I.16 FAR 52.215-2 AUDIT AND RECORDS – NEGOTIATION (MAR 2009) – ALTERNATE I (MAR 2009)****I.17 FAR 52.215-8 ORDER OF PRECEDENCE – UNIFORM CONTRACT FORMAT (OCT 1997)**

- I.18 FAR 52.215-10 PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA (OCT 1997)**
- I.19 FAR 52.215-12 SUBCONTRACTOR COST OR PRICING DATA (OCT 1997)**
- I.20 FAR 52.215-15 PENSION ADJUSTMENTS AND ASSET REVERSIONS (OCT 2004)**
- I.21 FAR 52.215-17 WAIVER OF FACILITIES CAPITAL COST OF MONEY (OCT 1997)**
- I.22 FAR 52.215-18 REVERSION OR ADJUSTMENT OF PLANS FOR POSTRETIREMENT BENEFITS (PRB) OTHER THAN PENSIONS (JUL 2005)**
- I.23 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.24 FAR 52.215-21 REQUIREMENTS FOR COST OR PRICING DATA OR INFORMATION OTHER THAN COST OR PRICING DATA – MODIFICATIONS (OCT 1997) AND ALTERNATE III (OCT 1997)

I.25 FAR 52.216-7 ALLOWABLE COST AND PAYMENT (DEC 2002)

- (a) Paragraph (a), the phrase is hereby added: “as supplemented by Subpart 931.2 of the Department of Energy Acquisition Regulations (DEAR),” after the acronym “(FAR)”.

I.26 FAR 52.219-6 NOTICE OF TOTAL SMALL BUSINESS SET-ASIDE (JUN 2003)

I.27 FAR 52.219-8 UTILIZATION OF SMALL BUSINESS CONCERNS (MAY 2004)

I.28 FAR 52.219-14 LIMITATIONS ON SUBCONTRACTING (DEC 1996)

I.29 FAR 52.219-28 POST-AWARD SMALL BUSINESS PROGRAM REREPRESENTATION (APR 2009)

I.30 FAR 52.222-1 NOTICE TO THE GOVERNMENT OF LABOR DISPUTES (FEB 1997)

I.31 FAR 52.222-2 PAYMENT FOR OVERTIME PREMIUMS (JUL 1990)

I.32 FAR 52.222-3 CONVICT LABOR (JUN 2003)

I.33 FAR 52.222-4 CONTRACT WORK HOURS AND SAFETY STANDARDS ACT – OVERTIME COMPENSATION (JUL 2005)

- I.34 FAR 52.222-6 DAVIS-BACON ACT (JUL 2005)
- I.35 FAR 52.222-7 WITHHOLDING OF FUNDS (FEB 1988)
- I.36 FAR 52.222-8 PAYROLLS AND BASIC RECORDS (FEB 1988)
- I.37 FAR 52.222-9 APPRENTICES AND TRAINEES (JUL 2005)
- I.38 FAR 52.222-10 COMPLIANCE WITH COPELAND ACT REQUIREMENTS (FEB 1988)
- I.39 FAR 52.222-11 SUBCONTRACTS (LABOR STANDARDS) (JUL 2005)
- I.40 FAR 52.222-12 CONTRACT TERMINATION – DEBARMENT (FEB 1988)
- I.41 FAR 52.222-13 COMPLIANCE WITH DAVIS-BACON AND RELATED ACT REGULATIONS (FEB 1988)
- I.42 FAR 52.222-14 DISPUTES CONCERNING LABOR STANDARDS (FEB 1988)
- I.43 FAR 52.222-15 CERTIFICATION OF ELIGIBILITY (FEB 1988)
- I.44 FAR 52.222-21 PROHIBITION OF SEGREGATED FACILITIES (FEB 1999)
- I.45 FAR 52.222-26 EQUAL OPPORTUNITY (MAR 2007)
- I.46 FAR 52.222-30 DAVIS-BACON ACT – PRICE ADJUSTMENT (NONE OR SEPARATELY SPECIFIED METHOD) (DEC 2001)
- I.47 FAR 52.222-35 EQUAL OPPORTUNITY FOR SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS (SEP 2006)
- I.48 FAR 52.222-36 AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES (JUN 1998)
- I.49 FAR 52.222-37 EMPLOYMENT REPORTS ON SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS (SEP 2006)

I.50 FAR 52.222-39 NOTIFICATION OF EMPLOYEE RIGHTS CONCERNING PAYMENT OF UNION DUES OR FEES (DEC 2004)

- (a) Definition. As used in this clause— “United States” means the 50 States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, the U.S. Virgin Islands, and Wake Island.
- (b) Except as provided in paragraph (e) of this clause, during the term of this contract, the Contractor shall post a notice, in the form of a poster, informing employees of their rights concerning union membership and payment of union dues and fees, in conspicuous places in and about all its plants and offices, including all places where notices to employees are customarily posted. The notice shall include the following information (except that the information pertaining to National Labor Relations Board shall not be included in notices posted in the plants or offices of carriers subject to the Railway Labor Act, as amended (45 U.S.C. 151-188)).

Notice to Employees

Under Federal law, employees cannot be required to join a union or maintain membership in a union in order to retain their jobs. Under certain conditions, the law permits a union and an employer to enter into a union-security agreement requiring employees to pay uniform periodic dues and initiation fees. However, employees who are not union members can object to the use of their payments for certain purposes and can only be required to pay their share of union costs relating to collective bargaining, contract administration, and grievance adjustment.

If you do not want to pay that portion of dues or fees used to support activities not related to collective bargaining, contract administration, or grievance adjustment, you are entitled to an appropriate reduction in your payment. If you believe that you have been required to pay dues or fees used in part to support activities not related to collective bargaining, contract administration, or grievance adjustment, you may be entitled to a refund and to an appropriate reduction in future payments.

For further information concerning your rights, you may wish to contact the National Labor Relations Board (NLRB) either at one of its Regional offices or at the following address or toll free number:

National Labor Relations Board
Division of Information
1099 14th Street, N.W.
Washington, DC 20570
1-866-667-6572
1-866-316-6572 (TTY)

To locate the nearest NLRB office, see NLRB's website at <http://www.nlr.gov>.

- (c) The Contractor shall comply with all provisions of Executive Order 13201 of February 17, 2001, and related implementing regulations at 29 CFR Part 470, and orders of the Secretary of Labor.
- (d) In the event that the Contractor does not comply with any of the requirements set forth in paragraphs (b), (c), or (g), the Secretary may direct that this contract be cancelled, terminated, or suspended in whole or in part, and declare the Contractor ineligible for further Government contracts in accordance with procedures at 29 CFR Part 470, Subpart B—Compliance Evaluations, Complaint Investigations and Enforcement Procedures. Such other sanctions or remedies may be imposed as are provided by 29 CFR Part 470, which implements Executive Order 13201, or as are otherwise provided by law.
- (e) The requirement to post the employee notice in paragraph (b) does not apply to—
 - (1) Contractors and subcontractors that employ fewer than 15 persons;
 - (2) Contractor establishments or construction work sites where no union has been formally recognized by the Contractor or certified as the exclusive bargaining representative of the Contractor's employees;
 - (3) Contractor establishments or construction work sites located in a jurisdiction named in the definition of the United States in which the law of that jurisdiction forbids enforcement of union-security agreements;
 - (4) Contractor facilities where upon the written request of the Contractor, the Department of Labor Deputy Assistant Secretary for Labor-Management Programs has waived the posting requirements with respect to any of the Contractor's facilities if the Deputy

- Assistant Secretary finds that the Contractor has demonstrated that—
- (i) The facility is in all respects separate and distinct from activities of the Contractor related to the performance of a contract; and
 - (ii) Such a waiver will not interfere with or impede the effectuation of the Executive order; or
- (5) Work outside the United States that does not involve the recruitment or employment of workers within the United States.
- (f) The Department of Labor publishes the official employee notice in two variations; one for contractors covered by the Railway Labor Act and a second for all other contractors. The Contractor shall—
- (1) Obtain the required employee notice poster from the Division of Interpretations and Standards, Office of Labor-Management Standards, U.S. Department of Labor, 200 Constitution Avenue, NW, Room N-5605, Washington, DC 20210, or from any field office of the Department's Office of Labor-Management Standards or Office of Federal Contract Compliance Programs;
 - (2) Download a copy of the poster from the Office of Labor-Management Standards website at <http://www.olms.dol.gov>; or
 - (3) Reproduce and use exact duplicate copies of the Department of Labor's official poster.
- (g) The Contractor shall include the substance of this clause in every subcontract or purchase order that exceeds the simplified acquisition threshold, entered into in connection with this contract, unless exempted by the Department of Labor Deputy Assistant Secretary for Labor-Management Programs on account of special circumstances in the national interest under authority of 29 CFR 470.3(c). For indefinite quantity subcontracts, the Contractor shall include the substance of this clause if the value of orders in any calendar year of the subcontract is expected to exceed the simplified acquisition threshold. Pursuant to 29 CFR Part 470, Subpart B—Compliance Evaluations, Complaint Investigations and Enforcement Procedures, the Secretary of Labor may direct the Contractor to take such action in the enforcement of these regulations, including the imposition of sanctions for noncompliance with respect to any such subcontract or purchase order. If the Contractor becomes involved in litigation with a subcontractor or vendor, or is threatened with

such involvement, as a result of such direction, the Contractor may request the United States, through the Secretary of Labor, to enter into such litigation to protect the interests of the United States.

I.51 FAR 52.222-41 SERVICE CONTRACT ACT OF 1965 (NOV 2007)

I.52 FAR 52.222-42 STATEMENT OF EQUIVALENT RATES FOR FEDERAL HIRES (MAY 1989)

In compliance with the Service Contract Act of 1965, as amended, 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.

Employee Class	Monetary Wage – Fringe Benefits
_____	_____
_____	_____
_____	_____
_____	_____

I.53 FAR 52.222-50 COMBATING TRAFFICKING IN PERSONS (FEB 2009)

I.54 FAR 52.222-54 EMPLOYMENT ELIGIBILITY VERIFICATION (JAN 2009)

I.55 FAR 52.223-2 AFFIRMATIVE PROCUREMENT OF BIOBASED PRODUCTS UNDER SERVICE AND CONSTRUCTION CONTRACTS (DEC 2007)

I.56 FAR 52.223-3 HAZARDOUS MATERIAL IDENTIFICATION AND MATERIAL SAFETY DATA (JAN 1997) ALTERNATE I (JUL 1995)

- (a) "Hazardous material," as used in this clause, includes any material defined as hazardous under the latest version of Federal Standard No. 313 (including revisions adopted during the term of the contract).
- (b) The offeror must list any hazardous material, as defined in paragraph (a) of this clause, to be delivered under this contract. The hazardous material shall be properly identified and include any applicable identification

number, such as national stock number or special item number. This information shall be included on the material safety data sheet submitted under this contract.

Material (if none, insert none)

Sampling chemical – Methanol, ID# 67-56-1

Sampling chemical – Nitric Acid 20%, ID# 7697-37-2

Sampling chemical – Alconox, ID# None Given

Identification No.

ID# 67-56-1

ID# 7697-37-2

None Given

- (c) The apparently successful offeror, by acceptance of the contract, certifies that the list in paragraph (b) of this clause is complete. This list must be updated during performance of the contract whenever the Contractor determines that any other material to be delivered under this contract is hazardous.
- (d) The apparently successful offeror agrees to submit, for each item as required prior to award, a material safety data sheet, meeting the requirements of 29 CFR 1910.1200(g) and the latest version of Federal Standard No. 313, for all hazardous material identified in paragraph (b) of this clause. Data shall be submitted in accordance with Federal Standard No. 313, whether or not the apparently successful offeror is the actual manufacturer of these items. Failure to submit the material safety data sheet prior to award may result in the Contracting Officer and resubmit the data.
- (e) If, after award, there is a change in the composition of the item(s) or a revision to Federal Standard No. 313, which renders incomplete or inaccurate the data submitted under paragraph (d) of this clause or the certification submitted under paragraph (c) of this clause, the Contractor shall promptly notify the Contracting Officer and resubmit the data.
- (f) Neither the requirements of this clause nor any act or failure to act by the Government shall relieve the Contractor of any responsibility or liability for the safety of Government, Contractor, or subcontractor personnel or property.

- (g) Nothing contained in this clause shall relieve the Contractor from complying with applicable Federal, State, and local laws, codes, ordinances, and regulations (including the obtaining of licenses and permits) in connection with hazardous material.
- (h) The Government's rights in data furnished under this contract with respect to hazardous material are as follows:
 - (1) To use, duplicate, and disclose any data to which this clause is applicable. The purposes of this right are to—
 - (i) Apprise personnel of the hazards to which they may be exposed in using, handling, packaging, transporting, or disposing of hazardous materials;
 - (ii) Obtain medical treatment for those affected by the material; and
 - (iii) Have others use, duplicate, and disclose the data for the Government for these purposes.
 - (2) To use, duplicate, and disclose data furnished under this clause, in accordance with subparagraph (h)(1) of this clause, in precedence over any other clause of this contract providing for rights in data.
 - (3) The government is not precluded from using similar or identical data acquired from other sources.
- (i) Except as provided in paragraph (i)(2) the Contractor shall prepare and submit a sufficient number of Material Safety Data Sheets (MSDS's), meeting the requirements of 29 CFR 1910.1200(g) and the latest version of Federal Standard No. 313, for all hazardous materials identified in paragraph (b) of this clause.
 - (1) For items shipped to consignees, the Contractor shall include a copy of the MSDS with the packing list or other suitable shipping document which accompanies each shipment. Alternatively, the Contractor is permitted to transmit MSDSs to consignees in advance of receipt of shipments by consignees, if authorized in writing by the Contracting Officer.

- (2) For items shipped to consignees identified by mailing address as agency depots, distribution centers or customer supply centers, the Contractor shall provide one copy of the MSDS's in or on each shipping container. If affixed to the outside of each container, the MSDS's must be placed in a weather resistant envelope.

I.57 FAR 52.223-5 POLLUTION PREVENTION AND RIGHT-TO-KNOW INFORMATION (AUG 2003) ALTERNATE I (AUG 2003) AS MODIFIED BY DOE ACQUISITION LETTER 2008-05 (APR 2008)

- (a) Definitions. As used in this clause— "Priority chemical" means a chemical identified by the Interagency Environmental Leadership Workgroup or, alternatively, by an agency pursuant to Implementing Instruction VIII of Executive Order 13423 of April 21, 2000, Greening the Government through Leadership in Environmental Management.

"Toxic chemical" means a chemical or chemical category listed in 40 CFR 372.65.

- (b) Executive Order 13148 requires Federal facilities to comply with the provisions of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11001-11050) and the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13101-13109).
- (c) The Contractor shall provide all information needed by the Federal facility to comply with the following:
 - (1) The emergency planning reporting requirements of Section 302 of EPCRA.
 - (2) The emergency notice requirements of Section 304 of EPCRA.
 - (3) The list of Material Safety Data Sheets, required by Section 311 of EPCRA.
 - (4) The emergency and hazardous chemical inventory forms of Section 312 of EPCRA.
 - (5) The toxic chemical release inventory of Section 313 of EPCRA, which includes the reduction and recycling information required by Section 6607 of PPA.

- (6) The toxic chemical, priority chemical, and hazardous substance release and use reduction goals of Implementing Instruction VIII of Executive Order 13423.
- (7) The environmental management system as described in Section 3(b) of Executive Order 13423.

I.58 FAR 52.223-7 NOTICE OF RADIOACTIVE MATERIALS (JAN 1997)

- (a) The Contractor shall notify the Contracting Officer or designee, in writing, _____ * 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.59 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 contracting performance, including, if applicable, the percentage of postconsumer material content; and
 - (2) Submit this estimate to _____
[Contracting Officer complete in accordance with agency procedures].

I.60 FAR 52.223-10 WASTE REDUCTION PROGRAM (AUG 2000)AS MODIFIED BY DOE ACQUISITION LETTER 2008-05 (APR 2008)

- (a) Definitions. As used in this clause—

“Recycling” means the series of activities, including collection, separation, and processing, by which products or other materials are recovered from the solid waste stream for use in the form of raw materials in the manufacture of products other than fuel for producing heat or power by combustion.

“Waste prevention” means any change in the design, manufacturing, purchase, or use of materials or products (including packaging) to reduce their amount or toxicity before they are discarded. Waste prevention also refers to the reuse of products or materials.

“Waste reduction” means preventing or decreasing the amount of waste being generated through waste prevention, recycling, or purchasing recycled and environmentally preferable products.

- (b) Consistent with the requirements of Section 3(a) of Executive Order 13423, the Contractor shall establish a program to promote cost-effective waste reduction in all operations and facilities covered by this contract. The Contractor’s programs shall comply with applicable Federal, State, and local requirements, specifically including Section 6002 of the Resource Conservation and Recovery Act (42 U.S.C. 6962, et seq.) and implementing regulations (40 CFR Part 247).

I.61 FAR 52.223-11 OZONE-DEPLETING SUBSTANCES (MAY 2001)

- (a) Definition. “Ozone-depleting substance,” as used in this clause, means any substance the Environmental Protection Agency designates in 40 CFR Part 82 as—
- (1) Class I, including, but not limited to, chlorofluorocarbons, halons, carbon tetrachloride, and methyl chloroform; or
 - (2) Class II, including, but not limited to, hydrochlorofluorocarbons.
- (b) The Contractor shall label products which contain or are manufactured with ozone-depleting substances in the manner and to the extent required by 42 U.S.C. 7671j (b), (c), and (d) and 40 CFR Part 82, Subpart E, as follows:

Warning

Contains (or manufactured with, if applicable) * _____, a substance(s) which harm(s) public health and environment by destroying ozone in the upper atmosphere.

* The Contractor shall insert the name of the substance(s).

- I.62 FAR 52.223-12 REFRIGERATION EQUIPMENT AND AIR CONDITIONERS (MAY 1995)**
- I.63 FAR 52.223-14 TOXIC CHEMICAL RELEASE REPORTING (AUG 2003)**
- I.64 FAR 52.223-15 ENERGY EFFICIENCY IN ENERGY-CONSUMING PRODUCTS (DEC 2007)**
- I.65 FAR 52.223-16 IEEE 1680 STANDARD FOR THE ENVIRONMENTAL ASSESSMENT OF PERSONAL COMPUTER PRODUCTS (DEC 2007)**
- I.66 FAR 52.223-17 AFFIRMATIVE PROCUREMENT OF EPA-DESIGNATED ITEMS IN SERVICE AND CONSTRUCTION CONTRACTS (MAY 2008)**
- I.67 FAR 52.223-19 COMPLIANCE WITH ENVIRONMENTAL MANAGEMENT SYSTEMS (MAY 2011)**
- I.68 FAR 52.224-1 PRIVACY ACT NOTIFICATION (APR 1984)**
- I.69 FAR 52.224-2 PRIVACY ACT (APR 1984)**
- I.70 FAR 52.225-1 BUY AMERICAN ACT – SUPPLIES (FEB 2009)**
- I.71 FAR 52.225-11 BUY AMERICAN ACT – CONSTRUCTION MATERIALS UNDER TRADE AGREEMENTS (AUG 2009) (DOE DEVIATION) (FEB 2008)**

(a) Definitions. As used in this clause –

“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 section 3 of the Shipping Act of 1984 (46 U.S.C. App. 1702), 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 country (Aruba, Austria, Belgium, Bulgaria, Canada, 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, Netherlands, Norway, Poland, Portugal, Romania, Singapore, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Taiwan, or United Kingdom);
- (2) A Free Trade Agreement country (Australia, Bahrain, Canada, Chile, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Mexico, Morocco, Nicaragua, Oman, Peru, or Singapore); or
- (3) A least developed country (Afghanistan, Angola, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, Central African Republic, Chad, Comoros, Democratic Republic of Congo, Djibouti, East Timor, Equatorial Guinea, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, Kiribati, Laos, Lesotho, Liberia, Madagascar, Malawi, Maldives,

Mali, Mauritania, Mozambique, Nepal, Niger, Rwanda, Samoa, Sao Tome and Principe, Senegal, Sierra Leone, Solomon Islands, Somalia, Tanzania, Togo, Tuvalu, Uganda, Vanuatu, Yemen, or Zambia).

"Designated country construction material" means a construction material that is a WTO GPA country construction material, an FTA country construction material, or a least developed 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.

"Foreign construction material" means a construction material other than a domestic construction material.

"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.

"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 the Buy American Act (41 U.S.C. 10a-10d) by providing a preference for domestic construction material. In accordance with 41 U.S.C. 431, the component test of the Buy American Act 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 Act restrictions are waived for designated county 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 the construction materials or components listed by the Government as follows:

[Contracting Officer to list applicable excepted materials or indicate "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 Act 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 Act 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 Act.

- (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 Act 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 Act applies, use of foreign construction material is noncompliant with the Buy American Act.
- (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 MATERIAL 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.72 FAR 52.225-13 RESTRICTIONS ON CERTAIN FOREIGN PURCHASES (JUN 2008)

I.73 FAR 52.227-1 AUTHORIZATION AND CONSENT (DEC 2007)

I.74 FAR 52.227-2 NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT (DEC 2007)

I.75 FAR 52.227-3 PATENT INDEMNITY (APR 1984)

I.76 FAR 52.227-9 REFUND OF ROYALTIES (APR 1984)

I.77 FAR 52.227-23 RIGHTS TO PROPOSAL DATA (TECHNICAL) (JUN 1987)

Except for data contained on pages (N/A), it is agreed that as a condition of award of this contract, and notwithstanding the conditions of any notice appearing thereon, the Government shall have unlimited rights (as defined in the "Rights in Data—General" clause contained in this contract) in and to the technical data contained in the proposal dated January 20, 2010, upon which this contract is based.

I.78 FAR 52.228-7 INSURANCE – LIABILITY TO THIRD PERSONS (MAR 1996)

I.79 FAR 52.230-2 COST ACCOUNTING STANDARDS (OCT 2008)

- I.80 FAR 52.230-3 DISCLOSURE AND CONSISTENCY OF COST ACCOUNTING PRACTICES (OCT 2008)**
- I.81 FAR 52.230-6 ADMINISTRATION OF COST ACCOUNTING STANDARDS (MAR 2008)**
- I.82 FAR 52.232-9 LIMITATION ON WITHHOLDING OF PAYMENTS (APR 1984)**
- I.83 FAR 52.232-17 INTEREST (OCT 2008)**
- I.84 FAR 52.232-18 AVAILABILITY OF FUNDS (APR 1984)**
- I.85 FAR 52.232-22 LIMITATION OF FUNDS (APR 1984)**
- I.86 FAR 52.232-23 ASSIGNMENT OF CLAIMS (JAN 1986)**
- I.87 FAR 52.232-25 PROMPT PAYMENT (OCT 2008) – ALTERNATE I (FEB 2002)**
- I.88 FAR 52.232-33 PAYMENT BY ELECTRONIC FUNDS TRANSFER – CENTRAL CONTRACTOR REGISTRATION (OCT 2003)**
- I.89 FAR 52.233-1 DISPUTES (JUL 2002) – ALTERNATE I (DEC 1991)**
- I.90 FAR 52.233-3 PROTEST AFTER AWARD (AUG 1996) – ALTERNATE I (JUN 1985)**
- I.91 FAR 52.233-4 APPLICABLE LAW FOR BREACH OF CONTRACT CLAIM (OCT 2004)**
- I.92 FAR 52.234-4 EARNED VALUE MANAGEMENT SYSTEM (JUL 2006)**
 - (a) The Contractor shall use an earned value management system (EVMS) that has been determined by the Cognizant Federal Agency (CFA) to be compliant with the guidelines in ANSI/EIA Standard - 748 (current version at the time of award) to manage this contract. If the Contractor's current EVMS has not been determined compliant at the time of award, see paragraph (b) of this clause. The Contractor shall submit reports in accordance with the requirements of this contract.

- (b) If, at the time of award, the Contractor's EVM System has not been determined by the CFA as complying with EVMS guidelines or the Contractor does not have an existing cost/schedule control system that is compliant with the guidelines in ANSI/EIA Standard - 748 (current version at time of award), the Contractor shall—
 - (1) Apply the current system to the contract; and
 - (2) Take necessary actions to meet the milestones in the Contractor's EVMS plan approved by the Contracting Officer.

- (c) The Government will conduct an Integrated Baseline Review (IBR). If a pre-award IBR has not been conducted, a post award IBR shall be conducted as early as practicable after contract award.

- (d) The Contracting Officer may require an IBR at—
 - (1) Exercise of significant options; or
 - (2) Incorporation of major modifications.

- (e) Unless a waiver is granted by the CFA, Contractor proposed EVMS changes require approval of the CFA prior to implementation. The CFA will advise the Contractor of the acceptability of such changes within 30 calendar days after receipt of the notice of proposed changes from the Contractor. If the advance approval requirements are waived by the CFA, the Contractor shall disclose EVMS changes to the CFA at least 14 calendar days prior to the effective date of implementation.

- (f) The Contractor shall provide access to all pertinent records and data requested by the Contracting Officer or a duly authorized representative as necessary to permit Government surveillance to ensure that the EVMS conforms, and continues to conform, with the performance criteria referenced in paragraph (a) of this clause.

- (g) The Contractor shall require the subcontractors specified below to comply with the requirements of this clause: [Insert list of applicable subcontractors.]
 - TBD _____
 - _____
 - _____
 - _____

- I.93 FAR 52.236-5 MATERIAL AND WORKMANSHIP (APR 1984)
- I.94 FAR 52.236-7 PERMITS AND RESPONSIBILITIES (NOV 1991)
- I.95 FAR 52.236-18 WORK OVERSIGHT AND COST-REIMBURSEMENT CONSTRUCTION CONTRACTS (APR 1984)
- I.96 FAR 52.236-19 ORGANIZATION AND DIRECTION OF THE WORK (APR 1984)
- I.97 FAR 52.237-2 PROTECTION OF GOVERNMENT BUILDINGS, EQUIPMENT, AND VEGETATION (APR 1984)
- I.98 FAR 52.237-3 CONTINUITY OF SERVICES (JAN 1991)
- I.99 FAR 52.239-1 PRIVACY OR SECURITY SAFEGUARDS (AUG 1996)
- I.100 FAR 52.242-1 NOTICE OF INTENT TO DISALLOW COSTS (APR 1984)
- I.101 FAR 52.242-3 PENALTIES FOR UNALLOWABLE COSTS (MAY 2001)
- I.102 FAR 52.242-4 CERTIFICATION OF FINAL INDIRECT COSTS (JAN 1997)
- I.103 FAR 52.242-13 BANKRUPTCY (JUL 1995)
- I.104 FAR 52.243-2 CHANGES – COST REIMBURSEMENT (AUG 1987) – ALTERNATE I (APR 1984)
- I.105 FAR 52.243-6 CHANGE ORDER ACCOUNTING (APR 1984)
- I.106 FAR 52.243-7 NOTIFICATION OF CHANGES (APR 1984)

(a) *Definitions.* "Contracting Officer," as used in this clause, does not include any representative of the Contracting Officer. "Specifically Authorized Representative (SAR)," as used in this clause, means any person the Contracting Officer has so designated by written notice (a copy of which shall be provided to the Contractor) which shall refer to this paragraph and shall be issued to the designated representative before the SAR exercises such authority.

(b) *Notice.* The primary purpose of this clause is to obtain prompt reporting of Government conduct that the Contractor considers to constitute a change to this contract. Except for changes identified as such in writing and signed by the Contracting Officer, the Contractor shall notify the Administrative Contracting Officer in writing promptly, within 5 (to be

negotiated) calendar days from the date that the Contractor identifies any Government conduct (including actions, inactions, and written or oral communications) that the Contractor regards as a change to the contract terms and conditions. On the basis of the most accurate information available to the

Contractor, the notice shall state—

- (1) The date, nature, and circumstances of the conduct regarded as a change;
- (2) The name, function, and activity of each Government individual and Contractor official or employee involved in or knowledgeable about such conduct;
- (3) The identification of any documents and the substance of any oral communication involved in such conduct;
- (4) In the instance of alleged acceleration of scheduled performance or delivery, the basis upon which it arose;
- (5) The particular elements of contract performance for which the Contractor may seek an equitable adjustment under this clause, including—
 - (i) What contract line items have been or may be affected by the alleged change;
 - (ii) What labor or materials or both have been or may be added, deleted, or wasted by the alleged change;
 - (iii) To the extent practicable, what delay and disruption in the manner and sequence of performance and effect on continued performance have been or may be caused by the alleged change;
 - (iv) What adjustments to contract price, delivery schedule, and other provisions affected by the alleged change are estimated; and
- (6) The Contractor's estimate of the time by which the Government must respond to the Contractor's notice to minimize cost, delay or disruption of performance.

(c) *Continued performance.* Following submission of the notice required by paragraph (b) of this clause, the Contractor shall diligently continue performance of this contract to the maximum extent possible in accordance with its terms and conditions as construed by the Contractor, unless the notice reports a direction of the Contracting Officer or a communication from a SAR of the Contracting Officer, in either of which events the Contractor shall continue performance; provided, however, that if the Contractor regards the direction or communication as a change as described in paragraph (b) of this clause, notice shall be given in the manner provided. All directions, communications, interpretations, orders and similar actions of the SAR shall be reduced to writing promptly and copies furnished to the Contractor and to the Contracting Officer. The Contracting Officer shall promptly countermand any action which exceeds the authority of the SAR.

(d) *Government response.* The Contracting Officer shall promptly, within 30 (to be negotiated) calendar days after receipt of notice, respond to the notice in writing. In responding, the Contracting Officer shall either—

- (1) Confirm that the conduct of which the Contractor gave notice constitutes a change and when necessary direct the mode of further performance;
- (2) Countermand any communication regarded as a change;
- (3) Deny that the conduct of which the Contractor gave notice constitutes a change and when necessary direct the mode of further performance; or
- (4) In the event the Contractor's notice information is inadequate to make a decision under paragraphs (d)(1), (2), or

(3) of this clause, advise the Contractor what additional information is required, and establish the date by which it should be furnished and the date thereafter by which the Government will respond.

(e) *Equitable adjustments.* (1) If the Contracting Officer confirms that Government conduct effected a change as alleged by the Contractor, and the conduct causes an increase or decrease in the Contractor's cost of, or the time required for, performance of any part of the work under this contract, whether changed or not changed by such conduct, an equitable adjustment shall be made—

- (i) In the contract price or delivery schedule or both; and
 - (ii) In such other provisions of the contract as may be affected.
- (2) The contract shall be modified in writing accordingly.

In the case of drawings, designs or specifications which are defective and for which the Government is responsible, the equitable adjustment shall include the cost and time extension for delay reasonably incurred by the Contractor in attempting to comply with the defective drawings, designs or specifications before the Contractor identified, or reasonably should have identified, such defect. When the cost of property made obsolete or excess as a result of a change confirmed by the Contracting Officer under this clause is included in the equitable adjustment, the Contracting Officer shall have the right to prescribe the manner of disposition of the property.

The equitable adjustment shall not include increased costs or time extensions for delay resulting from the Contractor's failure to provide notice or to continue performance as provided, respectively, in paragraphs (b) and (c) of this clause.

NOTE: The phrases "contract price" and "cost" wherever they appear in the clause, may be appropriately modified to apply to cost-reimbursement or incentive contracts, or to combinations thereof.

I.107 FAR 52.244-2 SUBCONTRACTS (JUN 2007) ALTERNATE I (JUN 2007)

- (a) Definitions.

As used in this clause— "Approved purchasing system" means a Contractor's purchasing system that has been reviewed and approved in accordance with Part 44 of the Federal Acquisition Regulation (FAR).

"Consent to subcontract" means the Contracting Officer's written consent for the Contractor to enter into a particular subcontract.

"Subcontract" means any contract, as defined in FAR Subpart 2.1, entered into by a subcontractor to furnish supplies or services for performance of the prime contract or a subcontract. It includes, but is not limited to, purchase orders, and changes and modifications to purchase orders.

- (b) When this clause is included in a fixed-price type contract, consent to subcontract is required only on unpriced contract actions (including unpriced modifications or unpriced delivery orders), and only if required in accordance with paragraph (c) or (d) of this clause.
- (c) If the Contractor does not have an approved purchasing system, consent to subcontract is required for any subcontract that—
 - (1) s of the cost-reimbursement, time-and-materials, or labor-hour type; or
 - (2) Is fixed-price and exceeds—
 - (i) For a contract awarded by the Department of Defense, the Coast Guard, or the National Aeronautics and Space Administration, the greater of the simplified acquisition threshold or 5 percent of the total estimated cost of the contract; or
 - (ii) For a contract awarded by a civilian agency other than the Coast Guard and the National Aeronautics and Space Administration, either the simplified acquisition threshold or 5 percent of the total estimated cost of the contract.
- (d) If the Contractor has an approved purchasing system, the Contractor nevertheless shall obtain the Contracting Officer's written consent before placing the following subcontracts:
TBD

- (e)
 - (1) The Contractor shall notify the Contracting Officer reasonably in advance of placing any subcontract or modification thereof for which consent is required under paragraph (b), (c), or (d) of this clause, including the following information:
 - (i) A description of the supplies or services to be subcontracted.
 - (ii) Identification of the type of subcontract to be used.
 - (iii) Identification of the proposed subcontractor.

- (iv) The proposed subcontract price.
 - (v) The subcontractor's current, complete, and accurate cost or pricing data and Certificate of Current Cost or Pricing Data, if required by other contract provisions.
 - (vi) The subcontractor's Disclosure Statement or Certificate relating to Cost Accounting Standards when such data are required by other provisions of this contract.
 - (vii) A negotiation memorandum reflecting—
 - (A) The principal elements of the subcontract price negotiations;
 - (B) The most significant considerations controlling establishment of initial or revised prices;
 - (C) The reason cost or pricing data were or were not required;
 - (D) The extent, if any, to which the Contractor did not rely on the subcontractor's cost or pricing data in determining the price objective and in negotiating the final price;
 - (E) The extent to which it was recognized in the negotiation that the subcontractor's cost or pricing data were not accurate, complete, or current; the action taken by the Contractor and the subcontractor; and the effect of any such defective data on the total price negotiated;
 - (F) The reasons for any significant difference between the Contractor's price objective and the price negotiated; and
 - (G) A complete explanation of the incentive fee or profit plan when incentives are used. The explanation shall identify each critical performance element, management decisions used to quantify each incentive element, reasons for the incentives, and a summary of all trade-off possibilities considered.
- (2) If the Contractor has an approved purchasing system and consent is not required under paragraph (c), or (d) of this clause, the Contractor nevertheless shall notify the Contracting Officer reasonably in advance of entering into any (i) cost-plus-fixed-fee subcontract, or (ii) fixed-price subcontract that exceeds either the simplified acquisition threshold or 5 percent of the total estimated cost of this contract. The notification shall include the information required by paragraphs (e)(1)(i) through (e)(1)(iv) of this clause.

- (f) Unless the consent or approval specifically provides otherwise, neither consent by the Contracting Officer to any subcontract nor approval of the Contractor's purchasing system shall constitute a determination—
 - (1) Of the acceptability of any subcontract terms or conditions;
 - (2) Of the allowability of any cost under this contract; or
 - (3) To relieve the Contractor of any responsibility for performing this contract.

- (g) No subcontract or modification thereof placed under this contract shall provide for payment on a cost-plus-a-percentage-of-cost basis, and any fee payable under cost-reimbursement type subcontracts shall not exceed the fee limitations in FAR 15.404-4(c)(4)(i).

- (h) The Contractor shall give the Contracting Officer immediate written notice of any action or suit filed and prompt notice of any claim made against the Contractor by any subcontractor or vendor that, in the opinion of the Contractor, may result in litigation related in any way to this contract, with respect to which the Contractor may be entitled to reimbursement from the Government.

- (i) The Government reserves the right to review the Contractor's purchasing system as set forth in FAR Subpart 44.3.

- (j) Paragraphs (c) and (e) of this clause do not apply to the following subcontracts, which were evaluated during negotiations:
 - None
 - _____
 - _____
 - _____

- I.108 FAR 52.244-5 COMPETITION IN SUBCONTRACTING (DEC 1996)**
- I.109 FAR 52.244-6 SUBCONTRACTS FOR COMMERCIAL ITEMS (AUG 2009)**
- I.110 FAR 52.245-1 GOVERNMENT PROPERTY (JUN 2007)**
- I.111 FAR 52.246-25 LIMITATION OF LIABILITY – SERVICES (FEB 1997)**
- I.112 FAR 52.247-1 COMMERCIAL BILL OF LADING NOTATIONS (FEB 2006)**
- I.113 FAR 52.247-63 PREFERENCE FOR U.S.-FLAG AIR CARRIERS (JUN 2003)**

I.114 FAR 52.247-64 PREFERENCE FOR PRIVATELY OWNED U.S.-FALG COMMERCIAL VESSELS (FEB 2006)**I.115 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—
- General Services Administration
Transportation Audit Division (QMCA)
Crystal Plaza 4, Room 300
2200 Crystal Drive, Arlington, VA 22202
[To be filled in by Contracting Officer]

I.116 FAR 52.248-1 VALUE ENGINEERING (FEB 2000)**I.117 FAR 52.249-6 TERMINATION (COST REIMBURSEMENT) (MAY 2004)****I.118 FAR 52.249-14 EXCUSABLE DELAYS (APR 1984)****I.119 FAR 52.251-1 GOVERNMENT SUPPLY SOURCES (APR 1984)****I.120 FAR 52.251-2 INTERAGENCY FLEET MANAGEMENT SYSTEM VEHICLES AND RELATED SERVICES (JAN 1991)****I.121 FAR 52.252-6 AUTHORIZED DEVIATIONS IN CLAUSES (APR 1984)**

- (a) The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the clause.
- (b) The use in this solicitation or contract of any Department of Energy Acquisition Regulation (48 CFR 10) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

I.122 FAR 52.253-1 COMPUTER GENERATED FORMS (JAN 1991)

I.123 DEAR 952.202-1 DEFINITIONS (MAR 2002)

- (a) As prescribed in 902.200, insert the clause at FAR 52.202-1 in all contracts. The contracting officer shall substitute the following for paragraph (a) of the clause.
 - (a) Head of Agency means: (i) The Secretary; (ii) Deputy Secretary; (iii) Under Secretaries of the Department of Energy and (iv) the Chairman, Federal Energy Regulatory Commission.
 - (b) The following shall be added as paragraphs (h) and (i) except that they will be designated paragraphs (g) and (h) if Alternate I of the FAR clause is used.
 - (h) The term DOE means the Department of Energy, FERC means the Federal Energy Regulatory Commission, and NNSA means the National Nuclear Security Administration.
 - (i) The term Senior Procurement Executive means, for DOE: Department of Energy – Director, Office of Procurement and Assistance Management, DOE; National Nuclear Security Administration – Administrator for Nuclear Security, NNSA; and Federal Energy Regulatory Commission – Chairman, FERC.

I.124 DEAR 952.203-70 WHISTLEBLOWER PROTECTION FOR CONTRACTOR EMPLOYEES (DEC 2000)

- (a) The Contractor shall comply with the requirements of the "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.125 DEAR 952.204-2 SECURITY (MAR 2011) DEVIATION (OCT 2013)

As prescribed in 904.404(d)(l), the following clause shall be included in contracts entered into under section 31 (research assistance, 42 U.S.C. 2051), or section 41 (ownership and operation of production facilities, 42 U.S.C. 2061) of the Atomic Energy Act of 1954, and in other contracts and subcontracts which involve or are likely to involve classified information or special nuclear material:

SECURITY (OCT 2013) DEVIATION

- (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 01' 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 maintain a record of information concerning each uncleared applicant or uncleared employee who is selected for a position requiring an access authorization. Upon request only, the following information will be furnished to the head of the cognizant local DOE Security Office.

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.* (l) 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. 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, 01' the Department of Justice shall also be furnished concurrently to the Contracting Officer. Contractors are encouraged to submit this information through the use of the online tool at <https://efoc.fed.gov>. When completed the Contractor must print and sign one copy of the SF 328 and submit it 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 01' 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, 01' 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 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. (End of clause)

I.126 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 Declassifier 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.127 DEAR 952.204-71 SENSITIVE FOREIGN NATIONAL CONTROLS (APR 1994)

- (a) In connection with any activities in the performance of this contract, the contractor agrees to comply with the "Sensitive Foreign Nations Controls" requirements attached to this contract, relating to those countries, which may from time to time, be identified to the contractor by written notice as sensitive foreign nations. The contractor shall have the right to terminate its performance under this contract upon at least 60 days' prior written notice to the contracting officer if the contractor determines that it is unable, without substantially interfering with its policies or without adversely impacting its performance to continue performance of the work under this contract as a result of such notification. If the contractor elects to terminate performance, the provisions of this contract regarding termination for the convenience of the Government shall apply.

- (b) The provisions of this clause shall be included in any subcontracts.

I.128 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.129 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.130 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.131 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 8" 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.132 DEAR 952.209-72 ORGANIZATIONAL CONFLICTS OF INTEREST (AUG 2009) AND ALTERNATE I (JUL 2009)

- (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 (Contracting Officer see 48 CFR 909.507-2 and enter specific term) 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.

- (1) 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.133 DEAR 952.217-70 ACQUISITION OF REAL PROPERTY (APR 1984)

- (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, and the government assumes liability for, or will otherwise pay for the obligation under the lease 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 (a), shall be included in any subcontract occasioned by this contract under which property described in paragraph (a) of this clause shall be acquired.

I.134 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 subject to inspection by DOE and shall be preserved by the Contractor until disposal is authorized by DOE or at the option of the Contractor delivered to DOE upon completion or termination of the contract. If the Contractor exercises the foregoing option, title to such records shall vest in DOE upon delivery.

I.135 DEAR 952.223-76 CONDITIONAL PAYMENT OF FEE OR PROFIT – SAFEGUARDING RESTRICTED DATA AND OTHER CLASSIFIED INFORMATION AND PROTECTION OF WORKER SAFETY AND HEALTH (AUG 2009)**(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% nor greater than 100% of the total fee or profit earned for a first degree performance failure, not less than 11% nor greater than 25% for a second degree performance failure, and up to 10% 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 [insert 6 or 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).
 - (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).
 - (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 Order 232.1A requirements, or internal oversight of DOE O 440.1A 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.136 RESERVED**I.137 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.138 DEAR 952.227-11 PATENT RIGHTS-RETENTION BY THE CONTRACTOR
(SHORT FORM) (FEB 1995)****(a) Definitions.**

- (1) "Invention" means any invention or discovery which is or may be patentable or otherwise protectable under title 35 of the United States Code, or any novel variety of plant which is or may be protected under the Plant Variety Protection Act (7 U.S.C. 2321, et seq.).
- (2) "Made" when used in relation to any invention means the conception of first actual reduction to practice of such invention.
- (3) "Nonprofit organization" means a university or other institution of higher education or an organization of the type described in section 501(c)(3) of the Internal Revenue Code of 1954 (26 U.S.C. 501(c)) and exempt from taxation under section 501(a) of the Internal Revenue Code (26 U.S.C. 501(a)) or any nonprofit scientific or educational organization qualified under a state nonprofit organization statute.
- (4) "Practical application" means to manufacture, in the case of a composition or product; to practice, in the case of a process or method; or to operate, in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are, to the extent permitted by law or Government regulations, available to the public on reasonable terms.
- (5) "Small business firm" means a small business concern as defined at section 2 of Pub. L. 85-536 (15 U.S.C. 632) and implementing regulations of the Administrator of the Small Business Administration. For the purpose of this clause, the size standards for small business concerns involved in Government procurement and subcontracting at 13 CFR 121.3-8 and 13 CFR 121.3-12, respectively, will be used.
- (6) "Subject invention" means any invention of the contractor conceived or first actually reduced to practice in the performance of work under this contract, provided that in the case of a variety of plant, the date of determination (as defined in section 41(d) of the Plant Variety Protection Act, 7 U.S.C. 2401(d)) must also occur during the period of contract performance.

- (7) "Agency licensing regulations" and "agency regulations concerning the licensing of Government-owned inventions" mean the Department of Energy patent licensing regulations at 10 CFR Part 781.
- (b) Allocation of principal rights. The Contractor may retain the entire right, title, and interest throughout the world to each subject invention subject to the provisions of this clause and 35 U.S.C. 203. With respect to any subject invention in which the Contractor retains title, the Federal Government shall have a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the subject invention throughout the world.
- (c) Invention disclosure, election of title, and filing of patent application by Contractor.
- (1) The Contractor will disclose each subject invention to the Department of Energy (DOE) within 2 months after the inventor discloses it in writing to Contractor personnel responsible for patent matters. The disclosure to DOE shall be in the form of a written report and shall identify the contract under which the invention was made and the inventor(s). It shall be sufficiently complete in technical detail to convey a clear understanding to the extent known at the time of the disclosure, of the nature, purpose, operation, and the physical, chemical, biological or electrical characteristics of the invention. The disclosure shall also identify any publication, on sale or public use of the invention and whether a manuscript describing the invention has been submitted for publication and, if so, whether it has been accepted for publication at the time of disclosure. In addition, after disclosure to the DOE, the Contractor will promptly notify that agency of the acceptance of any manuscript describing the invention for publication or of any on sale or public use planned by the Contractor.
- (2) The Contractor will elect in writing whether or not to retain title to any such invention by notifying DOE within 2 years of disclosure to DOE. However, in any case where publication, on sale or public use has initiated the 1-year statutory period wherein valid patent protection can still be obtained in the United States, the period for election of title may be shortened by DOE to a date that is no more than 60 days prior to the end of the statutory period.

- (3) The Contractor will file its initial patent application on a subject invention to which it elects to retain title within 1 year after election of title or, if earlier, prior to the end of any statutory period wherein valid patent protection can be obtained in the United States after a publication, on sale, or public use. The Contractor will file patent applications in additional countries or international patent offices within either 10 months of the corresponding initial patent application or 6 months from the date permission is granted by the Commissioner of Patents and Trademarks to file foreign patent applications where such filing has been prohibited by a Secrecy Order.
 - (4) Requests for extension of the time for disclosure, election, and filing under subparagraphs (c)(1), (2), and (3) of this clause may, at the discretion of the agency, be granted.
- (d) Conditions when the Government may obtain title. The Contractor will convey to the Federal agency, upon written request, title to any subject invention—
 - (1) If the Contractor fails to disclose or elect title to the subject invention within the times specified in paragraph (c) of this clause, or elects not to retain title; provided, that DOE may only request title within 60 days after learning of the failure of the Contractor to disclose or elect within the specified times.
 - (2) In those countries in which the Contractor fails to file patent applications within the times specified in paragraph (c) of this clause; provided, however, that if the Contractor has filed a patent application in a country after the times specified in paragraph (c) of this clause, but prior to its receipt of the written request of the Federal agency, the Contractor shall continue to retain title in that country.
 - (3) In any country in which the Contractor decides not to continue the prosecution of any application for, to pay the maintenance fees on, or defend in reexamination or opposition proceeding on, a patent on a subject invention.
- (e) Minimum rights to Contractor and protection of the Contractor right to file.
 - (1) The Contractor will retain a nonexclusive royalty-free license throughout the world in each subject invention to which the

Government obtains title, except if the Contractor fails to disclose the invention within the times specified in paragraph (c) of this clause. The Contractor's license extends to its domestic subsidiary and affiliates, if any, within the corporate structure of which the Contractor is a party and includes the right to grant sublicenses of the same scope to the extent the Contractor was legally obligated to do so at the time the contract was awarded. The license is transferable only with the approval of the Federal agency, except when transferred to the successor of that part of the Contractor's business to which the invention pertains.

- (2) The Contractor's domestic license may be revoked or modified by DOE to the extent necessary to achieve expeditious practical application of subject invention pursuant to an application for an exclusive license submitted in accordance with applicable provisions at 37 CFR Part 404 and agency licensing regulations. This license will not be revoked in that field of use or the geographical areas in which the Contractor has achieved practical application and continues to make the benefits of the invention reasonably accessible to the public. The license in any foreign country may be revoked or modified at the discretion of DOE to the extent the Contractor, its licensees, or the domestic subsidiaries or affiliates have failed to achieve practical application in that foreign country.
 - (3) Before revocation or modification of the license, DOE will furnish the Contractor a written notice of its intention to revoke or modify the license, and the Contractor will be allowed 30 days (or such other time as may be authorized by DOE for good cause shown by the Contractor) after the notice to show cause why the license should not be revoked or modified. The Contractor has the right to appeal, in accordance with applicable regulations in 37 CFR Part 404 and agency regulations concerning the licensing of Government owned inventions, any decision concerning the revocation or modification of the license.
- (f) Contractor action to protect the Government's interest.
- (1) The Contractor agrees to execute or to have executed and promptly deliver to DOE all instruments necessary to (i) establish or confirm the rights the Government has throughout the world in those subject inventions to which the Contractor elects to retain

- title, and (ii) convey title to DOE when requested under paragraph (d) of this clause and to enable the government to obtain patent protection throughout the world in that subject invention.
- (2) The Contractor agrees to require, by written agreement, its employees, other than clerical and nontechnical employees, to disclose promptly in writing to personnel identified as responsible for the administration of patent matters and in a format suggested by the Contractor each subject invention made under contract in order that the Contractor can comply with the disclosure provisions of paragraph (c) of this clause, and to execute all papers necessary to file patent applications on subject inventions and to establish the Government's rights in the subject inventions. This disclosure format should require, as a minimum, the information required by subparagraph (c)(1) of this clause. The Contractor shall instruct such employees, through employee agreements or other suitable educational programs, on the importance of reporting inventions in sufficient time to permit the filing of patent applications prior to U.S. or foreign statutory bars.
- (3) The Contractor will notify DOE of any decision not to continue the prosecution of a patent application, pay maintenance fees, or defend in a reexamination or opposition proceeding on a patent, in any country, not less than 30 days before the expiration of the response period required by the relevant patent office. (4) The Contractor agrees to include, within the specification of any United States patent application and any patent issuing thereon covering a subject invention, the following statement, "This invention was made with Government support under (identify the contract) awarded by the United States Department of Energy. The Government has certain rights in the invention."
- (g) Subcontracts.
- (1) The Contractor will include this clause, suitably modified to identify the parties, in all subcontracts, regardless of tier, for experimental, developmental, or research work to be performed by a small business firm or domestic nonprofit organization. The subcontractor will retain all rights provided for the Contractor in this clause, and the Contractor will not, as part of the consideration for awarding the subcontract, obtain rights in the subcontractor's subject inventions.

- (2) The contractor shall include in all other subcontracts, regardless of tier, for experimental, developmental, demonstration, or research work the patent rights clause at 952.227-13.
 - (3) In the case of subcontracts, at any tier, DOE, subcontractor, and the Contractor agree that the mutual obligations of the parties created by this clause constitute a contract between the subcontractor and DOE with respect to the matters covered by the clause; provided, however, that nothing in this paragraph is intended to confer any jurisdiction under the Contract Disputes Act in connection with proceedings under paragraph (j) of this clause.
- (h) Reporting on utilization of subject inventions. The Contractor agrees to submit, on request, periodic reports no more frequently than annually on the utilization of a subject invention or on efforts at obtaining such utilization that are being made by the Contractor or its licensees or assignees. Such reports shall include information regarding the status of development, date of first commercial sale or use, gross royalties received, by the Contractor, and such other data and information as DOE may reasonably specify. The Contractor also agrees to provide additional reports as may be requested by DOE in connection with any march-in proceeding undertaken by that agency in accordance with paragraph (j) of this clause. As required by 35 U.S.C. 202(c)(5), DOE agrees it will not disclose such information to persons outside the Government without permission of the Contractor.
- (i) Preference for United States industry. Notwithstanding any other provision of this clause, the Contractor agrees that neither it nor any assignee will grant to any person the exclusive right to use or sell any subject invention in the United States unless such person agrees that any product embodying the subject invention or produced through the use of the subject invention will be manufactured substantially in the United States. However, in individual cases, the requirement for such an agreement may be waived by DOE upon a showing by the Contractor or its assignee that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the United States or that under the circumstances domestic manufacture is not commercially feasible.
- (j) March-in rights. The Contractor agrees that, with respect to any subject invention in which it has acquired title, DOE has the right in accordance

with the procedures in 37 CFR 401.6 and any supplemental regulations of the agency to require the Contractor, an assignee or exclusive licensee of a subject invention to grant a nonexclusive, partially exclusive, or exclusive license in any field of use to a responsible applicant or applicants, upon terms that are reasonable under the circumstances, and, if the Contractor, assignee, or exclusive licensee refuses such a request, DOE has the right to grant such a license itself if DOE determines that—

- (1) Such action is necessary because the Contractor or assignee has not taken, or is not expected to take within a reasonable time, effective steps to achieve practical application of the subject invention in such field of use;
 - (2) Such action is necessary to alleviate health or safety needs which are not reasonably satisfied by the Contractor, assignee, or their licensees;
 - (3) Such action is necessary to meet requirements for public use specified by Federal regulations and such requirements are not reasonably satisfied by the Contractor, assignee, or licensees; or
 - (4) Such action is necessary because the agreement required by paragraph (i) of this clause has not been obtained or waived or because a licensee of the exclusive right to use or sell any subject invention in the United States is in breach of such agreement.
- (k) Special provisions for contracts with nonprofit organizations. If the Contractor is a nonprofit organization, it agrees that—
- (1) Rights to a subject invention in the United States may not be assigned without the approval of the Federal agency, except where such assignment is made to an organization which has as one of its primary functions the management of inventions; provided, that such assignee will be subject to the same provisions as the Contractor;
 - (2) The Contractor will share royalties collected on a subject invention with the inventor, including Federal employee co-inventors (when DOE deems it appropriate) when the subject invention is assigned in accordance with 35 U.S.C. 202(e) and 37 CFR 401.10;
 - (3) The balance of any royalties or income earned by the Contractor with respect to subject inventions, after payment of expenses (including payments to inventors) incidental to the administration of

- subject inventions will be utilized for the support of scientific research or education; and
- (4) It will make efforts that are reasonable under the circumstances to attract licensees of subject inventions that are small business firms, and that it will give a preference to a small business firm when licensing a subject invention if the Contractor determines that the small business firm has a plan or proposal for marketing the invention which, if executed, is equally as likely to bring the invention to practical application as any plans or proposals from applicants that are not small business firms; provided, that the Contractor is also satisfied that the small business firm has the capability and resources to carry out its plan or proposal. The decision whether to give a preference in any specific case will be at the discretion of the contractor. However, the Contractor agrees that the Secretary of Commerce may review the Contractor's licensing program and decisions regarding small business applicants, and the Contractor will negotiate changes to its licensing policies, procedures, or practices with the Secretary of Commerce when that Secretary's review discloses that the Contractor could take reasonable steps to more effectively implement the requirements of this subparagraph (k)(4).
- (l) Communications.
- (1) The contractor shall direct any notification, disclosure, or request to DOE provided for in this clause to the DOE patent counsel assisting the DOE contracting activity, with a copy of the communication to the Contracting Officer.
- (2) Each exercise of discretion or decision provided for in this clause, except subparagraph (k)(4), is reserved for the DOE Patent Counsel and is not a claim or dispute and is not subject to the Contract Disputes Act of 1978.
- (3) Upon request of the DOE Patent Counsel or the contracting officer, the contractor shall provide any or all of the following:
- (i) a copy of the patent application, filing date, serial number and title, patent number, and issue date for any subject invention in any country in which the contractor has applied for a patent;
 - (ii) a report, not more often than annually, summarizing all subject inventions which were disclosed to DOE individually during the reporting period specified; or

- (iii) a report, prior to closeout of the contract, listing all subject inventions or stating that there were none.

**I.139 DEAR 952.227-13 PATENT RIGHTS-ACQUISITION BY THE GOVERNMENT
(SEP 1997)**

- (a) Definitions. "Invention", as used in this clause, means any invention or discovery which is or may be patentable or otherwise protectable under title 35 of the United States Code or any novel variety of plant that is or may be protectable under the Plant Variety Protection Act (7 U.S.C. 2321, et seq.).

"Practical application", as used in this clause, means to manufacture, in the case of a composition or product; to practice, in the case of a process or method; or to operate, in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are, to the extent permitted by law or Government regulations, available to the public on reasonable terms.

"Subject invention", as used in this clause, means any invention of the Contractor conceived or first actually reduced to practice in the course of or under this contract.

"Patent Counsel", as used in this clause, means the Department of Energy Patent Counsel assisting the procuring activity.

"DOE patent waiver regulations", as used in this clause, means the Department of Energy patent waiver regulations at 41 CFR 9-9.109- 6 or successor regulations. See 10 CFR part 784.

"Agency licensing regulations" and "applicable agency licensing regulations", as used in this clause, mean the Department of Energy patent licensing regulations at 10 CFR Part 781.

- (b) Allocations of principal rights.
 - (1) Assignment to the Government. The Contractor agrees to assign to the Government the entire right, title, and interest throughout the world in and to each subject invention, except to the extent that

rights are retained by the Contractor under subparagraph (b)(2) and paragraph (d) of this clause.

- (2) Greater rights determinations.
- (i) The contractor, or an employee-inventor after consultation with the Contractor, may request greater rights than the nonexclusive license and the foreign patent rights provided in paragraph (d) of this clause on identified inventions in accordance with the DOE patent waiver regulations. A request for a determination of whether the Contractor or the employee-inventor is entitled to acquire such greater rights must be submitted to the Patent Counsel with a copy to the Contracting Officer at the time of the first disclosure of the invention pursuant to subparagraph (e)(2) of this clause, or not later than 8 months thereafter, unless a longer period is authorized in writing by the Contracting Officer for good cause shown in writing by the Contractor. Each determination of greater rights under this contract shall be subject to paragraph (c) of this clause, unless otherwise provided in the greater rights determination, and to the reservations and conditions deemed to be appropriate by the Secretary of Energy or designee.
 - (ii) Within two (2) months after the filing of a patent application, the Contractor shall provide the filing date, serial number and title, a copy of the patent application (including an English-language version if filed in a language other than English), and, promptly upon issuance of a patent, provide the patent number and issue date for any subject invention in any country for which the Contractor has been granted title or the right to file and prosecute on behalf of the United States by the Department of Energy.
 - (iii) Not less than thirty (30) days before the expiration of the response period for any action required by the Patent and Trademark Office, notify the Patent Counsel of any decision not to continue prosecution of the application.
 - (iv) Upon request, the Contractor shall furnish the Government an irrevocable power to inspect and make copies of the patent application file.
- (c) Minimum rights acquired by the Government.

- (1) With respect to each subject invention to which the Department of Energy grants the Contractor principal or exclusive rights, the Contractor agrees as follows:
 - (i) The Contractor hereby grants to the Government a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced each subject invention throughout the world by or on behalf of the Government of the United States (including any Government agency).
 - (ii) The Contractor agrees that with respect to any subject invention in which DOE has granted it title, DOE has the right in accordance with the procedures in the DOE patent waiver regulations (10 CFR part 784) to require the Contractor, an assignee, or exclusive licensee of a subject invention to grant a nonexclusive, partially exclusive, or exclusive license in any field of use to a responsible applicant or applicants, upon terms that are reasonable under the circumstances, and if the Contractor, assignee, or exclusive licensee refuses such a request, DOE has the right to grant such a license itself if it determines that-- (A) Such action is necessary because the Contractor or assignee has not taken, or is not expected to take within a reasonable time, effective steps to achieve practical application of the subject invention in such field of use; (B) Such action is necessary to alleviate health or safety needs which are not reasonably satisfied by the Contractor, assignee, or their licensees; (C) Such action is necessary to meet requirements for public use specified by Federal regulations and such requirements are not reasonably satisfied by the Contractor, assignee, or licensees; or (D) Such action is necessary because the agreement required by paragraph (i) of this clause has neither been obtained nor waived or because a licensee of the exclusive right to use or sell any subject invention in the United States is in breach of such agreement.
 - (iii) The Contractor agrees to submit on request periodic reports no more frequently than annually on the utilization of a subject invention or on efforts at obtaining such utilization of a subject invention or on efforts at obtaining such utilization that are being made by the Contractor or its licensees or assignees. Such reports shall include information regarding the status of development, date of first commercial sale or use, gross royalties received by the Contractor, and such other data and

information as DOE may reasonably specify. The Contractor also agrees to provide additional reports as may be requested by DOE in connection with any march-in proceedings undertaken by that agency in accordance with subparagraph (c)(1)(ii) of this clause. To the extent data or information supplied under this section is considered by the Contractor, its licensee, or assignee to be privileged and confidential and is so marked, the Department of Energy agrees that, to the extent permitted by law, it will not disclose such information to persons outside the Government.

- (iv) The Contractor agrees, when licensing a subject invention, to arrange to avoid royalty charges on acquisitions involving Government funds, including funds derived through a Military Assistance Program of the Government or otherwise derived through the Government, to refund any amounts received as royalty charges on a subject invention in acquisitions for, or on behalf of, the Government, and to provide for such refund in any instrument transferring rights in the invention to any party.
 - (v) The Contractor agrees to provide for the Government's paid-up license pursuant to subparagraph (c)(1)(i) of this clause in any instrument transferring rights in a subject invention and to provide for the granting of licenses as required by subparagraph (c)(1)(ii) of this clause, and for the reporting of utilization information as required by subparagraph (c)(1)(iii) of this clause, whenever the instrument transfers principal or exclusive rights in a subject invention. (2) Nothing contained in this paragraph (c) shall be deemed to grant to the Government any rights with respect to any invention other than a subject invention.
- (d) Minimum rights to the Contractor.
- (1) The Contractor is hereby granted a revocable, nonexclusive, royalty-free license in each patent application filed in any country on a subject invention and any resulting patent in which the Government obtains title, unless the Contractor fails to disclose the subject invention within the times specified in subparagraph (e)(2) of this clause. The Contractor's license extends to its domestic subsidiaries and affiliates, if any, within the corporate structure of which the Contractor is a part and includes the right to grant

- sublicenses of the same scope to the extent the Contractor was legally obligated to do so at the time the contract was awarded. The license is transferable only with the approval of DOE except when transferred to the successor of that part of the Contractor's business to which the invention pertains.
- (2) The Contractor's domestic license may be revoked or modified by DOE to the extent necessary to achieve expeditious practical application of the subject invention pursuant to an application for an exclusive license submitted in accordance with applicable provisions in 37 CFR Part 404 and agency licensing regulations. This license will not be revoked in that field of use or the geographical areas in which the Contractor has achieved practical applications and continues to make the benefits of the invention reasonably accessible to the public. The license in any foreign country may be revoked or modified at the discretion of DOE to the extent the Contractor, its licensees, or its domestic subsidiaries or affiliates have failed to achieve practical application in that foreign country.
 - (3) Before revocation or modification of the license, DOE will furnish the Contractor a written notice of its intention to revoke or modify the license, and the Contractor will be allowed 30 days (or such other time as may be authorized by DOE for good cause shown by the Contractor) after the notice to show cause why the license should not be revoked or modified. The Contractor has the right to appeal, in accordance with applicable agency licensing regulations and 37 CFR Part 404 concerning the licensing of Government-owned inventions, any decision concerning the revocation or modification of its license.
 - (4) The Contractor may request the right to acquire patent rights to a subject invention in any foreign country where the Government has elected not to secure such rights, subject to the conditions in subparagraphs (d)(4)(i) through (d)(4)(vii) of this clause. Such request must be made in writing to the Patent Counsel as part of the disclosure required by subparagraph (e)(2) of this clause, with a copy to the DOE Contracting Officer. DOE approval, if given, will be based on a determination that this would best serve the national interest.
 - (i) The recipient of such rights, when specifically requested by DOE, and three years after issuance of a foreign patent disclosing the subject invention, shall furnish DOE a report

- stating: (A) The commercial use that is being made, or is intended to be made, of said invention, and (B) The steps taken to bring the invention to the point of practical application or to make the invention available for licensing.
- (ii) The Government shall retain at least an irrevocable, nonexclusive, paid-up license to make, use, and sell the invention throughout the world by or on behalf of the Government (including any Government agency) and States and domestic municipal governments, unless the Secretary of Energy or designee determines that it would not be in the public interest to acquire the license for the States and domestic municipal governments.
 - (iii) If noted elsewhere in this contract as a condition of the grant of an advance waiver of the Government's title to inventions under this contract, or, if no advance waiver was granted but a waiver of the Government's title to an identified invention is granted pursuant to subparagraph (b)(2) of this clause upon a determination by the Secretary of Energy that it is in the Government's best interest, this license shall include the right of the Government to sublicense foreign governments pursuant to any existing or future treaty or agreement with such foreign governments.
 - (iv) Subject to the rights granted in subparagraphs (d)(1), (2), and (3) of this clause, the Secretary of Energy or designee shall have the right to terminate the foreign patent rights granted in this subparagraph (d)(4) in whole or in part unless the recipient of such rights demonstrates to the satisfaction of the Secretary of Energy or designee that effective steps necessary to accomplish substantial utilization of the invention have been taken or within a reasonable time will be taken.
 - (v) Subject to the rights granted in subparagraphs (d)(1), (2), and (3) of this clause, the Secretary of Energy or designee shall have the right, commencing four years after foreign patent rights are accorded under this subparagraph (d)(4), to require the granting of a nonexclusive or partially exclusive license to a responsible applicant or applicants, upon terms reasonable under the circumstances, and in appropriate circumstances to terminate said foreign patent rights in whole or in part, following a hearing upon notice thereof to the public, upon a petition by an interested person justifying such hearing: (A) If

the Secretary of Energy or designee determines, upon review of such material as he deems relevant, and after the recipient of such rights or other interested person has had the opportunity to provide such relevant and material information as the Secretary or designee may require, that such foreign patent rights have tended substantially to lessen competition or to result in undue market concentration in any section of the United States in any line of commerce to which the technology relates; or (B) Unless the recipient of such rights demonstrates to the satisfaction of the Secretary of Energy or designee at such hearing that the recipient has taken effective steps, or within a reasonable time thereafter is expected to take such steps, necessary to accomplish substantial utilization of the invention.

- (vi) If the contractor is to file a foreign patent application on a subject invention, the Government agrees, upon written request, to use its best efforts to withhold publication of such invention disclosures for such period of time as specified by Patent Counsel, but in no event shall the Government or its employees be liable for any publication thereof.
 - (vii) Subject to the license specified in subparagraphs (d)(1), (2), and (3) of this clause, the contractor or inventor agrees to convey to the Government, upon request, the entire right, title, and interest in any foreign country in which the contractor or inventor fails to have a patent application filed in a timely manner or decides not to continue prosecution or to pay any maintenance fees covering the invention. To avoid forfeiture of the patent application or patent, the contractor or inventor shall, not less than 60 days before the expiration period for any action required by any patent office, notify the Patent Counsel of such failure or decision, and deliver to the Patent Counsel, the executed instruments necessary for the conveyance specified in this paragraph.
- (e) Invention identification, disclosures, and reports.
- (1) The Contractor shall establish and maintain active and effective procedures to assure that subject inventions are promptly identified and disclosed to Contractor personnel responsible for patent matters within 6 months of conception and/or first actual reduction

to practice, whichever occurs first in the performance of work under this contract. These procedures shall include the maintenance of laboratory notebooks or equivalent records and other records as are reasonably necessary to document the conception and/or the first actual reduction to practice of subject inventions, and records that show that the procedures for identifying and disclosing the inventions are followed. Upon request, the Contractor shall furnish the Contracting Officer a description of such procedures for evaluation and for determination as to their effectiveness.

- (2) The Contractor shall disclose each subject invention to the DOE Patent Counsel with a copy to the Contracting Officer within 2 months after the inventor discloses it in writing to Contractor personnel responsible for patent matters or, if earlier, within 6 months after the Contractor becomes aware that a subject invention has been made, but in any event before any on sale, public use, or publication of such invention known to the Contractor. The disclosure to DOE shall be in the form of a written report and shall identify the contract under which the invention was made and the inventor(s). It shall be sufficiently complete in technical detail to convey a clear understanding, to the extent known at the time of the disclosure, of the nature, purpose, operation, and physical, chemical, biological, or electrical characteristics of the invention. The disclosure shall also identify any publication, on sale, or public use of the invention and whether a manuscript describing the invention has been submitted for publication and, if so, whether it has been accepted for publication at the time of disclosure. In addition, after disclosure to DOE, the Contractor shall promptly notify Patent Counsel of the acceptance of any manuscript describing the invention for publication or of any on sale or public use planned by the Contractor. The report should also include any request for a greater rights determination in accordance with subparagraph (b)(2) of this clause. When an invention is disclosed to DOE under this paragraph, it shall be deemed to have been made in the manner specified in Sections (a)(1) and (a)(2) of 42 U.S.C. 5908, unless the Contractor contends in writing at the time the invention is disclosed that it was not so made.
- (3) The Contractor shall furnish the Contracting Officer the following:

- (i) Interim reports every 12 months (or such longer period as may be specified by the Contracting Officer) from the date of the contract, listing all subject inventions during that period, and including a statement that all subject inventions have been disclosed (or that there are not such inventions), and that such disclosure has been made in accordance with the procedures required by paragraph (e)(1) of this clause.
 - (ii) A final report, within 3 months after completion of the contracted work listing all subject inventions or containing a statement that there were no such inventions, and listing all subcontracts at any tier containing a patent rights clause or containing a statement that there were no such subcontracts.
- (4) The Contractor agrees to require, by written agreement, its employees, other than clerical and nontechnical employees, to disclose promptly in writing to personnel identified as responsible for the administration of patent matters and in a format suggested by the Contractor each subject invention made under contract in order that the Contractor can comply with the disclosure provisions of paragraph (c) of this clause, and to execute all papers necessary to file patent applications on subject inventions and to establish the Government's rights in the subject inventions. This disclosure format should require, as a minimum, the information required by subparagraph (e)(2) of this clause. (5) The Contractor agrees, subject to FAR 27.302(j), that the Government may duplicate and disclose subject invention disclosures and all other reports and papers furnished or required to be furnished pursuant to this clause.
- (f) Examination of records relating to inventions.
 - (1) The Contracting Officer or any authorized representative shall, until 3 years after final payment under this contract, have the right to examine any books (including laboratory notebooks), records, and documents of the Contractor relating to the conception or first actual reduction to practice of inventions in the same field of technology as the work under this contract to determine whether—
 - (i) Any such inventions are subject inventions;
 - (ii) The Contractor has established and maintains the procedures required by subparagraphs (e)(1) and (4) of this clause;

- (iii) The Contractor and its inventors have complied with the procedures.
 - (2) If the Contracting Officer learns of an unreported Contractor invention which the Contracting Officer believes may be a subject invention, the Contractor may be required to disclose the invention to DOE for a determination of ownership rights.
 - (3) Any examination of records under this paragraph will be subject to appropriate conditions to protect the confidentiality of the information involved.
- (g) Withholding of payment (NOTE: This paragraph does not apply to subcontracts).
- (1) Any time before final payment under this contract, the Contracting Officer may, in the Government's interest, withhold payment until a reserve not exceeding \$50,000 or 5 percent of the amount of this contract, whichever is less, shall have been set aside if, in the Contracting Officer's opinion, the Contractor fails to—
 - (i) Convey to the Government, using a DOE-approved form, the title and/or rights of the Government in each subject invention as required by this clause.
 - (ii) Establish, maintain, and follow effective procedures for identifying and disclosing subject inventions pursuant to subparagraph (e)(1) of this clause;
 - (iii) Disclose any subject invention pursuant to subparagraph (e)(2) of this clause;
 - (iv) Deliver acceptable interim reports pursuant to subparagraph (e)(3)(i) of this clause; or
 - (v) Provide the information regarding subcontracts pursuant to subparagraph (h)(4) of this clause.
 - (2) Such reserve or balance shall be withheld until the Contracting Officer has determined that the Contractor has rectified whatever deficiencies exist and has delivered all reports, disclosures, and other information required by this clause.
 - (3) Final payment under this contract shall not be made before the Contractor delivers to the Contracting Officer all disclosures of

subject inventions required by subparagraph (e)(2) of this clause, and acceptable final report pursuant to subparagraph (e)(3)(ii) of this clause, and the Patent Counsel has issued a patent clearance certification to the Contracting Officer.

- (4) The Contracting Officer may decrease or increase the sums withheld up to the maximum authorized above. No amount shall be withheld under this paragraph while the amount specified by this paragraph is being withheld under other provisions of the contract. The withholding of any amount or the subsequent payment thereof shall not be construed as a waiver of any Government rights.
- (h) Subcontracts.
- (1) The contractor shall include the clause at 48 CFR 952.227-11 (suitably modified to identify the parties) in all subcontracts, regardless of tier, for experimental, developmental, demonstration, or research work to be performed by a small business firm or domestic nonprofit organization, except where the work of the subcontract is subject to an Exceptional Circumstances Determination by DOE. In all other subcontracts, regardless of tier, for experimental, developmental, demonstration, or research work, the contractor shall include this clause (suitably modified to identify the parties). The contractor shall not, as part of the consideration for awarding the subcontract, obtain rights in the subcontractor's subject inventions.
 - (2) In the event of a refusal by a prospective subcontractor to accept such a clause the Contractor—
 - (i) Shall promptly submit a written notice to the Contracting Officer setting forth the subcontractor's reasons for such refusal and other pertinent information that may expedite disposition of the matter; and
 - (ii) Shall not proceed with such subcontract without the written authorization of the Contracting Officer.
 - (3) In the case of subcontracts at any tier, DOE, the subcontractor, and Contractor agree that the mutual obligations of the parties created by this clause constitute a contract between the subcontractor and DOE with respect to those matters covered by this clause.

- (4) The Contractor shall promptly notify the Contracting Officer in writing upon the award of any subcontract at any tier containing a patent rights clause by identifying the subcontractor, the applicable patent rights clause, the work to be performed under the subcontract, and the dates of award and estimated completion. Upon request of the Contracting Officer, the Contractor shall furnish a copy of such subcontract, and, no more frequently than annually, a listing of the subcontracts that have been awarded.
- (5) The contractor shall identify all subject inventions of the subcontractor of which it acquires knowledge in the performance of this contract and shall notify the Patent Counsel, with a copy to the contracting officer, promptly upon identification of the inventions.
 - (i) Preference United States industry. Unless provided otherwise, no Contractor that receives title to any subject invention and no assignee of any such Contractor shall grant to any person the exclusive right to use or sell any subject invention in the United States unless such person agrees that any products embodying the subject invention will be manufactured substantially in the United States. However, in individual cases, the requirement may be waived by the Government upon a showing by the Contractor or assignee that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the United States or that under the circumstances domestic manufacture is not commercially feasible.
 - (j) Atomic energy.
 - (1) No claim for pecuniary award of compensation under the provisions of the Atomic Energy Act of 1954, as amended, shall be asserted with respect to any invention or discovery made or conceived in the course of or under this contract.
 - (2) Except as otherwise authorized in writing by the Contracting Officer, the Contractor will obtain patent agreements to effectuate the provisions of subparagraph (e)(1) of this clause from all persons who perform any part of the work under this contract, except nontechnical personnel, such as clerical employees and manual laborers.

- (k) Background Patents.
- (1) Background Patent means a domestic patent covering an invention or discovery which is not a subject invention and which is owned or controlled by the Contractor at any time through the completion of this contract:
 - (i) Which the contractor, but not the Government, has the right to license to others without obligation to pay royalties thereon, and
 - (ii) Infringement of which cannot reasonably be avoided upon the practice of any specific process, method, machine, manufacture, or composition of matter (including relatively minor modifications thereof) which is a subject of the research, development, or demonstration work performed under this contract.
 - (2) The Contractor agrees to and does hereby grant to the Government a royalty-free, nonexclusive license under any background patent for purposes of practicing a subject of this contract by or for the Government in research, development, and demonstration work only.
 - (3) The Contractor also agrees that upon written application by DOE, it will grant to responsible parties, for purposes of practicing a subject of this contract, nonexclusive licenses under any background patent on terms that are reasonable under the circumstances. If, however, the Contractor believes that exclusive rights are necessary to achieve expeditious commercial development or utilization, then a request may be made to DOE for DOE approval of such licensing by the Contractor.
 - (4) Notwithstanding subparagraph (k)(3) of this clause, the contractor shall not be obligated to license any background patent if the Contractor demonstrates to the satisfaction of the Secretary of Energy or designee that:
 - (i) a competitive alternative to the subject matter covered by said background patent is commercially available or readily introducible from one or more other sources; or

- (ii) the Contractor or its licensees are supplying the subject matter covered by said background patent in sufficient quantity and at reasonable prices to satisfy market needs, or have taken effective steps or within a reasonable time are expected to take effective steps to so supply the subject matter.
- (l) Publication. It is recognized that during the course of the work under this contract, the Contractor or its employees may from time to time desire to release or publish information regarding scientific or technical developments conceived or first actually reduced to practice in the course of or under this contract. In order that public disclosure of such information will not adversely affect the patent interests of DOE or the Contractor, patent approval for release of publication shall be secured from Patent Counsel prior to any such release or publication.
- (m) Forfeiture of rights in unreported subject inventions.
 - (1) The Contractor shall forfeit and assign to the Government, at the request of the Secretary of Energy or designee, all rights in any subject invention which the Contractor fails to report to Patent Counsel within six months after the time the Contractor:
 - (i) Files or causes to be filed a United States or foreign patent application thereon; or
 - (ii) Submits the final report required by subparagraph (e)(2)(ii) of this clause, whichever is later.
 - (2) However, the Contractor shall not forfeit rights in a subject invention if, within the time specified in subparagraph (m)(1) of this clause, the Contractor:
 - (i) Prepares a written decision based upon a review of the record that the invention was neither conceived nor first actually reduced to practice in the course of or under the contract and delivers the decision to Patent Counsel, with a copy to the Contracting Officer; or
 - (ii) Contending that the invention is not a subject invention, the Contractor nevertheless discloses the invention and all facts pertinent to this contention to the Patent Counsel, with a copy to the Contracting Officer; or
 - (iii) Establishes that the failure to disclose did not result from the Contractor's fault or negligence.

- (3) Pending written assignment of the patent application and patents on a subject invention determined by the Secretary of Energy or designee to be forfeited (such determination to be a final decision under the Disputes clause of this contract), the Contractor shall be deemed to hold the invention and the patent applications and patents pertaining thereto in trust for the Government. The forfeiture provision of this paragraph (m) shall be in addition to and shall not supersede other rights and remedies which the Government may have with respect to subject inventions.

I.140 DEAR 952.231-71 INSURANCE-LITIGATION AND CLAIMS (AUG 2009)

- (a) The Contractor may, with the prior written authorization of the Contracting Officer, and shall, upon the request of the government, initiate litigation against third parties, including proceedings before administrative agencies, in connection with this contract. The Contractor shall proceed with such litigation in good faith and as directed from time to time by the Contracting Officer.
- (b) The Contractor shall give the Contracting Officer immediate notice in writing of any legal proceeding, including any proceeding before an administrative agency, filed against the contractor arising out of the performance of this contract. Except as otherwise directed by the Contracting Officer, in writing, the Contractor shall furnish immediately to the Contracting Officer copies of all pertinent papers received by the Contractor with respect to such action. The Contractor, with the prior written authorization of the Contracting Officer, shall proceed with such litigation in good faith and as directed from time to time by the contracting officer.
- (c)
 - (1) Except as provided in paragraph (c)(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; 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.

- (d) 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.
- (e) Except as provided in paragraphs (g) and (h) 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 or otherwise without regard to and as an exception to the limitation of cost or limitation of funds clause of this contract.
- (f) The government's liability under paragraph (e) 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.
- (g) Notwithstanding any other provision of this contract, the Contractor shall not be reimbursed for liabilities (and expenses incidental to such liabilities, including litigation costs, counsel fees, judgment and settlements)—
 - (1) which are otherwise unallowable by law or the provisions of this contract; or
 - (2) 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.
- (h) In addition to the cost reimbursement limitations contained in 48 CFR part 31, as supplemented in 48 CFR part 931, and notwithstanding any other provision of this contract, the Contractor's liabilities to third persons, including employees but excluding costs incidental to workers' compensation actions (and any expenses incidental to such liabilities, including litigation costs, counsel fees, judgments

and settlements), shall not be reimbursed if such liabilities were caused by contractor managerial personnel's—

- (1) willful misconduct,
 - (2) lack of good faith, or
 - (3) 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.
- (i) The burden of proof shall be upon the Contractor to establish that costs covered by paragraph (h) of this clause are allowable and reasonable if, after an initial review of the facts, the Contracting Officer challenges a specific cost or informs the Contractor that there is reason to believe that the cost results from willful misconduct, lack of good faith, or failure to exercise prudent business judgment by contractor managerial personnel.
- (j)
- (1) All litigation costs, including counsel fees, judgments and settlements shall be differentiated and accounted for by the Contractor so as to be separately identifiable. 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 (g)(1) of this clause is not allowable.
 - (4) The term "contractor's managerial personnel" is defined in the property clause in this contract.
- (k) 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 unreimbursable costs incurred in connection with contract performance.

- (l) If any suit or action is filed or any claim is made against the Contractor, the cost and expense of which may be reimbursable to the Contractor under this contract, and the risk of which is then uninsured or is insured for less than the amount claimed, the Contractor shall—
 - (1) immediately notify the Contracting Officer and promptly furnish copies of all pertinent papers received;
 - (2) authorize department representatives to collaborate with: in-house or DOE-approved outside counsel in settling or defending the claim; or counsel for the insurance carrier in settling or defending the claim if the amount of the liability claimed exceeds the amount of coverage, unless precluded by the terms of the insurance contract; and
 - (3) authorize department representatives to settle the claim or to defend or represent the Contractor in and/or to take charge of any litigation, if required by the Department, if the liability is not insured or covered by bond. In any action against more than one Department Contractor, the Department may require the Contractor to be represented by common counsel. Counsel for the Contractor may, at the Contractor's own expense, be associated with the Department representatives in any such claim or litigation.

1.141 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 PWS.
 - (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 Government.
- (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 Performance Work Statement;
 - (2) Constitutes a change as defined in the contract clause entitled "Changes;"
 - (3) In any manner causes an increase or decrease in the total estimated 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 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 (5) 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 thirty (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 Government 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 to the technical direction will be subject to the provisions of the clause entitled "Disputes."

I.142 DEAR 952.250-70 NUCLEAR HAZARDS INDEMNITY AGREEMENT (OCT 2005)

- (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 170d. of the Act, as that amount may be increased in accordance with section 170t., in the aggregate for each nuclear incident or precautionary evacuation occurring within the United States or \$500 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 section 234A of the Act, for violations of applicable DOE nuclear-safety related rules, regulations, or orders. If the contractor is a not-for-profit contractor, as defined by section 234Ad.(2), the total amount of civil penalties paid shall not exceed the total amount of fees paid within any 1-year period (as determined by the Secretary) under this contract.
- (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 section 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.

I.143 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. 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.

OFFICIAL AGENCY LETTERHEAD

TO: Participating Vendor

SUBJECT: OFFICIAL TRAVEL OF GOVERNMENT CONTRACTOR

(FULL NAME OF TRAVELER), the bearer of this letter is an employee of (COMPANY NAME) which has a contract with this agency under Government contract (CONTRACT NUMBER). During the period of the contract (GIVE DATES), AND WITH THE APPROVAL OF THE CONTRACT VENDOR, the employee is eligible and authorized to use available travel discount rates in accordance with Government contracts and/or agreements. Government Contract City Pair fares are not available to Contractors.

SIGNATURE, Title and telephone number of Contracting Officer

I.144 DEAR 970.5203-1 MANAGEMENT CONTROLS (JUN 2007)

- (a)
 - (1) The contractor shall be responsible for maintaining, as an integral part of its organization, effective systems of management controls for both administrative and programmatic functions. Management controls comprise the plan of organization, methods, and procedures adopted including consideration of outsourcing of functions by management to reasonably ensure that: the mission and functions assigned to the contractor are properly executed; efficient and effective operations are promoted; resources are safeguarded against waste, loss, mismanagement, unauthorized use, or misappropriation; all encumbrances and costs that are incurred under the contract and fees that are earned are in compliance with applicable clauses and other current terms, conditions, and intended purposes; all collections accruing to the contractor in connection with the work under this contract, expenditures, and all other transactions and assets are properly recorded, managed, and reported; and financial, statistical, and other reports necessary to maintain accountability and managerial control are accurate, reliable, and timely.

- (2) The systems of controls employed by the contractor shall be documented and satisfactory to DOE.
 - (3) Such systems shall be an integral part of the contractor's management functions, including defining specific roles and responsibilities for each level of management, and holding employees accountable for the adequacy of the management systems and controls in their areas of assigned responsibility.
 - (4) The contractor shall, as part of the internal audit program required elsewhere in this contract, periodically review the management systems and controls employed in programs and administrative areas to ensure that they are adequate to provide reasonable assurance that the objectives of the systems are being accomplished and that these systems and controls are working effectively. Annually, or at other intervals directed by the contracting officer, the contractor shall supply to the contracting officer copies of the reports reflecting the status of recommendations resulting from management audits performed by its internal audit activity and any other audit organization. This requirement may be satisfied in part by the reports required under paragraph (i) of 970.5232-3, Accounts, records, and inspection.
- (b) The contractor shall be responsible for maintaining, as a part of its operational responsibilities, a baseline quality assurance program that implements documented performance, quality standards, and control and assessment techniques.

I.145 DEAR 970.5203-2 PERFORMANCE IMPROVEMENT AND COLLABORATION (MAY 2006)

- (a) The contractor agrees that it shall affirmatively identify, evaluate, and institute practices, where appropriate, that will improve performance in the areas of environmental and health, safety, scientific and technical, security, business and administrative, and any other areas of performance in the management and operation of the contract. This may entail the alteration of existing practices or the institution of new procedures to more effectively or efficiently perform any aspect of contract performance or reduce overall cost of operation under the contract. Such improvements may result from changes in organization, outsourcing decisions, simplification of systems while retaining necessary controls, or any other

approaches consistent with the statement of work and performance measures of this contract.

- (b) The contractor agrees to work collaboratively with the Department, all other management and operating, DOE major facilities management contractors and affiliated contractors which manage or operate DOE sites or facilities for the following purposes: (i) to exchange information generally, (ii) to evaluate concepts that may be of benefit in resolving common issues, in confronting common problems, or in reducing costs of operations, and (iii) to otherwise identify and implement DOE-complex-wide management improvements discussed in paragraph (a). In doing so, it shall also affirmatively provide information relating to its management improvements to such contractors, including lessons learned, subject to security considerations and the protection of data proprietary to third parties.
- (c) The contractor may consult with the contracting officer in those instances in which improvements being considered pursuant to paragraph (a) involve the cooperation of the DOE. The contractor may request the assistance of the contracting officer in the communication of the success of improvements to other management and operating contractors in accordance with paragraph (b) of this clause.
- (d) The contractor shall notify the contracting officer and seek approval where necessary to fulfill its obligations under the contract. Compliance with this clause in no way alters the obligations of the Contractor under any other provision of this contract.

I.146 DEAR 970.5204-1 COUNTERINTELLIGENCE (DEC 2000)

- (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 5670.3, Counterintelligence Program; 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.147 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 (c) 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 Environmental, 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.148 DEAR 970.5204-3 ACCESS TO AND OWNERSHIP OF RECORDS (JUL 2005)

- (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 shall be the property of the Government and shall be 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 the contract.

- (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. [The contracting officer shall identify which of the following categories of records will be included in the 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 non-employee patient medical/health-related records, except for those records described by the contract as being maintained in Privacy Act systems of records. [70 FR 37010 Jun. 28, 2005]
 - (2) Confidential contractor financial information, 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 48CFR 970.5232-3, Accounts, Records, and Inspection, 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.

I.149 DEAR 970.5223-1 -- INTEGRATION OF ENVIRONMENT, SAFETY, AND HEALTH INTO WORK PLANNING AND EXECUTION (DEC 2000)

- (a) For the purposes of this clause,
 - (1) Safety encompasses environment, safety and health, including pollution prevention and waste minimization; and
 - (2) Employees include subcontractor employees.
- (b) In performing work under this contract, the contractor shall perform work safely, in a manner that ensures adequate protection for employees, the public, and the environment, and shall be accountable for the safe performance of work. The contractor shall exercise a degree of care commensurate with the work and the associated hazards. The contractor shall ensure that management of environment, safety and health (ES&H) functions and activities becomes an integral but visible part of the contractor's work planning and execution processes. The contractor shall, in the performance of work, ensure that:
 - (1) Line management is responsible for the protection of employees, the public, and the environment. Line management includes those contractor and subcontractor employees managing or supervising employees performing work.
 - (2) Clear and unambiguous lines of authority and responsibility for ensuring (ES&H) are established and maintained at all organizational levels.
 - (3) Personnel possess the experience, knowledge, skills, and abilities that are necessary to discharge their responsibilities.

- (4) Resources are effectively allocated to address ES&H, programmatic, and operational considerations. Protecting employees, the public, and the environment is a priority whenever activities are planned and performed.
 - (5) Before work is performed, the associated hazards are evaluated and an agreed-upon set of ES&H standards and requirements are established which, if properly implemented, provide adequate assurance that employees, the public, and the environment are protected from adverse consequences.
 - (6) Administrative and engineering controls to prevent and mitigate hazards are tailored to the work being performed and associated hazards. Emphasis should be on designing the work and/or controls to reduce or eliminate the hazards and to prevent accidents and unplanned releases and exposures.
 - (7) The conditions and requirements to be satisfied for operations to be initiated and conducted are established and agreed-upon by DOE and the contractor. These agreed-upon conditions and requirements are requirements of the contract and binding upon the contractor. The extent of documentation and level of authority for agreement shall be tailored to the complexity and hazards associated with the work and shall be established in a Safety Management System.
- (c) The contractor shall manage and perform work in accordance with a documented Safety Management System (System) that fulfills all conditions in paragraph (b) of this clause at a minimum. Documentation of the System shall describe how the contractor will:
- (1) Define the scope of work;
 - (2) Identify and analyze hazards associated with the work;
 - (3) Develop and implement hazard controls;
 - (4) Perform work within controls; and

- (5) Provide feedback on adequacy of controls and continue to improve safety management.
- (d) The System shall describe how the contractor will establish, document, and implement safety performance objectives, performance measures, and commitments in response to DOE program and budget execution guidance while maintaining the integrity of the System. The System shall also describe how the contractor will measure system effectiveness.
- (e) The contractor shall submit to the contracting officer documentation of its System for review and approval. Dates for submittal, discussions, and revisions to the System will be established by the contracting officer. Guidance on the preparation, content, review, and approval of the System will be provided by the contracting officer. On an annual basis, the contractor shall review and update, for DOE approval, its safety performance objectives, performance measures, and commitments consistent with and in response to DOE's program and budget execution guidance and direction. Resources shall be identified and allocated to meet the safety objectives and performance commitments as well as maintain the integrity of the entire System. Accordingly, the System shall be integrated with the contractor's business processes for work planning, budgeting, authorization, execution, and change control.
- (f) The contractor shall comply with, and assist the Department of Energy in complying with, ES&H requirements of all applicable laws and regulations, and applicable directives identified in the clause of this contract entitled "Laws, Regulations, and DOE Directives." The contractor shall cooperate with Federal and non-Federal agencies having jurisdiction over ES&H matters under this contract.
- (g) The contractor shall promptly evaluate and resolve any noncompliance with applicable ES&H requirements and the System. If the contractor fails to provide resolution or if, at any time, the contractor's acts or failure to act causes substantial harm or an imminent danger to the environment or health and safety of employees or the public, the contracting officer may issue an order stopping work in whole or in part. Any stop work order issued by a contracting officer under this clause (or issued by the contractor to a subcontractor in accordance with paragraph (i) of this clause) shall be without prejudice to any other legal or contractual rights of the Government. In the event that the contracting officer issues a stop

work order, an order authorizing the resumption of the work may be issued at the discretion of the contracting officer. The contractor shall not be entitled to an extension of time or additional fee or damages by reason of, or in connection with, any work stoppage ordered in accordance with this clause.

- (h) Regardless of the performer of the work, the contractor is responsible for compliance with the ES&H requirements applicable to this contract. The contractor is responsible for flowing down the ES&H requirements applicable to this contract to subcontracts at any tier to the extent necessary to ensure the contractor's compliance with the requirements.
- (i) The contractor shall include a clause substantially the same as this clause in subcontracts involving complex or hazardous work on site at a DOE-owned or-leased facility. Such subcontracts shall provide for the right to stop work under the conditions described in paragraph (g) of this clause. Depending on the complexity and hazards associated with the work, the contractor may choose not to require the subcontractor to submit a Safety Management System for the contractor's review and approval.

I.150 DEAR 970.5223-2 AFFIRMATIVE PROCUREMENT PROGRAM AS MODIFIED BY DOE ACQUISITION LETTER 2008-05 (APR 2008)

- (a) In the performance of this contract, the Contractor shall comply with the requirements of Executive Order 13423 and the U.S. Department of Energy (DOE) Affirmative Procurement Program Guidance. This guidance includes requirements concerning environmentally preferable products and services, recycled content products and biobased products. This guidance is available on the Internet.
- (b) In complying with the requirements of paragraph (a) of this clause, the Contractor shall coordinate its activities with the DOE Recycling Coordinator. Reports required by paragraph (c) of this clause shall be submitted through the DOE Recycling Coordinator.
- (c) The Contractor shall prepare and submit reports, at the end of the Federal fiscal year, on matters related to the acquisition of items designated in EPA's Comprehensive Procurement Guidelines that Federal agencies and their Contractors are to procure with recovered/recycled content.

- (d) If the Contractor subcontracts a significant portion of the operation of the Government facility which includes the acquisition of items designated in EPA's Comprehensive Procurement Guidelines, the subcontract shall contain a clause substantially the same as this clause. The EPA Comprehensive Procurement Guidelines identify products which Federal agencies and their Contractors are to procure with recycled content pursuant to 40 CFR 247. Examples of such a subcontract would be operation of the facility supply function, construction or remodeling at the facility, or maintenance of the facility motor vehicle fleet. In situations in which the facility management contractor can reasonably determine the amount of products with recovered/recycled content to be acquired under the subcontract, the facility management contractor is not required to flow down the reporting requirement of this clause. Instead, the facility management contractor may include such quantities in its own report and include an agreement in the subcontract that such products will be acquired with recovered/recycled content and that the subcontractor will advise if it is unable to procure such products with recovered/recycled content because the product is not available (i) competitively within a reasonable time, (ii) at a reasonable price, or, (iii) within the performance requirements. If reports are required of the subcontractor, such reports shall be submitted to the facility management contractor. 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.
- (e) When this clause is used in a subcontract, the word "Contractor" will be understood to mean "subcontractor" and the term "DOE Recycling Coordinator" will be understood to mean "Contractor Recycling Coordinator."

I.151 DEAR 970.5223-4 WORKPLACE SUBSTANCE ABUSE PROGRAMS AT DOE SITES (DEC 2000)

- (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.
 - (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.152 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.153 DEAR 970.5223-7 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 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 at 48 CFR 970.5243-1 Changes. 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. This requirement should not be flowed down to subcontractors.

(f) In complying with the requirements of paragraph (c) of this clause, the Contractor shall coordinate its activities with and submit required reports through the Environmental Sustainability Coordinator or equivalent position.

(g) The Contractor shall prepare and submit performance reports 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 [see FAR 52.249-6, Termination (Cost Reimbursement)].

(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 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.154 DEAR 970.5226-2 WORKFORCE RESTRUCTURING UNDER SECTION 3161 OF THE NATIONAL DEFENSE AUTHORIZATION ACT FOR FISCAL YEAR 1993 (DEC 2000)

Consistent with the objectives of Section 3161 of the National Defense Authorization Act for Fiscal Year 1993, 42 U.S.C. 7274h, in instances where the Department of Energy has determined that a change in workforce at a Department of Energy Defense Nuclear Facility is necessary, the contractor agrees to (1) comply with the Department of Energy Workforce Restructuring Plan for the facility, if applicable, and (2) use its best efforts to accomplish workforce restructuring or displacement so as to mitigate social and economic impacts.

The requirements of this clause shall be included in subcontracts at any tier (except subcontracts for commercial items pursuant to 41 U.S.C. 403) expected to exceed \$500,000.

I.155 DEAR 970.5227-1 RIGHTS IN DATA—FACILITIES (DEC 2000)

(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 work for others 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 for 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. DE-AC30-10CC40020 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. DE-AC30-10CC40020. 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 in lieu thereof:

Restricted Rights Notice—Short Form

Use, reproduction, or disclosure is subject to restrictions set forth in the long form notice of DOE contract no. DE-AC30-10CC40020 with LATA Environmental Services of Kentucky, LLC.

(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.

I.156 DEAR 970.5231-4 PREEXISTING CONDITIONS (DEC 2000) ALTERNATE II (DEC 2000)

- (a) The Department of Energy agrees to reimburse the Contractor, and the Contractor shall not be held responsible, for any liability (including without limitation, a claim involving strict or absolute liability and any civil fine or penalty), expense, or remediation cost, but limited to those of a civil nature, which may be incurred by, imposed on, or asserted against the Contractor arising out of any condition, act, or failure to act which occurred before the contractor assumed responsibility on July 21, 2010. To the extent the acts or omissions of the contractor cause or add to any liability, expense or remediation cost resulting from conditions in existence prior to July 21, 2010, the contractor shall be responsible in accordance with the terms and conditions of this contract.
- (b) The obligations of the Department of Energy under this clause are subject to the availability of appropriated funds.
- (c) The contractor has the duty to inspect the facilities and sites and timely identify to the contracting officer those conditions which it believes could give rise to a liability, obligation, loss, damage, penalty, fine, claim, action, suit, cost, expense, or disbursement or areas of actual or potential noncompliance with the terms and conditions of this contract or applicable law or regulation. The contractor has the responsibility to take corrective

action, as directed by the contracting officer and as required elsewhere in this contract.

AMERICAN RECOVERY AND REINVESTMENT ACT (ARRA) CLAUSES

I.157 FAR 52.203-15 WHISTLEBLOWER PROTECTIONS UNDER THE AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009 (MAR 2009)

- (a) The Contractor shall post notice of employees rights and remedies for whistleblower protections provided under section 1553 of the American Recovery and Reinvestment Act of 2009 (Pub. L. 111-5).
- (b) The Contractor shall include the substance of this clause including this paragraph (b) in all subcontracts.

I.158 FAR 52.204-11 AMERICAN RECOVERY AND REINVESTMENT ACT – REPORTING REQUIREMENTS (MAR 2009)

- (a) Definitions. As used in this clause—

“Contract”, as defined in FAR 2.101, means a mutually binding legal relationship obligating the seller to furnish the supplies or services (including construction) and the buyer to pay for them. It includes all types of commitments that obligate the Government to an expenditure of appropriated funds and that, except as otherwise authorized, are in writing. In addition to bilateral instruments, contracts include (but are not limited to) awards and notices of awards; job orders or task letters issued under basic ordering agreements; letter contracts; orders, such as purchase orders, under which the contract becomes effective by written acceptance or performance; and bilateral contract modifications. Contracts do not include grants and cooperative agreements covered by 31 U.S.C. 6301, et seq. For discussion of various types of contracts, see FAR Part 16.

“First-tier subcontract” means a subcontract awarded directly by a Federal Government prime contractor whose contract is funded by the Recovery Act.

“Jobs created” means an estimate of those new positions created and filled, or previously existing unfilled positions that are filled, as a result of funding by the American Recovery and Reinvestment Act of 2009 (Recovery Act). This definition covers only prime contractor positions established in the United States and outlying areas (see definition in FAR 2.101). The number shall be expressed

as "full-time equivalent" (FTE), calculated cumulatively as all hours worked divided by the total number of hours in a full-time schedule, as defined by the contractor. For instance, two full-time employees and one part-time employee working half days would be reported as 2.5 FTE in each calendar quarter.

"Jobs retained" means an estimate of those previously existing filled positions that are retained as a result of funding by the American Recovery and Reinvestment Act of 2009 (Recovery Act). This definition covers only prime contractor positions established in the United States and outlying areas (see definition in FAR 2.101). The number shall be expressed as "full-time equivalent" (FTE), calculated cumulatively as all hours worked divided by the total number of hours in a full-time schedule, as defined by the contractor. For instance, two full-time employees and one part-time employee working half days would be reported as 2.5 FTE in each calendar quarter.

"Total compensation" means the cash and noncash dollar value earned by the executive during the contractor's past fiscal year of the following (for more information see 17 CFR 229.402(c)(2)):

- (1) Salary and bonus.
 - (2) Awards of stock, stock options, and stock appreciation rights. Use the dollar amount recognized for financial statement reporting purposes with respect to the fiscal year in accordance with the Statement of Financial Accounting Standards No. 123 (Revised 2004) (FAS 123R), Shared Based Payments.
 - (3) Earnings for services under non-equity incentive plans. Does not include group life, health, hospitalization or medical reimbursement plans that do not discriminate in favor of executives, and are available generally to all salaried employees.
 - (4) Change in pension value. This is the change in present value of defined benefit and actuarial pension plans.
 - (5) Above-market earnings on deferred compensation which is not tax-qualified.
 - (6) Other compensation. For example, severance, termination payments, value of life insurance paid on behalf of the employee, perquisites or property if the value for the executive exceeds \$10,000.
- (b) This contract requires the contractor to provide products and/or services that are funded under the American Recovery and Reinvestment Act of 2009 (Recovery Act). Section 1512(c) of the Recovery Act requires each contractor to report on its use of Recovery Act funds under this contract. These reports will be made available to the public.

- (c) Reports from contractors for all work funded, in whole or in part, by the Recovery Act, and for which an invoice is submitted prior to June 30, 2009, are due no later than July 10, 2009. Thereafter, reports shall be submitted no later than the 10th day after the end of each calendar quarter.
- (d) The Contractor shall report the following information, using the online reporting tool available at www.FederalReporting.gov.
 - (1) The Government contract and order number, as applicable.
 - (2) The amount of Recovery Act funds invoiced by the contractor for the reporting period. A cumulative amount from all the reports submitted for this action will be maintained by the government's on-line reporting tool.
 - (3) A list of all significant services performed or supplies delivered, including construction, for which the contractor invoiced in this calendar quarter.
 - (4) Program or project title, if any.
 - (5) A description of the overall purpose and expected outcomes or results of the contract, including significant deliverables and, if appropriate, associated units of measure.
 - (6) An assessment of the contractor's progress towards the completion of the overall purpose and expected outcomes or results of the contract (i.e., not started, less than 50 percent completed, completed 50 percent or more, or fully completed). This covers the contract (or portion thereof) funded by the Recovery Act.
 - (7) A narrative description of the employment impact of work funded by the Recovery Act. This narrative should be cumulative for each calendar quarter and only address the impact on the contractor's workforce. At a minimum, the contractor shall provide—
 - (i) A brief description of the types of jobs created and jobs retained in the United States and outlying areas (see definition in FAR 2.101). This description may rely on job titles, broader labor categories, or the contractor's existing practice for describing jobs as long as the terms used are widely understood and describe the general nature of the work; and
 - (ii) An estimate of the number of jobs created and jobs retained by the prime contractor, in the United States and outlying areas. A job cannot be reported as both created and retained.
 - (8) Names and total compensation of each of the five most highly compensated officers of the Contractor for the calendar year in which the contract is awarded if—
 - (i) In the Contractor's preceding fiscal year, the Contractor received—
 - (A) 80 percent or more of its annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants) and cooperative agreements; and

- (B) \$25,000,000 or more in annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants) and cooperative agreements; and
 - (ii) The public does not have access to information about the compensation of the senior executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986.
- (9) For subcontracts valued at less than \$25,000 or any subcontracts awarded to an individual, or subcontracts awarded to a subcontractor that in the previous tax year had gross income under \$300,000, the Contractor shall only report the aggregate number of such first tier subcontracts awarded in the quarter and their aggregate total dollar amount.
- (10) For any first-tier subcontract funded in whole or in part under the Recovery Act, that is over \$25,000 and not subject to reporting under paragraph 9, the contractor shall require the subcontractor to provide the information described in (i), (ix), (x), and (xi) below to the contractor for the purposes of the quarterly report. The contractor shall advise the subcontractor that the information will be made available to the public as required by section 1512 of the Recovery Act. The contractor shall provide detailed information on these first-tier subcontracts as follows:
- (i) Unique identifier (DUNS Number) for the subcontractor receiving the award and for the subcontractor's parent company, if the subcontractor has a parent company.
 - (ii) Name of the subcontractor.
 - (iii) Amount of the subcontract award.
 - (iv) Date of the subcontract award.
 - (v) The applicable North American Industry Classification System (NAICS) code.
 - (vi) Funding agency.
 - (vii) A description of the products or services (including construction) being provided under the subcontract, including the overall purpose and expected outcomes or results of the subcontract.
 - (viii) Subcontract number (the contract number assigned by the prime contractor).
 - (ix) Subcontractor's physical address including street address, city, state, and country. Also include the nine-digit zip code and congressional district if applicable.
 - (x) Subcontract primary performance location including street address, city, state, and country. Also include the nine-digit zip code and congressional district if applicable.
 - (xi) Names and total compensation of each of the subcontractor's five most highly compensated officers, for the calendar year in which the subcontract is awarded if—

- (A) In the subcontractor's preceding fiscal year, the subcontractor received—
 - (1) 80 percent or more of its annual gross revenues in Federal contracts (and subcontracts), loans, grants (and subgrants), and cooperative agreements; and
 - (2) \$25,000,000 or more in annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants), and cooperative agreements; and
- (B) The public does not have access to information about the compensation of the senior executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986.

I.153 FAR 52.215-2 AUDIT AND RECORDS – NEGOTIATION (MAR 2009) ALTERNATE I (MAR 2009)

- (a) As used in this clause, "records" includes books, documents, accounting procedures and practices, and other data, regardless of type and regardless of whether such items are in written form, in the form of computer data, or in any other form.
- (b) Examination of costs. If this is a cost-reimbursement, incentive, time-and-materials, labor-hour, or price redeterminable contract, or any combination of these, the Contractor shall maintain and the Contracting Officer, or an authorized representative of the Contracting Officer, shall have the right to examine and audit all records and other evidence sufficient to reflect properly all costs claimed to have been incurred or anticipated to be incurred directly or indirectly in performance of this contract. This right of examination shall include inspection at all reasonable times of the Contractor's plants, or parts of them, engaged in performing the contract.
- (c) Cost or pricing data. If the Contractor has been required to submit cost or pricing data in connection with any pricing action relating to this contract, the Contracting Officer, or an authorized representative of the Contracting Officer, in order to evaluate the accuracy, completeness, and currency of the cost or pricing data, shall have the right to examine and audit all of the Contractor's records, including computations and projections, related to—
 - (1) The proposal for the contract, subcontract, or modification;
 - (2) The discussions conducted on the proposal(s), including those related to negotiating;
 - (3) Pricing of the contract, subcontract, or modification; or
 - (4) Performance of the contract, subcontract or modification.

- (d) Comptroller General or Inspector General.
- (1) The Comptroller General of the United States, an appropriate Inspector General appointed under section 3 or 8G of the Inspector General Act of 1978 (5 U.S.C. App.), or an authorized representative of either of the foregoing officials, shall have access to and the right to—
 - (i) Examine any of the Contractor's or any subcontractor's records that pertain to and involve transactions relating to this contract or a subcontract hereunder; and
 - (ii) Interview any officer or employee regarding such transactions.
 - (2) This paragraph may not be construed to require the Contractor or subcontractor to create or maintain any record that the Contractor or subcontractor does not maintain in the ordinary course of business or pursuant to a provision of law.
- (e) Reports. If the Contractor is required to furnish cost, funding, or performance reports, the Contracting Officer or an authorized representative of the Contracting Officer shall have the right to examine and audit the supporting records and materials, for the purpose of evaluating—
- (1) The effectiveness of the Contractor's policies and procedures to produce data compatible with the objectives of these reports; and
 - (2) The data reported.
- (f) Availability. The Contractor shall make available at its office at all reasonable times the records, materials, and other evidence described in paragraphs (a), (b), (c), (d), and (e) of this clause, for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in Subpart 4.7, Contractor Records Retention, of the Federal Acquisition Regulation (FAR), or for any longer period required by statute or by other clauses of this contract. In addition—
- (1) If this contract is completely or partially terminated, the Contractor shall make available the records relating to the work terminated until 3 years after any resulting final termination settlement; and
 - (2) The Contractor shall make available records relating to appeals under the Disputes clause or to litigation or the settlement of claims arising under or relating to this contract until such appeals, litigation, or claims are finally resolved.
- (g)
- (1) Except as provided in paragraph (g)(2) of this clause, the Contractor shall insert a clause containing all the terms of this clause, including this paragraph (g), in all subcontracts under this contract. The clause may be altered only as necessary to identify properly the contracting parties and the Contracting Officer under the Government prime contract.

- (2) The authority of the Inspector General under paragraph (d)(1)(ii) of this clause does not flow down to subcontracts.

The clause may be altered only as necessary to identify properly the contracting parties and the Contracting Officer under the Government prime contract.

I.154 FAR 52.225-23 REQUIRED USE OF AMERICAN IRON, STEEL, AND OTHER MANUFACTURED GOODS – BUY AMERICAN ACT – CONSTRUCTION MATERIALS UNDER TRADE AGREEMENTS (AUG 2009)

- (a) Definitions. As used in this clause—

“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.

“Domestic construction material” means—

- (1) An unmanufactured construction material mined or produced in the United States; or
- (2) A construction material manufactured in the United States.

“Foreign construction material” means a construction material other than a domestic construction material.

“Free trade agreement (FTA) country construction material” means a construction material that—

- (1) Is wholly the growth, product, or manufacture of an 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 an FTA country into a new and different construction material distinct from the materials from which it was transformed.

“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.

"Manufactured construction material" means any construction material that is not unmanufactured construction material.

"Recovery Act designated country" means any of the following countries:

(1) A World Trade Organization Government Procurement Agreement (WTO GPA) country (Aruba, Austria, Belgium, Bulgaria, Canada, 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, Netherlands, Norway, Poland, Portugal, Romania, Singapore, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Taiwan, or United Kingdom);

(2) A Free Trade Agreement country (FTA)(Australia, Bahrain, Canada, Chile, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Israel, Mexico, Morocco, Nicaragua, Oman, Peru, or Singapore); or

(3) A least developed country (Afghanistan, Angola, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, Central African Republic, Chad, Comoros, Democratic Republic of Congo, Djibouti, East Timor, Equatorial Guinea, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, Kiribati, Laos, Lesotho, Liberia, Madagascar, Malawi, Maldives, Mali, Mauritania, Mozambique, Nepal, Niger, Rwanda, Samoa, Sao Tome and Principe, Senegal, Sierra Leone, Solomon Islands, Somalia, Tanzania, Togo, Tuvalu, Uganda, Vanuatu, Yemen, or Zambia).

"Recovery Act designated country construction material" means a construction material that is a WTO GPA country construction material, an FTA country construction material, or a least developed country construction material.

"Steel" means an alloy that includes at least 50 percent iron, between .02 and 2 percent carbon, and may include other elements.

"United States" means the 50 States, the District of Columbia, and outlying areas.

"Unmanufactured construction material" means raw material brought to the construction site for incorporation into the building or work that has not been—

(1) Processed into a specific form and shape; or

(2) Combined with other raw material to create a material that has different properties than the properties of the individual raw materials.

"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) The restrictions of section 1605 of the American Recovery and Reinvestment Act of 2009 (Pub. L. 111-5) (Recovery Act) and the Buy American Act (41 U.S.C. 10a–10d) do not apply to Recovery Act designated country construction material. Consistent with U.S. obligations under international agreements, this clause implements—
 - (i) Section 1605 of the Recovery Act by requiring, unless an exception applies, that all iron, steel, and other manufactured goods used as construction material in the project are produced in the United States; and
 - (ii) The Buy American Act by providing a preference for unmanufactured domestic construction material.
- (2) The Contractor shall use only domestic or Recovery Act 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 the construction materials or components listed by the Government as follows:

[Contracting Officer to list applicable excepted materials or indicate “none”.]

- (4) The Contracting Officer may add other 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.
 - (A) The cost of domestic iron, steel, or other manufactured goods used as construction material is unreasonable when the cumulative cost of such material will increase the overall cost of the contract by more than 25 percent;
 - (B) The cost of unmanufactured construction material is unreasonable when the cost of such material exceeds the cost of foreign material by more than 6 percent;
 - (ii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality; or
 - (iii) The application of the restriction of section 1605 of the Recovery Act or the Buy American Act to a particular construction material would be inconsistent with the public interest.

- (c) Request for determination of inapplicability of section 1605 of the Recovery Act or the Buy American Act.
- (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) Cost;
 - (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)(4) of this clause.
 - (ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed cost comparison table in the format in paragraph (d) of this clause.
 - (iii) The cost of construction material shall include all delivery costs to the construction site and any applicable duty.
 - (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 section 1605 of the Recovery Act or the Buy American Act 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 cost 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 section 1605 of the Recovery Act or the Buy American Act applies, use of foreign construction material other than that covered by trade agreements is noncompliant with the applicable Act.

- (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:

Construction Material Description	Unit of Measure	Quantity	Cost (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.]			