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PART I - THE SCHEDULE

SECTION B

SUPPLIES OR SERVICES AND PRICES/COSTS

SECTION B

SUPPLIES OR SERVICES AND PRICES/COSTS

B.01 TYPE OF CONTRACT AND SERVICES BEING ACQUIRED

B.01.1 DOE-B-2006 Firm-Fixed-Price Contract (OCT 2014)

(a) This is a firm-fixed-price contract. The Contractor shall provide the following Services at the fixed unit prices specified in Table B.02 Price Schedule

(b) Payments of the fixed unit prices and the total contract price will be made in accordance with G.05 DOE-G-2005 Billing Instructions (Oct 2014).

(End of Clause)

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B.01.2 DOE-B-2012 Supplies/Services Being Procured/Delivery Requirements (OCT 2014)

The Contractor shall furnish all personnel, facilities, equipment, material, supplies, and services (except as may be expressly set for in this contract as furnished by the Government) and otherwise do all things necessary for, or incident to, the performance of work as described in Section C C.04 Scope of Work.

(End of Clause)

B.02 PRICING SCHEDULE

Term: Year 1: 12/07/2017 through 12/06/2018 Year 2: 12/07/2018 through 12/06/2019

CLIN (Contract Line Item Number)	Schedule of Supplies / Services	Quantity	Total Price
0001	Radiological Risk Assessment TA-54 Area G, Base Year 1 – Phase 3C and Base Year 2 Phase 3D	1	\$1,973,305
Total CLIN Price			\$1,973,305

B.03 LIMITATION OF GOVERNMENT'S OBLIGATION

- (a) If a firm-fixed-price contract is incrementally funded, in the event of termination before it is fully funded the Government's maximum liability for each CLIN will be the lower of the amount of funds allotted to the CLIN or the amount payable to the contractor per the Termination for Convenience (Fixed-Price) clause of this contract. For each CLIN there is:
 - (1) a fixed price for the action;
 - (2) a fixed amount of work that corresponds to the firm-fixed-price;
 - (3) a planned funding schedule that corresponds to the firm-fixed-price and the fixed amount of work;
 - (4) no Government obligation to the contractor until the Government allots funds to the contract for the action;
 - (5) if the Government incrementally allots funds, both a firm-fixed-price for the services the allotted funds cover and a maximum Government obligation, including any termination obligations, to the contractor equal to the allotted funds; and
 - (6) an obligation that the Government will pay the contractor for the work the contractor performed for which funds were allotted based on the firm-fixed-price for the services the allotted funds covered and the firm-fixed-price of the work performed, not the costs the contractor actually incurred.
- (b) For each CLIN:
 - (1) the Government's maximum obligation, including any termination obligations and obligations under change orders, equitable adjustments, or unilateral or bilateral contract modifications, at any time is always less than or equal to the total amount of funds allotted by the Government for the CLIN;
 - (2) the contractor explicitly agrees it reflected (that is, included or could have included an additional amount) in its offered price and in the subsequent negotiated firm-fixed-price for each of the firm-fixed-price CLIN included in this contract:
 - i. the added complexity, challenges, and risks (including all risks, costs or otherwise, associated with termination as articulated in this clause) to which the contractor is subject due to the incremental funding arrangement established in this clause; and
 - ii. the specific risk that in the event of termination of an incrementally funded CLIN before the CLIN is fully funded, the contractor could receive less than the Termination for Convenience (Fixed-Price) clause of this contract would allow, that is, because the maximum Government obligation for a firm-fixed-price CLIN is the allotted funds for the CLIN, the contractor will receive the lower of the allotted funds or what the Termination for Convenience (Fixed-Price) clause of this contract would allow.
 - (3) the contractor is not authorized to continue work beyond the point at which the total amount payable by the Government, which is the firm-fixed-price of the services the allotted funds cover, equals the total amount allotted to the contract for the services;
 - (4) if funds become available and the Government's need continues, the Government will allot funds periodically to the CLIN, the contractor will provide a fixed amount of work

for the funds allotted, and the Government will pay the contractor based on the firm-fixedprice of the fixed amount work. The Government will not pay the contractor based on the costs the contractor incurs in performing the work; and

- (5) the contractor agrees to provide the fixed amount of work for the firm-fixed-price identified in the contract's Section B, Supplies or services and prices/costs, and in accordance with the delivery schedule identified in the contract's Section F, Deliveries or performance, provided the Government provides the funding per or earlier than the Planned Funding Schedule in paragraph (n) of this clause. At any time, the cumulative amount of funds allotted is the fixed price for the cumulative fixed amount of work identified with the funds.
- (c) For each CLIN:
 - (1) The firm-fixed-price (of both the entire CLIN and of the current cumulative amount of funds allotted to the CLIN at any time during contract performance) is not subject to any adjustment on the basis of the contractor's cost experience;
 - (2) The contract places the maximum risk and full responsibility on the contractor for all costs and resulting profit or loss; and
 - (3) If the Government meets the entire Planned Funding Schedule,
 - i. the cumulative amount of funds allotted will equal the CLIN's firm-fixed-price and
 - ii. the contractor must provide the work the contract requires for the CLIN.

(d) The firm-fixed-price for each CLIN will be listed in Section B.02 Price Schedule.

(e) The Planned Funding Schedule for each CLIN will be listed in each individual CLIN. The sum of the planned funding for each CLIN equals the firm-fixed-price of the CLIN.

(f) The Actual Funding Schedule for each CLIN will be listed in each individual CLIN. It specifies the actual amount of funds allotted and presently available for payment by the Government and the work to be performed for the funds allotted.

- (1) The contractor may bill against a CLIN only after the Government has allotted funds to the CLIN and the contractor has delivered the services and earned amounts payable for the CLIN.
 - i. The contractor may bill only the lower of the two preceding amounts, that is, the lower of allotted funds or amount payable.
 - ii. If the contractor does not perform the contract's requirements for the CLIN, it must return the amounts that it billed that the Government reimbursed.

(g) If during the course of this contract the Government is allotting funds to CLIN per or earlier than the Planned Funding Schedule, this contract to that point will be considered a simple firm-fixed-price contract for that CLIN regardless of the rate at which the contractor is, or is not, earning amounts payable, and:

(1) The Government's and the contractor's obligations under the contract for the CLIN - with the exception that the Government's obligation for the CLIN is limited to the total amount

of funds allotted by the Government to the CLIN and similarly the contractor is not authorized to continue work beyond the point at which the total amount payable by the Government equals the total amount allotted—will be as if the CLIN were both firm-fixedprice and fully funded at time of contract execution, that is, the contractor agrees that: it will perform the work of the contract for that CLIN; and neither the firm-fixed-price for the CLIN nor any other term or condition of the contract will be affected due to the CLIN being incrementally funded.

- i. The contractor agrees, for example, if the Government allots funds to a CLIN per or earlier than all of the funding dates in the Planned Funding Schedule for the CLIN, the Government has met all of its obligations just as if the CLIN were fully funded as of the time of contract execution and the contractor retains all of its obligations as if the CLIN were fully funded as of the time of contract execution, while at the same time the contractor is not authorized to continue work beyond the point at which the total amount payable by the Government equals the total amount allotted to the contract; consequently, if the Contactor earns amounts payable at any time in performing work for the CLIN that exceed the total amount of funds allotted by the Government to the contract for the CLIN
 - A. it (not the Government) will be liable for those excess amounts payable
 - B. it will remain liable for its obligations under every term or condition of the contract and
 - C. if it fulfills all of its obligations for that CLIN and the Government allots funds to the CLIN equal to the CLIN's firm-fixed-price, the Government will pay it the firm-fixed-price for the CLIN and no more.
- ii. The contractor also agrees, for example, if the Government allots funds to a CLIN by the first funding date in the Planned Funding Schedule, the Government has met all of its obligations up to that point in the contract as if the CLIN were fully funded (that is, as if progress payments based on cost had been agreed to and had been made, or milestone payments had agreed to and been made, or etc.) and the contractor retains all of its obligations up to that point (such as meeting delivery schedules, maintaining quality, etc.) as if the CLIN were fully funded; consequently, if the Government subsequently terminates the CLIN it will pay the contractor the lower of the following two amounts: the amount allotted by the Government to the CLIN; or the amount payable per the Termination for Convenience (Fixed-Price) clause of this contract.

(h) The contractor shall notify the Contracting Officer in writing whenever it has reason to believe that the amount payable it expects to earn for the CLIN in the next 60 days, when added to all amounts payable previously earned, will exceed 75 percent of the total amount allotted to the CLIN by the Government.

- (1) The notification is for planning purposes only and does not change any obligation of either the Government or the contractor.
- (2) The contractor is not authorized to continue work beyond the point at which the total amount payable by the Government equals the total amount allotted to the CLIN.

(3) The Government may require the contractor to continue performance of that CLIN for as long as the Government allots funds for that CLIN sufficient to cover the amount payable for that CLIN.

(i) If the Government does not allot funds to a CLIN per or earlier than its Planned Funding Schedule, the contractor may be entitled to an equitable adjustment and:

- (1) the Government's maximum obligation, including any termination obligation, to reimburse the contractor remains limited to the total amount of funds allotted by the Government to the contract for that CLIN;
- (2) the contractor is not authorized to continue work beyond the point at which the total amount payable by the Government equals the total amount allotted to the contract;
- (3) if the Government subsequently terminates the CLIN, it will pay the contractor the lower of the following two amounts: the total amount of funds allotted by the Government to the contract for the CLIN; or the amount payable per the Termination for Convenience (Fixed-Price) clause of this contract.

(j) Except as required by either other provisions of this contract specifically citing and stated to be an exception to this clause, or by, among other things, terminations, change orders, equitable adjustments, or unilateral or bilateral contract modifications specifically citing and stated to be an exception to this clause, for either CLIN:

- (1) The Government is not obligated to reimburse the contractor in excess of the total amount allotted by the Government to this contract for the CLIN; and
- (2) The contractor is not obligated to continue performance under this contract related to the CLIN or earn amounts payable in excess of the amount allotted to the contract by the Government until the Contracting Officer notifies the contractor in writing that the amount allotted by the Government has been increased and specifies an increased amount, which shall then constitute the total amount allotted by the Government to the CLIN.

(k) No notice, communication, or representation in any form, including, among other things, change orders, equitable adjustments, or unilateral or bilateral contract modifications, other than that specified in this clause, or from any person other than the Contracting Officer, shall affect the amount allotted by the Government to this contract for a CLIN, which will remain at all times the Government's maximum liability for a CLIN. In the absence of the specified notice, the Government is not obligated to reimburse the contractor for any amounts payable earned for a CLIN in excess of the total amount allotted by the Government to this contract for a CLIN, whether earned during the course of the contract or as a result of termination.

(1) Change orders, equitable adjustments, unilateral or bilateral contract modifications, or similar actions shall not be considered increases in the Government's maximum liability or authorizations to the contractor to exceed the amount allotted by the Government for a CLIN unless they contain a statement increasing the amount allotted.

(m) Nothing in this clause shall affect the right of the Government to terminate this contract for convenience or default.

(n) Planned Funding Schedule:

Contract (89303418CE000001)

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			Cumulative	
	Funds To	Work To	Funds	Cumulative Work
Date	Be Allotted	Be Accomplished	To Be Allotted	To Be Accomplished
12/7/2017	\$1,973,305	All	\$1,973,305	All

(o) Actual Funding Schedule:

Contract (89303418CE000001)

				Cumulative Work
	Funds To	Work To	Cumulative Funds	To Be
Date	Be Allotted	Be Accomplished	To Be Allotted	Accomplished
12/7/2017	\$1,973,305	All	\$1,973,305	All

PART I - THE SCHEDULE

SECTION C

DESCRIPTIONS/SPECIFICATIONS/PERFORMANCE WORK STATEMENT

SECTION C

DESCRIPTIONS/SPECIFICATIONS/PERFORMANCE WORK STATEMENT

C.01 PURPOSE

The purpose of this contract is to provide support to the U.S. Department of Energy (DOE) Environmental Management Los Alamos Field Office (EM-LA) in performing a probabilistic radiological risk assessment (RRA) to support the disposition of the below ground remote handled (RH) transuranic (TRU) waste at Material Disposal Area (MDA) G located on Technical Area (TA) 54 at the Los Alamos National Laboratory (LANL).

The scope addresses completing the development of and maintaining a full RRA, building on work that has been performed towards RRA modeling to date, and performing the remaining tasks that are needed to complete the RRA. A comprehensive computer model is needed for MDA G that has the capability of evaluating compliance with, and optimizing decisions regarding, the RH TRU waste. Relevant regulations include National Environmental Policy Act (NEPA), DOE O 435.1, DOE O 458.1, and 40 CFR 191. The comprehensive model, known as the Area G RRA Model, must make use of the current MDA G site models, but must also update and provide consistency with the current MDA G Performance Assessment (PA) and Composite Analysis (CA) models. The primary objective is to prepare a long term probabilistic RRA to support decision making regarding the long-term disposition of the below ground RH TRU waste.

C.02 BACKGROUND

LANL has disposed radioactive waste at Area G since the late 1950s. The Laboratory is owned by the DOE, which is ultimately responsible for the disposed waste. While the bulk of the disposed waste is low-level radioactive waste (LLW), other types of radioactive waste, including TRU radionuclides, are retrievably stored at Area G. In particular, RH TRU is currently placed in 33 Shafts (Shafts 200-232), that were intended to have been retrievably stored. Exhumation and treatment of these wastes require careful consideration of worker exposures, potential risks to the public and the environment, as well as cost. DOE requires development of a probabilistic RRA model and subsequent decision analysis regarding the disposition of the RH TRU waste in the 33 Shafts.

The RH TRU has not been previously evaluated for potential human health or ecological risk, despite the assessments that have been performed for the Area G disposal facility under several different regulatory requirements (in particular, DOE Order 435.1). Other potentially applicable regulations include DOE O 458.1 for general radiation protection, and EPA's 40 CFR 191 for the management of TRU waste.

DOE proposes to arrive at a long-term disposition decision for the RH TRU waste in the near future. This decision will be informed by an analytical modeling process that will include sensitivity analyses to provide near-term direction to site data collection activities, preparation of a long-term RRA, and preparation of an options analysis.

C.03 PERFORMANCE REQUIREMENTS

The Contractor shall furnish all services, materials, supplies, equipment, and travel required in connection with this performance work statement (PWS). The Contractor shall furnish sufficient technical, supervisory, and administrative personnel to ensure the expeditious accomplishment of the work specified in this contract. In doing so, the Contractor shall provide personnel with expertise in performing probabilistic modeling and in applying statistical decision analysis methods to evaluate and optimize long-term disposition decisions for the RH TRU waste.

The calculations of contaminant fate and transport through engineered and natural materials, and the subsequent assessment of risks to human health and the environment, are essential for all such risk assessments. The Area G RRA needs to be designed in such a way that it can be responsive to a variety of assessment endpoints, and compliance with multiple regulations that can also be evaluated. In this sense the RRA is generic in its calculations, free from the constraints that would be imposed by strict adherence to the standard definitions of PA/CA prescribed by DOE O 435.1 or 40 CFR 191. This allows for a more comprehensive and rigorous evaluation of risks, and therefore a broader basis for decision making for the disposition of the RH TRU wastes.

Development of the Area G RRA must be based on a thorough conceptualization of the site, so that decision makers have confidence in the results. The understanding of the site begins with an analysis of those features, events, processes, and exposure scenarios (FEPSs) that collectively define how the site performs in the natural environment, and how people may interact with the disposed materials in the future. The FEPSs Analysis (Neptune 2015) is in turn the basis for a conceptual site model (CSM), which is documented herein. This document includes discussions of the RH TRU waste in the 33 Shafts in particular and other Area G waste in general, the engineering features of the disposal technologies employed at the site, the environmental settings, the expected human and environmental exposure scenarios, and the regulatory context of the decision regarding their disposition.

Area G is situated on Mesita del Buey, one of many similar finger mesas on the deeply dissected Pajarito Plateau in northern New Mexico, west of the Rio Grande Rift. The Plateau consists of volcanic tuff near the surface, and basalts at depth, resulting from past eruptions from the Jemez Volcanic Complex. Waste is disposed at Area G in excavated pits and augured shafts. In general, the waste has little in the way of engineered barriers to prevent release, but in the case of the RH TRU Shafts, there is some steel corrugated pipe and casing, and in some cases concrete, in addition to the disposal canisters. The CSM considers the construction of the 33 Shafts, as well as other waste disposal technologies used at Area G, for evaluation of radionuclides in their transport to the accessible environment.

The principal decision to be made regarding the disposition of the RH TRU is whether some or all shafts should be retrieved, processed and disposed somewhere else or disposed in place. The shafts containing RH TRU are located in the midst of Area G, and this context is relevant. With the large amount of LLW and TRU waste disposed in the immediate vicinity, a natural risk management question is how the risk from the RH TRU alone compares to the risk from the entire disposed waste. The relative and potentially incremental risks posed by the RH TRU, as compared to the risks related to other radiological disposal at Area G, or indeed all disposed waste across LANL, should inform risk management decisions for the RH TRU. This comparison will require that the risks be estimated in comparable ways, so reproduction of the Area G PA/CA will be the first step in order to establish that context. The RH TRU RRA, similar to the Area G PA/CA, will likely be subjected to a high degree of scrutiny, and the analyses must be considered defensible by DOE in order to support decisions on the disposition of RH TRU.

The work outlined here has been preceded by a high-level review of documents relevant to the RH TRU RRA as well as the 2008 LANL Area G PA/CA (rev. 4) and supporting documents (*An Assessment of Information for Decision Making for Shafts 200–232 at Area G*). The scope of work includes:

(1) the development of a comprehensive Area G RRA Model that would be used to support RH TRU decisions and the Area G PA/CA maintenance in accordance with DOE Order 435.1;

(2) running the model to produce results and sensitivity analyses to inform decision makers on the future of the shafts as well as future PA/CA maintenance;

(3) preparation of an RH TRU RRA Report specifically to support decision making for Shafts 200–232.

C.03.1 PROBABILISTIC ANALYSIS TO SUPPORT DECISION MAKING

The Contractor shall implement all activities identified in this PWS. This work shall include: literature searches, research efforts, deterministic and/or probabilistic sensitivity and uncertainty analyses, modeling (erosion, groundwater, surface water, dose assessment, contaminant release, contaminant fate and transport), and preparation of long-term deterministic and/or probabilistic risk assessments.

C.03.2 COMPLETE THE LONG-TERM RRA FOR THE RH TRU WASTE

The Contractor shall work with DOE to develop future alternatives for the site to be evaluated through a long-term probabilistic RRA. The RRA model shall be designed to enable evaluation of different alternatives as described by DOE (potential source term removals, engineered barrier designs, etc.), and compare results to compliance objectives as prescribed in relevant DOE Orders and other applicable requirements. The model shall be developed using the most current version of the GoldSim probabilistic modeling software.

Deliverables shall include a complete and fully documented probabilistic RRA. The RRA shall include all proper supporting documents, files, etc. such that DOE can use the RRA within a joint Supplemental Environmental Impact Statement (SEIS) to support disposition decisions for the RH TRU waste. All analyses shall be fully documented, including all references/data used by the model in hardcopy and electronically, such that results can be reproduced.

The probabilistic long-term RRA will be used to fully evaluate the alternatives and will include a thorough characterization and evaluation of the nature and magnitude of uncertainty in the analyses. The probabilistic model shall also update and maintain consistency with the Area G PA/CA that apply to LLW disposed in Area G. The Contractor shall also develop and apply statistical decision analysis methods using Structured Decision Making to assist with the evaluation and enhancement of disposition options for the RH TRU waste.

C.03.3 PERFORM A SENSITIVITY ANALYSIS

The Contractor shall perform a sensitivity analysis of the probabilistic RRA. The objective of the sensitivity analysis will be to identify input parameters that cause significant uncertainty in the RRA output. Such results may be beneficial in assembling additional data collection efforts to support reducing uncertainty. Any further necessary data collected may be used to update the probabilistic RRA model, and the Area G PA/CA models as needed. Each iteration of the model shall be subjected to sensitivity analysis and evaluation until uncertainty is reduced such that final long-term disposition decisions can be made with sufficient confidence. The Contractor shall develop an interim report and a final report to detail results of the work.

C.04 SCOPE OF WORK

4.0 TASK DESCRIPTION

4.1 Develop GoldSim RRA Model

The RRA work scope began in 2013 and is organized into the following phases:

- Phase 1: Sufficiency Review
- Phase 2: Development of the Features, Events, Processes, and Scenarios (FEPS) and Conceptual Site Model (CSM) documents. This Phase also included the development of QA documents.
- Phase 3: Development of the RRA GoldSim Model and supporting process models and documentation. Phase 3 was split into 4 subphases: 3A, 3B, 3C, and 3D.

As of June 7, 2017, The Contractor has completed Phases 1, 2, and 3A and the Contractor is currently working on the scope in Phase 3B, which will be complete by September 30, 2017. Phase 3C is expected to be complete by **December 6, 2018**, and Phase 3D by **December 6, 2019**.

4.2 Develop Preliminary RRA Model

4.2.1 Define the Inventory for the RRA Model

- 4.2.1.1 Develop stochastic waste inventories.
 - Evaluate the existing Area G Inventory Model and consider integration into RRA model.
 - Evaluate prior work to estimate radionuclide composition of waste codes such as MFP, MAP, PU52, etc.
 - Determine the exhaustive list of radionuclides that have been disposed, regardless of half-

life.

• Develop input distributions for radionuclide inventories; consider annualized inventories to be introduced through time. Document the inventories and their input distributions in the 4.2.1.2 deliverable below.

4.2.1.2 Develop comprehensive Species list for the model. List of species to be simulated for each unit is determined by the inventory. Determine source of decay chain information and develop decay chains.

- Obtain consensus on appropriate half-life cutoff for short-lived and long-lived radionuclides.
- Using inventory results, develop full decay chains and full list of all radionuclides that could be considered.
- Screen out radionuclides that will be excluded from contaminant transport (CT) modeling.
- Document the list of Species to have contamination transport modeling in the RRA Model in the 4.2.12 deliverable below and implement them in the RRA Model.

Deliverables:

Phase 3D: Update to Inventory White Paper developed in Phase 3B.

4.2.1.3 Account for Specialized Release of Waste Forms

- Evaluate waste forms, and determine cases for modeling of source release from disposed materials that are not free-release
- Develop source-release models for those wastes that are not free-release
- Develop stochastic input distributions for source-release modeling
- Evaluate the various disposal technologies used at Area G, and determine how to incorporate them into the RRA Model
- Implement methods for source release and incorporation of engineering designs into the RRA Model and document the methods.

Deliverables:

Phase 3D: Update to Waste Form Release White Paper developed in Phase 3B.

- 4.2.1.4 Develop Physical Material Properties
 - Identify specific porous media materials for modeling, and research material properties
 - Develop distributions for all porous media material properties for use in external UZ and SZ models (Ksat, van Genuchten parameters, etc.) and stochastic properties for use in the RRA Model (porosity, dry bulk density) consistent with other modeling and tortuosity definitions.

Deliverables:

Phase 3D: Update to Material Properties White Paper developed in Phase 3B.

- 4.2.1.5 Develop an External Process-Level Unsaturated Zone (UZ) Model and Abstract Results
 - Determine the infiltration rate for all 1-D columns for current conditions
 - Research data and information that influence infiltration rates
 - Develop stochastic input distribution for infiltration rate

- Review existing UZ flow modeling work, and redevelop UZ model if necessary (e.g. a 1-D model using HYDRUS). Make this consistent with the plant rooting model.
- Design a series of experiments (model inputs) for the UZ model to develop a statistical model of infiltration flux and water contents of strata and materials. Consider effects of climate change.
- Build and run the suite of UZ models for each column and many conditions
- Develop abstracted UZ model for use in RRA Model
- Implement abstracted UZ model into RRA Model
- Evaluate effects of climate change on the UZ flow.
- Develop stochastic input distributions UZ Model
- Run suite of UZ Models

Deliverables:

1) Phase 3C: Update to UZ Model White Paper developed in Phase 3B.

2) Phase 3D: Update to UZ Model White Paper developed in Phase 3B.

4.2.1.6 Develop an External Process-Level Saturated Zone (SZ) Model and Abstract Results

- Review existing SZ flow modeling work, and redevelop SZ model if necessary
- Review information on parameters (Ksat, hydraulic gradient, etc.)
- Develop stochastic input distributions for SZ parameters
- Implement SZ model into RRA Model
- Develop Abstracted Climate Change SZ Model for RRA Model

Deliverables:

Phase 3C: White Paper describing the results from SZ Model Development
 Phase 3D: Update to SZ Model White Paper developed in Phase 3C.

- 4.2.1.7 Develop an External Process-Level Atmospheric Dispersion Model and Abstract Results
 - Review existing atmospheric dispersion modeling work, and redevelop atmospheric dispersion model if necessary (e.g. AERMOD modeling)
 - Build and run the atmospheric model for all receptors or other endpoints
 - Develop abstracted atmospheric dispersion to develop input distributions for Chi/Q table for use in RRA Model
 - Develop stochastic resuspension rates for particulates, to feed Chi/Q
 - Implement abstracted atmospheric dispersion model into RRA Model
 - Develop experimental design
 - Develop stochastic input distributions for atmospheric model

Deliverables:

1) Phase 3C: White Paper describing the results from Air Dispersion Model Development.

2) Phase 3D: Update to Atmospheric Dispersion White Paper developed in Phase 3C.

4.2.1.8 Develop and Implement Models for Biotically-Induced Contamination Transport (CT)

4.2.1.8.1 Develop and implement model of plant-induced contamination transport

- Identify plants that will contribute to contamination transport and classify for the model based largely on existing surveys and reports. Consider effects of climate change.
- Develop a stochastic plant rooting model appropriate for each plant type.
- Develop stochastic input distributions for plant parameters
- Build the plant contamination transport model into the RRA Model
- Identify plant types and communities for climate change

4.2.1.8.2 Develop and implement model of animal-induced contamination transport

- Identify burrowing animals that will contribute to contamination transport and classify for the model based largely on existing surveys and reports. Consider effects of climate change.
- Develop a stochastic animal burrowing model appropriate for each animal type.
- Develop stochastic input distributions for animal parameters
- Build the animal burrowing contamination transport model into the RRA Model
- Identify animal types for climate change

Deliverables:

Phase 3D: Update to Biotically-Inducted CT White Paper developed in Phase 3B.

4.2.1.9 Develop Bases for Diffusion Modeling

4.2.1.9.1 Develop basis for gaseous diffusion modeling (in porous media)

- Identify radionuclides that have a gas phase
- Develop Henry's Law (air/water partitioning) constants for gaseous rads
- Develop free-air diffusivities for gaseous radionuclides in porous media
- Develop equations for air-phase tortuosities for all porous media materials
- Implement all aspects of gas phase diffusion into the RRA Model
- Develop stochastic input distributions for gaseous transport

4.2.1.9.2 Develop basis for water phase diffusion modeling (in porous media)

- Develop aqueous diffusivities for radionuclides in pore waters
- Develop equations for water-phase tortuosities for all porous media materials
- Implement all aspects of water phase diffusion into the RRA Model
- Develop stochastic input distribution for water phase diffusion modeling

Deliverables:

Phase 3D: Update to Diffusion Modeling White Paper developed in Phase 3B.

4.2.1.10 Develop Stochastic Geochemical Parameters

- Review existing information for geochemistry
- Develop stochastic values for Kd's for all radioelements in all porous media.
- Develop stochastic aqueous solubility limits in all water types.
- Assure that diffusion coefficients and Henry's Law constants are consistent with diffusion development in 4.2.1.9.

Deliverables:

Phase 3D: Update to Geochemistry White Paper developed in Phase 3B.

4.2.1.11 Develop model(s) and Parameters for Erosion of Area G

4.2.1.11.1 Develop surface (sheet) and gully erosion model

- Review existing information for surface and gully erosion
- Construct mathematical model for surface erosion
- Develop stochastic input distributions for surface erosion model
- Construct and run surface and gully erosion model
- Redevelop future surface and gully erosion modeling considering climate change
- Implement the surface erosion model into the RRA Model
- Implement the gully erosion model into the RRA Model

4.2.1.11.2 Develop cliff erosion model

- Review existing information for cliff erosion
- Construct mathematical model for cliff erosion
- Develop stochastic input distributions for cliff erosion model
- Redevelop future cliff erosion modeling considering climate change
- Implement the cliff erosion model into the RRA Model

Deliverables:

1) Phase 3C: White Paper describing the results from Erosion Model Development.

2) Phase 3D: Update to Erosion White Paper developed in Phase 3C.

4.2.1.12 Develop and Implement Human Exposure Modeling in the RRA Model

- Determine metrics for evaluating future health effects, including dose, risk, other metrics suggested in regulation, guidance, and PA literature
- Determine scenarios, receptors, and points of assessment to be considered in the model, based on FEPSs and CSM
- Develop human exposure scenarios, including future occupation of the site, with interviews, elicitations, etc.
- Develop equations for calculating dose, risk, or other metrics.
- Determine what parameters are needed to inform the models
- Develop input distributions for exposure modeling, acquired from existing information or elicitations
- Implement the human exposure modeling into the RRA Model

Deliverables: Deliverables for 4.2.12 are included in 4.2.1.13 below.

4.2.1.13 Construct and Perform ALARA Analysis (per DOE O 458.1).

- Develop calculations in RRA Model to support ALARA analysis.
- Analyze results with regards to ALARA and write conclusions.

Deliverables:

None. This task has been combined with the Decision Analysis and Decision Support Module task (4.2).

4.2.1.14 Develop Ecological Exposure Models (per DOE O 458.1)

- Identify ecological exposure receptors (types of animals and plants) and points of assessment.
- Develop conceptual and mathematical models for ecological exposure.
- Determine what parameters are needed to inform the models.
- Develop stochastic input distributions for eco exposure modeling
- Implement the ecological exposure modeling into the RRA Model
- Consider climate change for ecological risk

Deliverables:

Phase 3D: White Paper describing the results of Ecological Exposure Modeling.

4.3 Develop Decision Support Module, Decision Analysis, and ALARA

Develop a decision module level for the RRA Model to aid in decision making using the core model results.

4.3.1 The Contractor shall define requirements of a decision support module that would be added to the RRA Model.

4.3.2 The Contractor shall design a UI for the decision support module to aid users.

- 4.3.3 The Contractor shall develop inputs for the decision support module.
 - Determine inputs to the decision support module.
 - Develop basis for input values based on research of data and information, including expert elicitations.
 - Develop stochastic input distributions for the decision support module inputs.
- 4.3.4 The Contractor shall integrate the decision support module into the RRA Model.

4.3.5 The Contractor shall develop a User Guide for the decision support module.

Deliverables:

1) Phase 3D: User Guide for the Decision Support Module.

2) Phase 3D: White Paper describing the Decision Support Module, Decision Analysis Results, and ALARA Results.

4.4 Conduct Sensitivity/Uncertainty Analyses

Estimate influence measures for input variables using uncertainty analysis (UA) and sensitivity analysis (SA)

4.4.1 The Contractor shall develop UA/SA design, including identification of endpoints

4.4.2 The Contractor shall run suites of Monte Carlo simulations, as needed, producing results for various endpoints.

4.4.3 The Contractor shall develop UA for various endpoints using probabilistic RRA Model results.

4.4.4 The Contractor shall conduct SA using R routines to produce partial dependence plots for various endpoints.

4.4.5 The Contractor shall document the results of the UA and SA in a report or appendix.

4.4.6 The Contractor shall evaluate the outcome of the SA in terms of model redevelopment. The SA will inform the decision to revise the model in order to reduce uncertainty and increase defensibility. This is a decision point.

Deliverables:

- 1) Phase 3C: Memo describing the status of the SA and UA.
- 2) Phase 3D: White Paper describing the results of the SA and UA.

4.5 Prepare RRA Model Documents

4.5.1 The Contractor shall prepare RRA Model User Guide.

4.5.2 The Contractor shall prepare RRA Model Development Report. This report assembles the deliverables from 4.2, 4.3 and 4.4 above and provides and Executive Summary and introductory material.

Deliverables:

Phase 3D: RRA Model User Guide
 Phase 3D: Prepare RRA Model Development Report.
 Phase 3D: Completed RRA GoldSim Model

4.6 Project Management

The Contractor shall prepare monthly status reports of each task and shall update the task order schedule monthly.

The Contractor shall participate in meetings, teleconferences, and other communications with EM-LA regarding the status of the task order.

The Contractor shall maintain Parameters Document and Workbook under configuration control and collect for distribution with the RRA Model.

The Contractor shall maintain a reference library of PDF documents and URL links to all literature referenced in the model, for distribution with the RRA Model.

Deliverables:

- 1) Monthly status reports
- 2) Monthly updates to the project schedule
- 3) Parameters Document Workbook
- 4) Reference library

4.7 General Responsibility

Quality Control: The Contractor shall prepare a Quality Control Plan for the RRA project. The

Quality Control Plan shall include independent review of deliverables and documentation of the independent review, and perform quality control of the RRA Model software. In Addition the Contractor shall establish a Quality Control program that meets DOE Order 414.1D Quality Assurance and EM-QA-001 EM Quality Assurance Program (QAP). Additional Quality Assurance Requirements for this contract are in Section H.21 QUALITY ASSURANCE FOR WORK AFFECTING NUCLEAR SAFETY.

Quality Control Plan shall supplement with the following key elements as a minimum:

<u>Organizational Structure</u>. The Quality Control Supplement shall clearly show the interrelationships of management, design team components, and technical review, including all consultants. An organizational chart identifying by name the key design and agency technical review team members, showing their specific responsibilities related to the task order, shall be included.

<u>Scheduling</u>. A schedule shall be included showing the sequence of events involved in carrying out specific tasks within the specified period of service. The technical review, Government review, and revision periods scheduled prior to submittals shall be clearly shown.

<u>Reviews</u>. Quality Checks and Reviews throughout the design process. Technical Review conducted by senior, technically qualified professionals. Respond to all Agency Technical Review (ATR) and Quality Assurance (QA) review comments. Contractor Statement of Technical Review.

- a. The Contractor shall provide a qualified designated Team Lead to manage a formally documented quality control and deliverable resolution process.
- b. The Contractor shall provide monthly progress reports to the designated Contracting Officer's Representative (COR) addressing task order progress of activities, individuals working, items reviewed, percent complete for each deliverable and any outstanding needs, issues and concerns requiring planning and/or resolution.
- c. The Contractor shall treat all products as confidential and provide the necessary security and protection of all data, existing and under development, both hard copy and electronic, related to this Task Order. When working within a DOE designated location or installation, all security aspects and requirements related to behavior, documents, work equipment, articles and information handling shall be subject to the site security requirements for that location.
- d. Communication and Outreach Support

The Contractor may be required to interact with organizations involved in scientific data collection activities at MDA G. The Contractor may be required to assist and support EM-LA during meetings with the regulatory agencies and with the public (including citizen advisory groups, environmental groups, and other interested parties) to discuss the progress and results of the work scope identified in this PWS.

The Contractor shall support DOE in outreach and response to elected officials, stakeholders, regulators, and Tribal entities. Such support shall include: preparation for briefings; public presentations; and search, review, and reproduction of documents and records.

e. Security and Emergency Response

While on the Los Alamos site, individuals working under this contract shall comply with ALL established security and emergency response requirements and actions. Additionally, the Contractor shall comply with DOE Order 471.3, Identifying and Protecting Official Use Only Information and DOE Manual 471.3-1, Manual for Identifying and Protecting Official Use Only Information.

4.8 Team Requirements

<u>Qualifications</u> - The Contractor resources shall consist of qualified personnel with extensive experience performing radiological risk assessments using GoldSim software, and with the experience and capability to manage these activities as performed by others. The Contractor shall ensure all employees affiliated with this Task Order having access to the data, whether on-site or working elsewhere, shall be United States citizens. Resumes shall be provided for verification and inclusion within the reports. The Contractor team shall have extensive experience and capability using Microsoft Word, PowerPoint, Excel and Access, and GoldSim software and analyses.

<u>Travel</u> - The Contractor team working on this task order shall be required to travel to Los Alamos National Lab, as required to produce on-time quality products. Virtual/teleconference meetings will be required to discuss project performance.

<u>Software</u> - The Contractor shall provide laptops and any specialized software for the task such as GoldSim, Primavera, Crystal Ball or others to support this Task Order effort. All reports shall be prepared in Microsoft Word; presentations made in Microsoft PowerPoint, and spreadsheets in Microsoft Excel.

The Contractor shall have the ability to share electronic files among its own members as well as the DOE representatives' customers and team representatives.

4.9 Deliverables and Schedule

Within 30 days after award, the Contractor shall submit a schedule for this task order showing the schedule for each of the subtasks and the scheduled delivery date for each deliverable identified in Section 4.0 above.

The Contractor shall submit the deliverables identified in Section 4.0 above. The submittal dates indicated in Section 4.0 above are approximations, to be refined in the foregoing task order schedule.

Many of the deliverables are identified as "white papers." The white papers are intended to describe the processes considered significant in the CSM, show how they are represented mathematically, document the development of statistical distributions for input parameters and describe how the process is implemented in the RRA Model. White papers and other supporting technical documents are controlled throughout development, and undergo internal review and QA.

PART I - THE SCHEDULE

SECTION D

PACKAGING AND MARKING

SECTION D

PACKAGING AND MARKING

D.01 DOE D-2001 PACKAGING AND MARKING (OCT 2014)

- (a) Preservation, packaging, and packing for shipment or mailing of all work delivered hereunder shall be in accordance with good commercial practice and adequate to ensure acceptance by common carrier and safe transportation at the most economical rate(s).
- (b) Each package, report or other deliverable shall be accompanied by a letter or other document which -
 - (1) Identifies the contract by number pursuant to which the item is being delivered;

(2) Identifies the deliverable item number or report requirement which requires the delivered item; and

(3) Indicates whether the contractor considers the delivered item to be a partial or full satisfaction of the requirement.

- (c) For any package, report, or other deliverable being delivered to a party other than the Contracting Officer, a copy of the document required by paragraph (b) shall be simultaneously delivered to the office administering this contract, as identified in Section G of the contract, or if none, to the Contracting Officer.
- (d) In lieu of mailing or other delivery service, the contractor may electronically submit reports via e-mail to the CO as identified in Section G and to the Contracting Officer's Representative (COR) as identified in Section G. Electronic file formats shall be as required in the PWS. If acceptable file formats are not listed in the PWS, submittals must be in Portable Document Format (PDF) or Microsoft Office 2007 (or newer) file formats. If it appears that another electronic data format is more appropriate for the type of document being submitted, the contractor shall contact the CO to determine whether the format is acceptable before submitting it.

PART I - THE SCHEDULE

SECTION E

INSPECTION AND ACCEPTANCE

SECTION E

INSPECTION AND ACCEPTANCE

E.01 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 CO will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

For FAR clauses: https://www.acquisition.gov/far/index.html

For DOE Acquisition Regulation (DEAR) clauses: http://farsite.hill.af.mil/vfdoea.htm

(End of clause)

E.02 DOE-E-2001 INSPECTION AND ACCEPTANCE (OCT 2014)

Inspection and acceptance of all items under this contract shall be accomplished by the Contracting Officer in accordance with the clause entitled FAR 52.246-4, Inspection of Services – Fixed-Price (AUG 1996). If the Contracting Officer assigns this responsibility to the Contracting Officer's Representative or another representative of the Government, the Contracting Officer shall notify the contractor in writing.

E.03 FAR 52.246-4 INSPECTION OF SERVICES - FIXED-PRICE (AUG 1996)

PART I - THE SCHEDULE

SECTION F

DELIVERIES OR PERFORMANCE

SECTION F - DELIVERIES OR PERFORMANCE

F.01 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 CO will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

For FAR clauses: https://www.acquisition.gov/far/index.html

For DOE Acquisition Regulation (DEAR) clauses: <u>http://farsite.hill.af.mil/vfdoea.htm</u>

F.02 FAR 52.242-15 STOP-WORK ORDER (AUG 1989)

F.03 FAR 52.242-17 GOVERNMENT DELAY OF WORK (APR 1984)

F.04 DOE-F-2002 PLACE OF PERFORMANCE – SERVICES (OCT 2014)

The services specified by this contract shall be performed in the following locations: the Contractor's facilities and the DOE EM Los Alamos Field Office in Los Alamos, NM as applicable.

F.05 PERIOD OF PERFORMANCE

The contract period of performance shall be 24 months from the date of award of this contract.

F.06 DOE-F-2007 DELIVERY OF LIMITED RIGHTS DATA (OCT 2014)

- (a) Delivery of limited rights data. The Contractor shall, at the option of the Contracting Officer, be required to deliver any limited rights data used in the performance of this contract. Such data shall be subject to the provisions of the clause at FAR 52.227-14, Rights in Data--General, paragraph (g), "Protection of limited rights data and restricted computer software," with Alternatives II and V which are incorporated into this contract.
- (b) The limited rights data subject to the clause at FAR 52.227-14, Rights in Data—General, are included in attachment no. J-8. This listing of limited rights data, which are asserted by the Contractor to be limited rights data, does not constitute an admission by the Government that the data is in fact limited rights in data.

If a patent is issued by the United States Patent and Trademark Office (U.S. PTO) or the patent office of any foreign country based on any information asserted to be limited rights data, the Government will no longer treat any data contained in such issued patent as limited rights data. In addition, if any information asserted to be limited rights data results in or becomes a subject invention, as that term is defined in the patent rights clause of this agreement, the government will only treat such data as limited rights data until the contractor has filed its initial patent application.

- (c) The Contractor shall not introduce or utilize any limited rights data not identified in (b) above without advance written notification to the Contracting Officer.
- (d) Notwithstanding any other provision of this contract, the following data shall be delivered to the Government with unlimited rights:

None

F.07 DOE-F-2008 DELIVERY OF RESTRICTED COMPUTER SOFTWARE (OCT 2014)

(a) Delivery of restricted computer software. The Contractor shall, at the option of the Contracting Officer, be required to deliver any restricted computer software used in the performance of this contract. Such restricted computer software shall be subject to the provisions of clause at FAR 52.227-14, Rights in Data-General, paragraph (g), "Protection of limited rights data and restricted computer software," with Alternatives III and V which are incorporated into this contract.

(b) The restricted computer software subject to the clause at FAR 52.227-14, Rights in Data-General, are included in Attachment number J-8 and attached to this contract and made a part hereof"]. This listing of restricted computer software, which is asserted by the Contractor to be restricted computer software, does not constitute an admission by the Government that the data is in fact restricted computer software.

If a patent is issued by the United States Patent and Trademark Office (U.S. PTO) or the patent office of any foreign country based on any information asserted to be restricted computer software, the Government will no longer treat any data contained in such issued patent as restricted computer software. In addition, if any information asserted to be restricted computer software results in or becomes a Subject Invention, as that term is defined in the patent rights clause of this agreement, the Government will only treat such data as restricted computer software until the Contractor has filed its initial patent application.

(c) The Contractor shall not introduce or utilize any restricted computer software not identified in (b) above without advance written notification to the Contracting Officer.

(d) Notwithstanding any other provision of this contract, the following data shall be delivered to the Government with unlimited rights:

None

PART I - THE SCHEDULE

SECTION G

CONTRACT ADMINISTRATIVE DATA

SECTION G - CONTRACT ADMINISTRATION DATA

G.01 DOE-G-2001 CONTRACTING OFFICER AUTHORITY (OCT 2014)

The Contracting Officer is responsible for administration of the contract. The Contracting Officer may appoint a Contracting Officer's Representative (COR), in accordance with the clause entitled Contracting Officer's Representative, to perform specifically delegated functions. The Contracting Officer is the only individual who has the authority on behalf of the Government, among other things, to take the following actions under the contract:

(a) Assign additional work within the general scope of the contract.

- (b) Issue a change in accordance with the clause entitled Changes.
- (c) Change the cost or price of the contract.
- (d) Change any of the terms, conditions, specifications, or services required by the contract.
- (e) Accept non-conforming work.
- (f) Waive any requirement of the contract.

G.02 DOE-G-2002 CONTRACTING OFFICER'S REPRESENTATIVE (OCT 2014)

Pursuant to the clause at DEAR 952.242-70, Technical Direction, the Contracting Officer shall designate in writing a Contracting Officer's Representative (COR) for this contract, and provide a copy of such designation to the contractor, including the delegated responsibilities and functions. The COR does not have authority to perform those functions reserved exclusively for the Contracting Officer.

G.03 DOE-G-2003 CONTRACTOR'S PROGRAM MANAGER (OCT 2014)

(a) The Contractor shall designate a Program Manager who will be the Contractor's authorized supervisor for technical and administrative performance of all work hereunder. The Program Manager shall be the primary point of contact between the Contractor and the Contracting Officer's Representative (COR) under this contract.

(b) The Program Manager shall receive and execute, on behalf of the Contractor, such technical directions as the COR may issue within the terms and conditions of the contract.

G.04 DOE-G-2004 CONTRACT ADMINISTRATION (OCT 2014)

To promote timely and effective contract administration, correspondence delivered to the Government under this contract shall reference the contract number, title, and subject matter, and shall be subject to the following procedures:

(a) Technical correspondence. Technical correspondence shall be addressed to the Contracting Officer's Representative (COR) for this contract, and a copy of any such correspondence shall be

sent to the Contracting Officer. As used herein, technical correspondence does not include correspondence where patent or rights in data issues are involved, nor technical correspondence which proposes or involves waivers, deviations, or modifications to the requirements, terms or conditions of this contract.

(b) Other Correspondence.

(1) Correspondence regarding patent or rights in data issues should be sent to the Intellectual Property Counsel. A copy of such correspondence shall be provided to the Contracting Officer.

(2) If no Government Contract Administration Office is designated on Standard Form 33 (Block 24) or Standard Form 26 (Block 6), all correspondence, other than technical correspondence and correspondence regarding patent of rights in data, including correspondence regarding waivers, deviations, or modifications to requirements, terms or conditions of the contract, shall be addressed to the Contracting Officer. Copies of all such correspondence shall be provided to the COR.

(3) Where a Government Contract Administration Office, other than DOE, is designated on either Standard Form 33 (Block 24), or Standard Form 26 (Block 6), of this contract, all correspondence, other than technical correspondence, shall be addressed to the Government Contract Administration Office so designated, with copies of the correspondence to the (insert Contract Specialist or Contracting Officer) and the COR.

(c) Information regarding correspondence addresses and contact information is as follows:

- (1) Contracting Officer's Representative
- (A) Hai Shen
- (B) Telephone number: 505-665-5046
- (C) Address EM Los Alamos Field Office

Pueblo Complex 1900 Diamond Drive MS-M984 Los Alamos, NM 87545

(D) Email address: hai.shen@em.doe.gov

(2) Contracting Officer, DOE EM-LA

- (A) Robert G. Maynard
- (B) Telephone number: 505-606-0398
- (C) Address: EM-LA Los Alamos Field Office Pueblo Complex.

1900 Diamond Drive MS-M984 Los Alamos, NM 87544

(D) Email address: Robert.Maynard@em.doe.gov

G.05 DOE-G-2005, BILLING INSTRUCTIONS (OCT 2014)

(a) Contractors shall use Standard Form 1034, Public Voucher for Purchases and Services Other than Personal, when requesting payment for work performed under the contract.

(b) Contractors shall submit vouchers electronically through the Oak Ridge Financial Service Center's (ORFSC) Vendor Inquiry Payment Electronic Reporting System (VIPERS). VIPERS allows vendors to submit vouchers, attach supporting documentation and check the payment status of any voucher submitted to the DOE. Instructions concerning contractor enrollment and use of VIPERS can be found at https://vipers.doe.gov.

(c) A paper copy of a voucher that has been submitted electronically will not be accepted.

(End of Clause)

G.06 DOE-G-2006 SUBMISSION OF REQUEST FOR PROGRESS PAYMENTS (OCT 2014)

(a) Progress Payments under this contract are authorized in accordance with the clause at FAR 52.232-16, Progress Payments (APR 2012), Alternate I (MAR 2000). The Contractor shall use Standard Form 1443 (Contractor's Request for Progress Payment) when requesting progress payments.

(b) Contractors shall submit requests for progress payments electronically through the Oak Ridge Financial Service Center's (ORFSC) Vendor Inquiry Payment Electronic Reporting System (VIPERS). VIPERS allows vendors to submit vouchers, attach supporting documentation and check the payment status of any voucher submitted to the DOE. Instructions concerning contractor enrollment and use of VIPERS can be found at https://vipers.doe.gov.

(c) The Contracting Officer will not make progress payments or increase the contract price beyond the funds obligated under the contract, as amended.

G.07 DOE-G-2007 CONTRACTOR PERFORMANCE ASSESSMENT REPORTING (OCT 2014)

(a) The Contracting Officer will document the contractor's performance under this contract (including any task orders placed against it, if applicable) by using the Contractor Performance Assessment Reporting System (CPARS). CPARS information is handled as "Source Selection Information." Performance assessments entered into CPARS by the Contracting Officer are transmitted to the Past Performance Information Retrieval System (PPIRS) which is maintained by the Department of Defense (DOD). Information in PPIRS is available to authorized Government personnel seeking past performance information when evaluating proposals for award.

(b) Contractor performance will be evaluated at least annually at the contract or task order level, as determined by the Contracting Officer. Evaluation categories may include any or all of the following at the Government's discretion: (1) quality, (2) schedule, (3) business relations, (4) business management/key personnel, and (5) cost/price. PPIRS information is available at http://www.ppirs.gov, and CPARS information is available at http://www.cpars.gov. It is recommended that the contractor take the overview training that can be found on the CPARS website. The contractor shall acknowledge receipt of the Government's request for comments on CPARS assessments at the time it is received and shall respond to such requests within thirty (30) calendar days of the request.

(c) Joint Ventures. Performance assessments shall be prepared on contracts with joint ventures. When the joint venture has a unique Commercial and Government Entity (CAGE) code and Data Universal Numbering System (DUNS) number, a single assessment will be prepared for the joint venture using its CAGE code and DUNS number. If the joint venture does not have a unique CAGE code and DUNS number, separate assessments, containing identical narrative, will be prepared for each participating contractor and will state that the evaluation is based on performance under a joint venture and will identify the contractors that were part of the joint venture.

(d) In addition to the performance assessments addressed above, the Government will perform other performance assessments necessary for administration of the contract in accordance with other applicable clauses in this contract.

G.08. DOE-G-2008 NON-SUPERVISION OF CONTRACTOR EMPLOYEES (OCT 2014)

The Government shall not exercise any supervision or control over contractor employees performing services under this contract. The contractor's employees shall be held accountable solely to the contractor's management, who in turn is responsible for contract performance to the Government.

G.09 DEFECTIVE OR IMPROPER INVOICES

The name, title, phone number, e-mail, and complete mailing address of those officials of the contractor who are to be notified when DOE receives a defective or improper invoice are as follows:

Name: Paul Black Position: Chief Executive Officer Business: Neptune and Company Inc. Address: 1435 Garrison St. Suite 201 Phone: (720) 746-1803 Email: Lakewood, CO 80215

G.10 CONTRACTOR'S PROGRAM LEAD

(a) The Contractor shall designate a working Program Lead to serve in the Contractor's local facility as described in the Section F clause *DOE-F-2002 Place of Performance - Services*, who will be the Contractor's authorized supervisor for technical and administrative performance of all work hereunder, and have supervisory control over the Contractor's employees assigned to perform work under this contract and its resulting task orders. The working Program Lead shall be the primary point of contact between the Contractor and the Contracting Officer's Representative (COR) under this contract.

(b) The working Program Lead shall receive and execute, on behalf of the Contractor, such technical directions as the COR may issue within the terms and conditions of the contract.

(c) The working Program Lead shall develop work and staffing plans for all assigned tasks and provide monthly status reports on all activities to the COR.

G.11 DEFINITIONS

Contracting Officer - The person identified in Section G.03, DOE-G-2004 Contract Administration, with the authority to enter into contracts as defined in FAR 2.101, who is assigned as responsible for this contract as a whole. This is the official that will award and administer the contract.

Contracting Officer's Representative (COR) – The Contracting Officer's designated representative identified in Section G.03, DOE-G-2004 Contract Administration, whose responsibilities apply to the administration of this contract as a whole. The extent of the COR's authority is defined in DEAR Clause 952.242-70, *Technical Direction*.

PART I - THE SCHEDULE

SECTION H

SPECIAL CONTRACT REQUIREMENTS

SECTION H

SPECIAL CONTRACT REQUIREMENTS

H.01 DOE-H-2013 CONSECUTIVE NUMBERING (OCT 2014)

Due to automated procedures employed in formulating this document, clauses and provisions contained within may not always be consecutively numbered.

H.02 DOE-H-2033 ALTERNATIVE DISPUTE RESOLUTION (OCT 2014)

(a) The DOE and the contractor both recognize that methods for fair and efficient resolution of contractual issues in controversy by mutual agreement are essential to the successful and timely completion of contract requirements. Accordingly, DOE and the contractor shall use their best efforts to informally resolve any contractual issue in controversy by mutual agreement. Issues of controversy may include a dispute, claim, question, or other disagreement. The parties agree to negotiate with each other in good faith, recognizing their mutual interests, and attempt to reach a just and equitable solution satisfactory to both parties.

(b) If a mutual agreement cannot be reached through negotiations within a reasonable period of time, the parties may use a process of alternate dispute resolution (ADR) in accordance with the clause at FAR 52.233-1, Disputes. The ADR process may involve mediation, facilitation, fact-finding, group conflict management, and conflict coaching by a neutral party. The neutral party may be an individual, a board comprised of independent experts, or a company with specific expertise in conflict resolution or expertise in the specific area of controversy. The neutral party will not render a binding decision, but will assist the parties in reaching a mutually satisfactory agreement. Any opinions of the neutral party shall not be admissible in evidence in any subsequent litigation proceedings.

(c) Either party may request that the ADR process be used. The contractor shall make a written request to the Contracting Officer, and the Contracting Officer shall make a written request to the appropriate official of the contractor. A voluntary election by both parties is required to participate in the ADR process. The parties must agree on the procedures and terms of the process, and officials of both parties who have the authority to resolve the issue must participate in the agreed upon process.

(d) ADR procedures may be used at any time that the Contracting Officer has the authority to resolve the issue in controversy. If a claim has been submitted by the contractor, ADR procedures may be applied to all or a portion of the claim. If ADR procedures are used subsequent to issuance of a Contracting Officer's final decision under the clause at FAR 52.233-1, Disputes, their use does not alter any of the time limitations or procedural requirements for filing an appeal of the Contracting Officer's final decision and does not constitute reconsideration of the final decision.

(e) If the Contracting Officer rejects the contractor's request for ADR proceedings, the Contracting Officer shall provide the contractor with a written explanation of the specific reasons the ADR process is not appropriate for the resolution of the dispute. If the contractor rejects the Contracting Officer's request to use ADR procedures, the contractor shall provide the Contracting Officer with the reasons for rejecting the request.

H.03 DOE-H-2034 CONTRACTOR INTERFACE WITH OTHER CONTRACTORS AND/OR GOVERNMENT EMPLOYEES (OCT 2014)

The Government may award contracts to other contractors for work to be performed at a DOEowned or –controlled site or facility. The Contractor shall cooperate fully with all other on-site DOE contractors and Government employees. The Contractor shall coordinate its own work with such other work as may be directed by the Contracting Officer or a duly authorized representative. The Contractor shall not commit or permit any act which will interfere with the performance of work by any other contractor or by a Government employee.

H.04 DOE-H-2035 ORGANIZATIONAL CONFLICT OF INTEREST MANAGEMENT PLAN (OCT 2014)

Within (30) calendar days after contract award, the Contractor shall submit to the Contracting Officer for approval an Organizational Conflict of Interest (OCI) Management Plan (Plan). The Plan shall describe the Contractor's program to identify, avoid, neutralize, or mitigate potential or actual conflicts of interest that exist or may arise during contract performance and otherwise comply with the requirements of the clause at DEAR 952.209-72, Organizational Conflicts of Interest. The Plan shall be periodically updated as required during the term of the contract. The Plan shall include, as a minimum, the following:

(a) The procedures for identifying and evaluating past, present, and anticipated contracts of the Contractor, its related entities and other performing entities under the contract.

(b) The procedures the Contractor will utilize to avoid, neutralize, or mitigate potential or actual conflicts of interest.

(c) The procedures for reporting actual or potential conflicts of interest to the Contracting Officer.

(d) The procedures the Contractor will utilize to oversee, implement, and update the Plan, to include assigning responsibility for management, oversight and compliance to an individual in the Contractor's organization with full authority to implement the Plan.

(e) The procedures for ensuring all required representations, certifications and factual analyses are submitted to the Contracting Officer for approval in a timely manner.

(f) The procedures for protecting agency information that could lead to an unfair competitive advantage if disclosed including collecting disclosure agreements covering all individuals, subcontractors, and other entities with access to agency-sensitive information and physical safeguarding of such information.

(g) An OCI training and awareness program that includes periodic, recurring training and a process to evidence employee participation.

(h) The enforceable, employee disciplinary actions to be used by the Contractor for violation of OCI requirements.

H.05 DOE-H-2043 ASSIGNMENT AND TRANSFER OF CONTRACTS AND SUBCONTRACTS (OCT 2014)

- (a) Assignment of DOE Prime Contracts. During the period of performance of this contract, it may become necessary for the U.S. Department of Energy (DOE) to transfer and assign existing or future DOE prime contracts supporting site work to this contract. The Contractor shall accept the transfers and assignments of such contracts. Any recommendations and/or suggestions regarding individual transfers directed by DOE shall be submitted in writing to the Contracting Officer prior to the transfer or assignment.
- (b) Transfer of Subcontracts. As the successor Contractor, the Contractor agrees to accept the transfer of existing subcontracts as determined necessary by DOE for continuity of operations. The Contractor shall use its best efforts to negotiate changes to the assigned subcontracts incorporating mandatory flow-down provisions at no cost. If the subcontractor refuses to accept the changes or requests price adjustments, the Contractor will notify the Contracting Officer in writing. DOE reserves the right to direct the Contractor to transfer to DOE or another Contractor any subcontract awarded under this contract.

H.06 DOE-H-2047 FEDERAL HOLIDAYS AND OTHER CLOSURES (OCT 2014)

(a) Designated Federal holidays. Federal employees observe the following Federal holidays:
(1) New Year's Day
(2) Birthday of Martin Luther King, Jr.
(3) Washington's Birthday
(4) Memorial Day
(5) Independence Day
(6) Labor Day
(7) Columbus Day
(8) Veterans Day
(9) Thanksgiving Day
(10) Christmas Day

Generally, Federal holidays that fall on Saturday are observed on the preceding Friday; and holidays that fall on Sunday are observed on the following Monday. The exact calendar day and/or date on which any of the listed holidays are observed may change year to year.

(b) Other Federal Holidays. In addition to the holidays specified above in paragraph (a), Federal employees may observe other holidays designated by Federal Statute, Executive Order, or Presidential Proclamation as a one-time, day-off such as Inauguration Day for the President of the United States.

(c) Unscheduled closures. Occasionally, an individual Federally-owned or -controlled site or facility will be closed or have an early closure on a normal work day for other reasons such as inclement weather or facility conditions. If an unplanned closure occurs, the Contractor will be

notified as soon as possible after the determination that the Federally-owned or -controlled site or facility will be closed.

(d) The Contractor shall provide the services required by the contract at Federally-owned or – controlled sites or facilities on all regularly scheduled Federal work days and other days as may be required by the contract. The Contractor shall not provide the services required by the contract on those days, or portions thereof, specified in paragraphs (a), (b) and (c), except as required under paragraph (e). Accordingly, the Contractor's employees, whose regular duty station in performance of this contract is a Federally-owned or controlled site or facility, shall not be granted access to the facility during those times specified in paragraphs (a), (b) and (c), unless required by paragraph (e) below.

(e) There may be times that the Contractor is required to perform the services required by the contract on a Federal holiday or other closure times. In the event that such performance is required, the Contracting Officer will notify the Contractor, in writing, and specify the extent to which performance of the contract will be required. The Contractor shall provide sufficient personnel to perform the contractually-required work on those days, as directed by the Contracting Officer.

(f) In accordance with the payment and other applicable clauses of the contract, the Government will not pay the Contractor for its employees' regularly scheduled work hours not actually provided directly in performance of the contract due to an unscheduled closure as contemplated in paragraphs (b) and (c) above.

H.07 DOE-H-2048 PUBLIC AFFAIRS (OCT 2014)

In implementation of the clause at DEAR 952.204-75, Public Affairs, all communications or releases of information to the public, the media, or Members of Congress prepared by the Contractor related to work performed under the contract shall be reviewed and approved by DOE prior to issuance. Therefore, the Contractor shall, at least ten (10) calendar days prior to the planned issue date, submit a draft copy to the Contracting Officer of any planned communications or releases of information to the public, the media, or Members of Congress related to work performed under this contract. The Contracting Officer will obtain necessary reviews and clearances and provide the Contractor with the results of such reviews prior to the planned issue date.

H.08 DOE-H-2049 INSURANCE - WORK ON A GOVERNMENT INSTALLATION (OCT 2014)

(a) In accordance with the clause FAR 52.228-5, Insurance – Work on a Government Installation (JAN 1997), the following types and minimum amounts of insurance shall be maintained by the Contractor:

(1) Workers' compensation – Amount in accordance with applicable Federal and State workers' compensation and occupational disease statutes.

(2) Employer's liability - \$100,000 (except in States with exclusive or monopolistic funds that do not permit worker's compensation to be written by private carriers).

(3) Comprehensive bodily injury liability - \$500,000.

(4) Property damage liability – None, unless otherwise required by the Contracting Officer.

H.09 DOE-H-2053 WORKER SAFETY AND HEALTH PROGRAM (OCT 2014)

(a) The Contractor shall comply with all applicable safety and health requirements set forth in 10 CFR 851, Worker Safety and Health Program, and any applicable DOE Directives incorporated into the contract. The Contractor shall develop, implement, and maintain a written Worker Safety and Health Program (WSHP) which shall describe the Contractor's method for complying with and implementing the applicable requirements of 10 CFR 851. The WSHP shall be submitted to and approved by DOE. The approved WSHP must be implemented prior to the start of work. In performance of the work, the Contractor shall provide a safe and healthful workplace and must comply with its approved WSHP and all applicable federal and state environment, health, and safety regulations.

(b) The Contractor shall take all reasonable precautions to protect the environment, health, and safety of its employees, DOE personnel, and members of the public. When more than one contractor works in a shared workplace, the Contractor shall coordinate with the other contractors to ensure roles, responsibilities, and worker safety and health provisions are clearly delineated. The Contractor shall participate in all emergency response drills and exercises related to the Contractor's work and interface with other DOE contractors.

(c) The Contractor shall take all necessary and reasonable steps to minimize the impact of its work on DOE functions and employees, and immediately report all job-related injuries and/or illnesses which occur in any DOE facility to the Contracting Officer Representative (COR). Upon request, the Contractor shall provide to the COR a copy of occupational safety and health self-assessments and/or inspections of work sites for job hazards for work performed at DOE facilities.

(d) The Contracting Officer may notify the Contractor, in writing, of any noncompliance with the terms of this clause, and the corrective action(s) to be taken. After receipt of such notice, the Contractor shall immediately take such corrective action(s).

(e) In the event that the Contractor fails to comply with the terms and conditions of this clause, the Contracting Officer may, without prejudice to any other legal or contractual rights, issue a stop work order halting all or any part of the work. Thereafter, the Contracting Officer may, at his or her discretion, cancel the stop-work order so that the performance of work may be resumed. The Contractor shall not be entitled to an equitable adjustment of the contract amount or extension of the performance schedule due to any stop-work order issued under this clause.

(f) The Contractor shall flow down the requirements of this clause to all subcontracts at any tier.

(g) In the event of a conflict between the requirements of this clause and 10 CFR 851, the requirements of 10 CFR 851 shall take precedence.

H.10 DOE-H-2057 DEPARTMENT OF LABOR WAGE DETERMINATIONS (OCT 2014)

The Contractor's performance under this contract shall comply with the requirements of the U.S. Department of Labor Wage Determination(s) located in Section J, Attachment 5, and the clause at FAR 52.222-42, Statement of Equivalent Rates for Federal Hires (MAY 2014).

H.11 DOE-H-2063 CONFIDENTIALITY OF INFORMATION (OCT 2014)

(a) Performance of work under this contract may result in the Contractor having access to Controlled Unclassified Information (CUI) via written or electronic documents, or by virtue of having access to DOE's electronic or other systems. Such Controlled Unclassified confidential information includes personally identifiable information (such as social security account numbers) or proprietary business, technical, or financial information belonging to the Government or other companies or organizations. The Contractor shall treat this information as sensitive and agrees not to use this information for its own purposes, or to disclose the information to third parties, unless specifically authorized to do so in writing by the Contracting Officer.

(b) The restrictions set out in paragraph (a) above, however, do not apply to –

Information which, at the time of receipt by the Contractor, is in the public domain;
 Information which, subsequent to receipt by the Contractor, becomes part of the public domain through no fault or action of the Contractor;

(3) Information which the Contractor can demonstrate was previously in its possession and was not acquired directly or indirectly as a result of access obtained by performing work under this contract;

(4) Information which the Contractor can demonstrate was received from a third party who did not require the Contractor to hold it in confidence; or

(5) Information which is subject to release under applicable law.

(c) The Contractor shall obtain a written agreement from each of its employees who are granted access to, or furnished with, Controlled Unclassified Information, whereby the employee agrees that he or she will not discuss, divulge, or disclose any such information to any person or entity except those persons within the contractor's organization directly concerned with the performance of the contract. The agreement shall be in a form satisfactory to the Contracting Officer.

(d) Upon request of the Contracting Officer, the Contractor agrees to execute an agreement with any party which provides Controlled Unclassified Information to the Contractor pursuant to this contract, or whose facilities the Contractor is given access to that restrict use and disclosure of Controlled Unclassified Information obtained by the Contractor. A copy of the agreement, which shall include all material aspects of this clause, shall be provided to the Contracting Officer for approval.

(e) Upon request of the Contracting Officer, the Contractor shall supply the Government with reports itemizing the Controlled Unclassified Information it receives under this contract and identify the source (company, companies or other organizations) of the information.

(f) The Contractor agrees to flow down this clause to all subcontracts issued under this contract.

H.12 DOE-H-2062 PERSONAL IDENTITY VERIFICATION OF CONTRACTOR PERSONNEL (OCT 2014)

(a) Pursuant to the clause at FAR 52.204-9, Personal Identity Verification of Contractor Personnel, the Contractor shall comply with applicable DOE regulations, policies and directives regarding identification, credential and access management for its personnel who have routine physical access to DOE-owned or -controlled sites or facilities or routine access to DOE information systems.

(b) The Contractor shall comply with the requirements of those DOE directives, or parts thereof, identified below in implementing the requirements of this clause. The Contracting Officer may, at any time, unilaterally amend this clause in order to add, modify or delete specific requirements. Directive No. Date Directive Title / Contract Requirements Document [Insert information pertaining to applicable directives]

(End of Clause)

H.13 DOE-H-2065 REPORTING OF FRAUD, WASTE, ABUSE, CORRUPTION, OR MISMANAGEMENT (OCT 2014)

The contractor shall comply with the following:

(a) Notify employees annually of their duty to report allegations of fraud, waste, abuse, misuse, corruption, criminal acts, or mismanagement relating to DOE programs, operations, facilities, contracts, or information technology systems to an appropriate authority (e.g., OIG, other law enforcement, supervisor, employee concerns office, security officials). Examples of violations to be reported include, but are not limited to, allegations of false statements; false claims; bribery; kickbacks; fraud; DOE environment, safety, and health violations; theft; computer crimes; contractor mischarging; conflicts of interest; and conspiracy to commit any of these acts. Contractors must also ensure that their employees are aware that they may always report incidents or information directly to the Office of Inspector General (OIG).

(b) Display the OIG hotline telephone number in buildings and common areas such as cafeterias, public telephone areas, official bulletin boards, reception rooms, and building lobbies.

(c) Publish the OIG hotline telephone number in telephone books and newsletters under the contractor's cognizance.

(d) Ensure that its employees report to the OIG within a reasonable period of time, but not later than 24 hours after discovery, all alleged violations of law, regulations, or policy, including incidents of fraud, waste, abuse, misuse, corruption, criminal acts, or mismanagement, that have been referred to Federal, State, or local law enforcement entities.

(e) Ensure that its employees report to the OIG any allegations of reprisals taken against employees who have reported to the OIG fraud, waste, abuse, misuse, corruption, criminal acts, or mismanagement.

(f) Ensure that its managers do not retaliate against DOE contractor employees who report fraud, waste, abuse, misuse, corruption, criminal acts, or mismanagement.

(g) Ensure that all their employees understand that they must -

(1) Comply with requests for interviews and briefings and must provide affidavits or sworn statements, if so requested by an employee of the OIG so designated to take affidavits or sworn statements;

(2) Not impede or hinder another employee's cooperation with the OIG; and(3) Not take reprisals against DOE contractor employees who cooperate with or disclose information to the OIG or other lawful appropriate authority.

(h) Seek more specific guidance concerning reporting of fraud, waste, abuse, corruption, or mismanagement, and cooperation with the Inspector General, in DOE directives.

H.14 DOE-H-2071 DEPARTMENT OF ENERGY DIRECTIVES (OCT 2014)

(a) In performing work under this contract, the contractor shall comply with the requirements of those Department of Energy (DOE) directives, or parts thereof listed in Section J, Attachment J-2 or identified elsewhere in the contract.

(b) The Contracting Officer may, at any time, unilaterally amend this clause, or other clauses which incorporate DOE directives, in order to add, modify or delete specific requirements. Prior to revising the listing of directives, the Contracting Officer shall notify the contractor in writing of the Department's intent to revise the list, and the contractor shall be provided with the opportunity to assess the effect of the contractor's compliance with the revised list on contract cost and funding, technical performance, and schedule, and identify any potential inconsistencies between the revised list and the other terms and conditions of the contract. Within 30 days after receipt of the Contracting Officer's notice, the contractor shall advise the Contracting Officer in writing of the potential impact of the contractor's compliance with the revised list. Based on the information provided by the contractor and any other information available, the Contracting Officer shall decide whether to revise the listing of directives and so to advise the contractor not later than 30 days prior to the effective date of the revision.

(c) Notwithstanding the process described in paragraph (b), the Contracting Officer may direct the contractor to immediately begin compliance with the requirements of any directive.

(d) The contractor and the Contracting Officer shall identify and, if appropriate, agree to any changes to other contract terms and conditions, including cost and schedule, associated with the revision pursuant to the clause of this contract at FAR 52.243-1, Changes – Fixed-Price, or FAR 52.243-3, Changes – Time-and-Materials or Labor-Hours.

(e) Regardless of the performer of the work, the contractor is responsible for compliance with the requirements of this clause. The contractor shall include this clause in all subcontracts to the extent necessary to ensure the contractor's compliance with these requirements.

H.15 DOE-H-2076 LOBBYING RESTRICTION

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.16 ACCESS TO DOE-OWNED OR LEASED FACILITIES

- (a) The performance of this contract requires that employees of the contractor have physical access to DOE-owned or leased facilities; however, this clause does not control requirements for an employee's obtaining a security clearance. The contractor understands and agrees that DOE has a prescribed process with which the contractor and its employees must comply in order to receive a Federal credential or security badge that allows such physical access. The contractor further understands that it must propose employees whose background offers the best prospect of obtaining a Federal credential /security badge approval for access. The contractor shall consider the following potential disqualifiers which are not all inclusive and may vary depending on access requirements:
 - (i) is, or is suspected of being, a terrorist;
 - (ii) is the subject of an outstanding warrant;
 - (iii) has deliberately omitted, concealed, or falsified relevant and material facts from any Questionnaire for National Security Positions (SF-86), Questionnaire for Non-Sensitive Positions (SF-85), or similar form;
 - (iv) has presented false or forged identity source documents;
 - (v) has been barred from Federal employment;
 - (vi) is currently awaiting a hearing or trial or has been convicted of a crime punishable by imprisonment of six (6) months or longer; or
 - (vii) is awaiting or serving a form of pre-prosecution probation, suspended or deferred sentencing, probation or parole in conjunction with an arrest or criminal charges against the individual for a crime that is punishable by imprisonment of six (6) months or longer.
- (b) The contractor shall ensure:
 - (i) In initiating the process for gaining physical access: (1) compliance with procedures established by DOE in providing its employee(s) with any forms directed by DOE; (2) that the employee properly completes any forms; and (3) that the employee(s) submits the forms to the person designated by the CO.
 - (ii) In completing the process for gaining physical access, that its employee (1) cooperates with DOE officials responsible for granting access to DOE -owned or leased facilities and (2) provides additional information, requested by those DOE officials.
- (c) The contractor understands and agrees that DOE may unilaterally deny a security badge to an employee and that the denial remains effective for that employee unless DOE subsequently determines that access may be granted. To obtain a security badge employees must be US Citizens. Upon notice from DOE that an employee's application for a Federal credential / security badge is or will be denied, the contractor shall promptly identify and submit the forms referred to in subparagraph (b) (i) of this clause for the substitute employee. The denial of a Federal credential /security badge to individual employees by DOE shall not be cause for extension of the period of performance of this Contract or any contractor claim against DOE.
- (d) The contractor shall return to the CO or designee the badge(s) or other credential(s) provided by DOE pursuant to this clause, granting physical access to DOE -owned or leased facilities

by the contractor's employee(s), upon (1) the termination of this Contract; (2) the expiration of this Contract; (3) the termination of employment on this Contract by an individual employee; or (4) demand by DOE for return of the badge.

(e) The contractor shall include this clause, including this paragraph (e), in any subcontract, awarded in the performance of this Contract, in which an employee(s) of the subcontractor will require physical access to DOE -owned or leased facilities.

H.17 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.18 CONSERVATION OF UTILITIES

The Contractor shall instruct Contractor employees in utilities conservation practices when working at a DOE owned or leased location. The Contractor shall operate under conditions that preclude the waste of utilities. The contractor shall use lights only in areas where and at the time when work is actually being performed except in those areas where lighting is essential for purpose of safety and security.

H.19 INCORPORATION OF REPRESENTATIONS, CERTIFICATIONS, AND OTHER STATEMENTS OF OFFEROR

The representations, certifications, and other statements of the contractor, Dated **8/21/2017**, made in response to Solicitation No. DE-SOL-0011249 are hereby incorporated into this contract by reference.

H.20 CONTRACT PARTICIPATION BY FOREIGN NATIONALS

(a) The contractor shall notify the Contracting Officer, in writing, prior to the employment of or participation by any foreign national in the performance of work under the Contract.

(b) The contractor shall notify the Contracting Officer, in writing, prior to any visit to sites covered by this Contract by any foreign national in connection with the work being performed under this Contract. This notification shall be made at least 75 days prior to the planned visit.

H.21 QUALITY ASSURANCE FOR WORK AFFECTING NUCLEAR SAFETY

The contractor shall implement a DOE-approved Quality Assurance Program (QAP) (to be placed in Attachment J-6) in accordance with the EM Quality Assurance Program, EM-QA-001, prior to commencement of work affecting nuclear safety. The EM QAP provides the basis to achieve quality across the EM complex for all mission-related work while providing a consistent approach to Quality Assurance (QA).

EM requires that American Society of Mechanical Engineers (ASME) NQA-1, 2008, Quality Assurance Requirements for Nuclear Facility Applications, and addenda through 2009 be implemented as part of the contractor's QAP for work affecting nuclear safety. The required portions of NQA-1 to be implemented include: Introduction, Part I, and as applicable portions of Part II. NQA-1 Parts III and IV are to be used as guidance for the contractor's QAP and implementing procedures.

Contractors have three options for complying with this contract requirement:

- (1) Develop and submit for DOE approval a new QAP;
- (2) Adopt the prior contractor's DOE-approved QAP; or,
- (3) Modify the prior contractor's DOE-approved QAP and submit it for DOE approval.

Development of a new QAP, or adoption of an existing or modified version of a QAP from a prior contractor, does not alter a contractor's legal obligation to comply with 10 CFR 830, other regulations affecting QA and DOE Order 414.1C.

The contractor's QAP shall describe the overall implementation of the EM QA requirements and shall be applied to all work performed by the contractor (e.g., research, design/engineering, construction, operation, budget, mission, safety, and health).

The contractor shall develop and implement a comprehensive Issues Management System for the identification, assignment of significance category, and processing of nuclear safety-related issues identified within the contractor's organization. The significance assigned to the issues shall be the basis for all actions taken by the contractor in correcting the issue from initial causal analysis, reviews for reporting to DOE, through completion of Effectiveness Reviews if required based on the seriousness of the issue.

The contractor shall, at a minimum, annually review and update as appropriate their QAP. The review and any changes shall be submitted to DOE for approval. Changes shall be approved before implementation by the contractor.

PART II – CONTRACT CLAUSES

SECTION I

CONTRACT CLAUSES

Clause No.	FAR/DEAR Reference	Title	Fill-In Information (see FAR 52.104(d))
I.1	FAR 52.202-1	Definitions (NOV 2013)	None
I.2	FAR 52.203-3	Gratuities (APR 1984)	None
I.3	FAR 52.203-5	Covenant Against Contingent Fees (MAY 2014)	None
I.4	FAR 52.203-6	Restrictions on Subcontractor Sales to the Government (SEP 2006)	None
I.5	FAR 52.203-7	Anti-Kickback Procedures (MAY 2014)	None
I.6	FAR 52.203-8	Cancellation, Rescission, and Recovery of Funds for Illegal or Improper Activity (MAY 2014)	None
I.7	FAR 52.203-10	Price or Fee Adjustment for Illegal or Improper Activity (MAY 2014)	None
I.8	FAR 52.203-12	Limitation on Payments to Influence Certain Federal Transactions (OCT 2010)	None
I.9	FAR 52.203-17	Contractor Employee Whistleblower Rights and Requirement To Inform Employees of Whistleblower Rights (APR 2014)	None
I.10	FAR 52.204-4	Printed or Copied Double-Sided on Postconsumer Fiber Content Paper (MAY 2011)	None
I.11	FAR 52.204-10	Reporting Executive Compensation and First-Tier Subcontract Awards (OCT 2016)	None
I.12	FAR 52.204-13	System for Award Management Maintenance (OCT 2016)	None
I.13	FAR 52.204-19	Incorporation by Reference of Representations and Certifications (DEC 2014)	None
I.14	FAR 52.209-6	Protecting the Government's Interest when Subcontracting with Contractors Debarred, Suspended or Proposed for Debarment (OCT 2015)	None
I.15	FAR 52.209-9	Updates of Publicly Available Information Regarding Responsibility Matters (JUL 2013)	None
I.16	FAR 52.209-10	Prohibition on Contracting with Inverted Domestic Corporations (NOV 2015)	None
I.17	FAR 52.215-8	Order of Precedence – Uniform Contract Format (OCT 1997)	None
I.18	FAR 52.215-10	Price Reduction for Defective Certified Cost or Pricing Data (AUG 2011)	None
I.19	FAR 52.215-11	Price Reduction for Defective Certified Cost or Pricing Data – Modifications (AUG 2011)	None
I.20	FAR 52.215-12	Subcontractor Certified Cost or Pricing Data (OCT 2010)	None

Clause No.	FAR/DEAR Reference	Title	Fill-In Information (see FAR 52.104(d))
I.21	FAR 52.215-13	Subcontractor Certified Cost or Pricing Data – Modifications (OCT 2010)	None
I.22	FAR 52.215-19	Notification of Ownership Changes (OCT 1997)	None
I.23	FAR 52.215-21	Requirements for Certified Cost or Pricing Data and Data Other Than Certified Cost or Pricing Data – Modifications (OCT 2010)	None
I.24	FAR 52.219-14	Limitations on Subcontracting (NOV 2011)	None
I.25	FAR 52.219-28	Post-Award Small Business Program Representation (JUL 2013)	(g) The contractor represents that it is a small business concern under NAICS Code 541620 assigned to contract number 89303418CE000001
I.26	FAR 52.222-3	Convict Labor (JUN 2003)	None
I.27	FAR 52.222-21	Prohibition of Segregated Facilities (APR 2015)	None
I.28	FAR 52.222-22	Previous Contracts and Compliance Reports (FEB 1999)	None
I.29	FAR 52.222-26	Equal Opportunity (SEPT 2016)	None
I.30	FAR 52.222-35	Equal Opportunity for Veterans (OCT 2015)	None
I.31	FAR 52.222-36	Equal Opportunity for Workers with Disabilities (JUL 2014)	None
I.32	FAR 52.222-37	Employment Reports on Veterans (FEB 2016)	None
I.33	FAR 52.222-40	Notification of Employee Rights Under the National Labor Relations Act (DEC 2010)	None
I.34	FAR 52.222-41	Service Contract Labor Standards (MAY 2015)	None
I.35	FAR 52.222-50	Combating Trafficking in Persons (MAR 2015)	None
I.36	FAR 52.222-54	Employment Eligibility Verification (AUG 2013)	None
I.37	FAR 52.222-55	Minimum Wages Under Executive Order 13658 (DEC 2015)	None
I.38	FAR 52.223-5	Pollution Prevention and Right-to-Know Information (MAY 2011)	None
I.39	FAR 52.223-6	Drug Free Workplace (MAY 2001)	None
I.40	FAR 52.223-18	Encouraging Contractor Policies to Ban Text Messaging While Driving (AUG 2011)	None
I.41	FAR 52.225-1	Buy American – Supplies (MAY 2014)	None
I.42	FAR 52.225-13	Restrictions on Certain Foreign Purchases (JUN 2008)	None
I.43	FAR 52.227-14	Rights in Data – General (MAY 2014)	None
I.44	FAR 52.227-14 ALT III	Rights in Data – General (MAY 2014) Alternate III (DEC 2007)	None
I.45	FAR 52.227-14 ALT V	Rights in Data – General (MAY 2014) Alternate V (DEC 2007)	None
I.46	FAR 52.227-23	Rights to Proposal Data (Technical) (JUN 1987)	None

Clause	FAR/DEAR	Title	Fill-In Information
No.	Reference		(see FAR 52.104(d))
I.47	FAR 52.228-5	Insurance – Work on a Government Installation (JAN 1997)	None
I.48	FAR 52.229-4	Federal, State, and Local Taxes (State and Local Adjustments (FEB 2013)	None
I.49	FAR 52.232-1	Payments (APR 1984)	None
I.50	FAR 52.232-8	Discounts for Prompt Payment (FEB 2002)	None
I.51	FAR 52.232-11	Extras (APR 1984)	None
I.52	FAR 52.232-16	Progress Payments (APR 2012); Alternate I (APR 2012)	(1) 30th
I.53	FAR 52.232-17	Interest (MAY 2014)	None
I.54	FAR 52.232-23	Assignment of Claims (MAY 2014)	None
I.55	FAR 52.232-25	Prompt Payment (JAN 2017)	None
I.56	FAR 52.232-33	Payment by Electronic Funds Transfer – System for Award Management (JUL 2013)	None
I.57	FAR 52.232-39	Unenforceability of Unauthorized Obligations (JUN 2013)	None
I.58	FAR 52.232-40	Providing Accelerated Payments to Small Business Subcontractors (DEC 2013)	None
I.59	FAR 52.233-1	Disputes (MAY 2014); Alternate I (DEC 1991)	None
I.60	FAR 52.233-3	Protest After Award (AUG 1996)	None
I.61	FAR 52.233-4	Applicable Law for Breach of Contract Claim (OCT 2004)	None
I.62	FAR 52.242-13	Bankruptcy (JUL 1995)	None
I.63	FAR 52.243-1	Changes – Fixed Price (AUG 1987); Alternate I (APR 1984)	None
I.64	FAR 52.244-2	Subcontracts (OCT 2010)	None
I.65	FAR 52.244-5	Competition in Subcontracting (DEC 1996)	None
I.66	FAR 52.244-6	Subcontracts for Commercial Items (APR 2015)	None
I.67	FAR 52.246-25	Limitation of Liability – Services (FEB 1997)	None
I.68	FAR 52.249-2	Termination for Convenience of the Government (Fixed-Price) (APR 2012)	None
I.69	FAR 52.249-8	Default (Fixed-Price Supply and Service) (APR 1984)	None
I.70	This Contract inc and effect as if th full text available this/these address For FAR clauses For DOE Acquis	CLAUSES INCORPORATED BY REFERENCE (FEB 1998) corporates one or more clauses by reference, with the same force ney were given in full text. Upon request, the CO will make their e. Also, the full text of a clause may be accessed electronically at s(es): : https://www.acquisition.gov/far/index.html ition Regulation (DEAR) arsite.hill.af.mil/vfdoea.htm	None

Clause No.	FAR/DEAR Reference	Title	Fill-In Information (see FAR 52.104(d))
I.71	FAR 52.253-1	Computer Generated Forms (JAN 1991)	None
I.72	DEAR 952.202-1	DEFINITIONS. (FEB 2011)	None
	defined in the Depa chapter 9), the wor 902.101 or the defi	tion provision or contract clause uses a word or term that is artment of Energy Acquisition Regulation (DEAR) (48 CFR d or term has the same meaning as the definition in 48 CFR inition in the part, subpart, or section of 48 CFR chapter 9 where ause is prescribed in effect at the time the solicitation was issued, a in (a) applies	
I.73	DEAR 952.203-70	WHISTLEBLOWER PROTECTION FOR EMPLOYEES (DEC 2000)	None
	Employee Protection	shall comply with the requirements of "DOE Contractor on Program" at 10 CFR part 708 for work performed on behalf of ed to activities at DOE-owned or -leased sites.	
	including this parag	shall insert or have inserted the substance of this clause, graph (b), in subcontracts at all tiers, for subcontracts involving a behalf of DOE directly related to activities at DOE-owned or	
	leased sites.		

I.74	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	

Clause No.	FAR/DEAR Reference	Title	Fill-In Information (see FAR 52.104(d))
	funding programs achievements.	and projects resulting in scientific, technical, and other	
	(End of clause)		

Clause No.	FAR/DEAR Reference	Title	Fill-In Information (see FAR 52.104(d))
I.75	DEAR 952.204-77	COMPUTER SECURITY (AUG 2006)	
	computer networks controlled by DOE	<i>Computer</i> means desktop computers, portable computers, (including the DOE Network and local area networks at or organizations), network devices, automated information er related computer equipment owned by, leased, or operated on	
	person who has bee computer, and does	as a DOE Contractor or subcontractor employee, or any other on granted access to a DOE computer or to information on a DOE not include a member of the public who sends an e-mail computer or who obtains information available to the public on	
		<i>computers</i> . A Contractor shall not allow an individual to have on on a DOE computer unless—	
		has acknowledged in writing that the individual has no acy in the use of a DOE computer; and	
	investigative agency	has consented in writing to permit access by an authorized y to any DOE computer used during the period of that to information on a DOE computer, and for a period of three	
	(including any prov	of privacy. Notwithstanding any other provision of law rision of law enacted by the Electronic Communications Privacy dividual using a DOE computer shall have any expectation of f that computer.	
	for itself and subco paragraph (b) of thi	The Contractor is responsible for maintaining written records ntractors demonstrating compliance with the provisions of is section. The Contractor agrees to provide access to these , or its authorized agents, upon request.	
	(e), in subcontract	he Contractor shall insert this clause, including this paragraph ts under this contract that may provide access to computers perated on behalf of the DOE.	

Clause No.	FAR/DEAR Reference	Title	Fill-In Information (see FAR 52.104(d))
I.76	DEAR 952.208-70	PRINTING (APR 1984)	
	defined in Title I of on the effective date under this contract. this contract involve no more than 25,00 be printing. A unit is color. A requirement	Il not engage in, nor subcontract for, any printing (as that term is 5 the U.S. Government Printing and Binding Regulations in effect e of this contract) in connection with the performance of work Provided, however, that performance of a requirement under ing the duplication of less than 5,000 copies of a single unit, or 0 units in the aggregate of multiple units, will not be deemed to is defined as one sheet, size $8^{1}/_{2}$ by 11 inches one side only, one nt is defined as a single publication document.	
	· · · ·	<i>ng</i> includes the following processes: composition, plate making, , microform publishing, or the end items produced by such	
	set forth above, the obtain the Contract production, acquisit obtained from the C	the contract will necessitate reproduction in excess of the limits Contractor shall notify the Contracting Officer in writing and ing Officer's approval prior to acquiring on DOE's behalf tion, and dissemination of printed matter. Such printing must be Government Printing Office (GPO), a contract source designated Committee on Printing authorized federal printing plant.	
	(3) Printing services cost of such printing	s not obtained in compliance with this guidance will result in the g being disallowed.	
		will include in each of his subcontracts hereunder a provision me as this clause including this paragraph (4).	

I.77	DEAR 952.209-72 ORGANIZATIONAL CONFLICTS OF INTEREST (AUG 2009)	None
	(a) <i>Purpose</i> . 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) <i>Scope</i> . 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 venture, 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) <i>Disclosure after award.</i> (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) <i>Remedies</i> . 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) <i>Waiver</i> . 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	

Clause No.	FAR/DEAR Reference	Title	Fill-In Information (see FAR 52.104(d))
	11	ort thereof. If it is determined to be in the best interests of the ontracting Officer may grant such a waiver in writing.	
I.78	DEAR 952.223-72 1984)	Radiation Protection and Nuclear Criticality (APR	None
	work under this comembers of the puradioactive materi protection and nucliar (including reporting management progreview and approvide approvide and and requipare prejudice to any of the work may be Contractor shall material approximation and the standards and requipare approximation and the work may be contractor shall material approximation approxim	all take all reasonable precautions in the performance of ontract to protect the safety and health of employees and of ablic against the hazards of ionizing radiation and als and shall comply with all applicable radiation clear criticality safety standards and requirements ing requirements) of DOE. The Contractor shall submit a ram and implementation plan to the Contracting Officer for val within 30 days after the effective date of this contract or ne event that the Contractor fails to comply with said uirements of DOE, the Contracting Officer may, without ther legal or contractual rights of DOE, issue an order y part of the work. Thereafter, a start order for resumption be issued at the discretion of the Contracting Officer. The nake no claim for an extension of time or for compensation ason of or in connection with such work stoppage.	

I.79	DEAR 952.242-70 Technical Direction (DEC 2000)	None
	(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, shift work emphasis between work areas or tasks, require pursuit of certain lines of inquiry, fill in details, or otherwise serve to accomplish the contractual Statement of Work.	
	(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 Contracting Officer. It will specify the extent of the COR's authority to act on behalf of the Contracting Officer.	
	(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 Statement of Work;	
	(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	

Clause No.	FAR/DEAR Reference	Title	Fill-In Information (see FAR 52.104(d))
	the Contractor, an the categories defi must not proceed five (5) working d must request the C	y under the provisions of this clause. If, in the opinion of y instruction or direction by the COR falls within one of and in (c)(1) through (c)(5) of this clause, the Contractor and must notify the Contracting Officer in writing within ays after receipt of any such instruction or direction and Contracting Officer to modify the contract accordingly. e notification from the Contractor, the Contracting Officer	
	the Contractor's le	ntractor in writing within thirty (30) days after receipt of otter that the technical direction is within the scope of the I does not constitute a change under the Changes clause of	
		ntractor in writing within a reasonable time that the issue a written change order; or	
		ntractor in writing within a reasonable time not to proceed on or direction of the COR.	
	technical direction contract action to	e Contractor and Contracting Officer either to agree that the is within the scope of the contract or to agree upon the be taken with respect to the technical direction will be visions of the clause entitled "Disputes."	
	(End of clause)		

PART III - LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS

SECTION J

ATTACHMENT J-1 LIST ATTACHMENTS

The following attachments constitute part of this contract:

Attachment		
Number	Attachment Title	Page #
J-1	List of Attachments	63
J-2	Deliverables	64
J-3	List of Applicable DOE Directives (List B)	66
J-4	Notice of Nondisclosure	67
J-5	Register of Wage Determinations Under the SCA	69
J-6	Quality Assurance For Work Affecting Nuclear Safety	94
J-7	DOE O 206.2 Identity, Credential and Access Management (ICAM) (FEB 2013)	95
J-8	Restricted Software List	96

ATTACHMENT J-2 - LIST OF DELIVERABLES AND SCHEDULE

<u>All deliverables shall be provided to DOE in an editable electronic format (i.e., rather than PDF) in</u> addition to hardcopy. Omission of any deliverable from the List of Deliverables does not affect the obligation of the Contractor to comply with such requirement.

Report	Reference	Due Date	Approval or Information	DOE Recipient
Phase 3D: Update to Inventory White Paper	4.2.1.2	3/31/2019	DOE Approval	DOE COR
Phase 3D: Update to Waste Form Release White Paper developed in Phase 3B	4.2.1.3	4/14/2019	DOE Approval	DOE COR
Update to Material Properties White Paper developed in Phase 3B	4.2.1.4	04/14/2019	DOE Approval	DOE COR
Phase 3C: Update to UZ Model White Paper	4.2.1.5	5/31/2018	DOE Approval	DOE COR
Phase 3D: Update to UZ Model White Paper	4.2.1.5	4/30/2019	DOE Approval	DOE COR
Phase 3C. White Paper describing results from 4.2.1.6 (Sat. Zone [SZ] Hydrology)	4.2.1.6	6/30/2018	DOE Approval	DOE COR
Phase 3D: Update to SZ Model White Paper	4.2.1.6	5/16/2019	DOE Approval	DOE COR
Phase 3C: White Paper describing the results from 4.2.1.7 (Atmos. Dispersion)	4.2.1.7	7/31/2018	DOE Approval	DOE COR
Phase 3D: Update Atmospheric Dispersion White Paper	4.2.1.7	5/31/2019	DOE Approval	DOE COR
Phase 3D: Update to Biotically-Inducted CT White Paper	4.2.1.8	6/15/2019	DOE Approval	DOE COR
Phase 3D: Update to Diffusion Modeling White Paper	4.2.1.9	6/30/2019	DOE Approval	DOE COR
Phase 3D: Update to Geochemistry White Paper	4.2.1.10	7/15/2019	DOE Approval	DOE COR
Phase 3C: White Paper describing the results from 4.2.1.11.1 and 4.2.1.11.2 (Erosion)	4.2.1.11	8/31/2018	DOE Approval	DOE COR
Deliverables for 4.2.1.13 are included in 4.2.5 (ALARA)	4.2.1.13		DOE Approval	DOE COR

	10110	0/20/2010		
Phase 3C: White Paper	4.2.1.12	9/30/2018	DOE Approval	DOE COR
describing the results from				
4.2.1.12 (Human Exposure				
White Paper)				
Phase 3D: Update to Human	4.2.1.12	7/31/2019	DOE Approval	DOE COR
Exposure White Paper				
Phase 3D: White Paper	4.2.1.14	8/7/2019	DOE Approval	DOE COR
describing the results from				
4.2.1.14 (Ecological				
Exposure)				
Phase 3D: User guide for the	4.3.5	8/15/2019	DOE Approval	DOE COR
Decision Support Module			11	
Phase 3D: White Paper	4.3.5	8/31/2019	DOE Approval	DOE COR
describing the Decision			11	
Support Module, Decision				
Analysis, and ALARA				
Phase 3C: Memo describing	4.4	9/30/2018	DOE Approval	DOE COR
the status of the				
sensitivity/uncertainty				
analysis				
Phase 3D: White Paper	4.4	9/15/2019	DOE Approval	DOE COR
describing the results of the			- II - ···	
sensitivity/uncertainty				
analysis				
Phase 3D: RRA Model User	4.5.2	9/30/2019	DOE Approval	DOE COR
Guide	1.0.2	272072012	DOLIMPPION	DOLCON
Phase 3D: Prepare RRA	4.5.2	9/30/2019	DOE Approval	DOE COR
model Development Report		7,00,2017	2 02 rppi0 /ul	202000
Phase 3D: Completed RRA	4.5.2	9/30/2019	DOE Approval	DOE COR
GoldSim Model	7.3.2	7/50/2017	DOLIMPPION	DOLCON
Quality Control Plan	4.7	10/31/2017	DOE Approval	DOE COR
Project Management	4.6	Monthly	DOE Approval	DOE COR
i ioject Management	4.0	wonuny	DOL Approval	DOLCOK

Deliverables and Schedule	4.9	01/06/2018	DOE	DOE
			Informational	COR
Quality Assurance Plan (QAP) for Work	H.21	As	DOE Approval	DOE
Affecting Nuclear Safety	J-6	Applicable		COR
Organizational Conflict of Interest (OCI)	H.04	1/06/2018	DOE Approval	DOE
Management Plan				COR

(Note these are not new or added deliverables; the chart is a summary of deliverables required by Sections C and H of the contract.)

ATTACHMENT J-3 - LIST OF APPLICABLE DOE DIRECTIVES

DOE Directives	Subject
EM-QA-001	Environmental Management Quality Assurance Program
DOE O 414.1D	Quality Assurance
DOE O 435.1	Radioactive Waste Management
DOE O 458.1	Radiation Protection of the Public and the Environment

ATTACHMENT J-4 NOTICE OF NON-DISCLOSURE

I_____, am working on Contract No. 89303418CE000001 for the US Department of Energy.

In performance on or in support of Contract 89303418CE000001 I certify that I shall not disclose any Government or DOE or contractor proprietary or confidential information related to or gathered during contract performance, or after contract completion concerning this contract to anyone who is not also authorized access to that information by law, regulation, agency head, or the Contracting Officer; any disclosure shall be limited to the information required in connection with a person's official responsibilities. I certify that I am aware of the restrictions on disclosure on information under the Procurement Integrity Act, 41 U.S.C. §423, and its implementing regulations, Federal Acquisition Regulation 3.104. I understand that unauthorized disclosure of such information may subject me to substantial administrative, civil and criminal penalties, including fines, imprisonment, and loss of employment under the Procurement Integrity Act, 41 U.S.C. §423 (2002), or other applicable laws and regulations. Furthermore, I will report any attempt to obtain such information concerning Contract 89303418CE000001 to the Contracting Officer.

I understand that making a false or fraudulent certification may subject me to prosecution under Title 18, United States Code, §1001 and the Procurement Integrity Act, 41 U.S.C. §423.

NAME

Print

Signature

DATE

ORGANIZATION _____

INDIVIDUAL CONFLICT OF INTEREST DISCLOSURE ADVISORY AND ASSISTANCE SERVICES

I, ______, certify that within the last twelve months, no present, or current planned financial, contractual, individual or other interests relating to the performance of the Performance Work Statement (PWS) under Contract 89303418CE000001exists that would render myself unable to provide impartial assistance or advice to the Government, or impair my objectivity in performing the contract work, or offer an unfair competitive advantage.

I hereby certify that I have the authority to represent my organization, and that to the best of my knowledge and belief, the facts and representation presented above are accurate and complete.

Signature

Date

Name and Title

Organization

Section J-4 Attachment, Notice of Non-Disclosure & Individual Conflict of Interest Disclosure Advisory and Assistance Services

Completed forms have been electronically received, are incorporated by reference and electronically filed in the Contracts Office, Environmental Management-Los Alamos Field Office.

ATTACHMENT J-5 SERVICE CONTRACT ACT WAGE DETERMINATION

Denver, Colorado

WD 15-5419 (Rev.-3) was first posted on www.wdol.gov on 01/03/2017 REGISTER OF WAGE DETERMINATIONS UNDER U.S. DEPARTMENT OF LABOR THE SERVICE CONTRACT ACT | EMPLOYMENT STANDARDS ADMINISTRATION By direction of the Secretary of Labor | WAGE AND HOUR DIVISION WASHINGTON D.C. 20210 Wage Determination No.: 2015-5419 Daniel W. Simms Division of Revision No.: 3 Date of Revision: 12/30/2016 Director Wage Determinations

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.20 for calendar year 2017 applies to all contracts subject to the Service Contract Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2017. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

State: Colorado

Area: Colorado Counties of Adams, Arapahoe, Broomfield, Clear Creek, Denver, Douglas, Elbert, Gilpin, Jefferson, Park

Fringe Benefits Required Follow the Occupational	Listing
OCCUPATION CODE - TITLE FOOTNOTE	RATE
01000 - Administrative Support and Clerical Occupations	
01011 - Accounting Clerk I	14.57
01012 - Accounting Clerk II	16.44
01013 - Accounting Clerk II	18.38
01020 - Administrative Assistant	26.31
01035 - Court Reporter	21.55
01041 - Customer Service Representative I	12.97
01042 - Customer Service Representative II	14.58
01043 - Customer Service Representative III	15.91
01051 - Data Entry Operator I	15.47
01052 - Data Entry Operator II	16.88
01060 - Dispatcher, Motor Vehicle	20.31
01070 - Document Preparation Clerk	15.04
01090 - Duplicating Machine Operator	15.04
01111 - General Clerk I	13.45
01112 - General Clerk II	14.67
01113 - General Clerk III	16.47

01120 - Housing Referral Assistant	21.75
01141 - Messenger Courier	14.32
01191 - Order Clerk I	14.93
01192 - Order Clerk II	16.29
01261 - Personnel Assistant (Employment) I	16.67
01262 - Personnel Assistant (Employment) II	18.65
01263 - Personnel Assistant (Employment) III	20.79
01270 - Production Control Clerk	22.47
01290 - Rental Clerk	15.53
01300 - Scheduler, Maintenance	17.15
01311 - Secretary I	17.15
01312 - Secretary II	19.19
01313 - Secretary III	21.75
01320 - Service Order Dispatcher	15.81
01410 - Supply Technician	26.31
01420 - Survey Worker	17.77
01460 - Switchboard Operator/Receptionist	14.31
01531 - Travel Clerk I	13.55
01532 - Travel Clerk II	14.20
01533 - Travel Clerk III	15.19
01611 - Word Processor I	14.96
01612 - Word Processor II	16.79
01613 - Word Processor III	18.79
05000 - Automotive Service Occupations	10.75
05005 - Automobile Body Repairer, Fiberglass	26.19
05010 - Automotive Electrician	20.43
05040 - Automotive Glass Installer	19.36
05070 - Automotive Worker	19.36
05110 - Mobile Equipment Servicer	17.61
05110 - Mobile Equipment Metal Mechanic	20.82
05160 - Motor Equipment Metal Worker	19.36
05190 - Motor Vehicle Mechanic	20.82
	16.41
05220 - Motor Vehicle Mechanic Helper	
05250 - Motor Vehicle Upholstery Worker	19.36
05280 - Motor Vehicle Wrecker	19.36
05310 - Painter, Automotive	19.69
05340 - Radiator Repair Specialist	19.36
05370 - Tire Repairer	14.98
05400 - Transmission Repair Specialist	20.82
07000 - Food Preparation and Service Occupations	
07010 - Baker	14.52
07041 - Cook I	13.33
07042 - Cook II	15.42
07070 - Dishwasher	9.69
07130 - Food Service Worker	10.90
07210 - Meat Cutter	15.21
07260 - Waiter/Waitress	10.65
09000 - Furniture Maintenance and Repair Occupations	
09010 - Electrostatic Spray Painter	19.06
09040 - Furniture Handler	15.90
09080 - Furniture Refinisher	19.06
09090 - Furniture Refinisher Helper	15.90
09110 - Furniture Repairer, Minor	18.10
09130 - Upholsterer	19.06

11000 -	General Services and Support Occupations	
	- Cleaner, Vehicles	11.08
	- Elevator Operator	12.01
	- Gardener	18.19
	- Housekeeping Aide	12.46
	- Janitor	12.01
	- Laborer, Grounds Maintenance	14.67
	- Maid or Houseman	9.41
	- Pruner	13.16
	- Tractor Operator	17.30
	- Trail Maintenance Worker	14.67
	- Window Cleaner	13.37
	Health Occupations	
	- Ambulance Driver	18.18
	- Breath Alcohol Technician	20.97
12012	- Certified Occupational Therapist Assistant	21.43
	- Certified Physical Therapist Assistant	20.63
	- Dental Assistant	19.22
	- Dental Hygienist	40.48
	- EKG Technician	26.46
	- Electroneuro Diagnostic Technologist	26.46
	- Emergency Medical Technician	18.18
	- Licensed Practical Nurse I	18.74
	- Licensed Practical Nurse II	20.97
	- Licensed Practical Nurse III	23.37
	- Medical Assistant	16.32
	- Medical Laboratory Technician	19.22
	- Medical Record Clerk	17.73
	- Medical Record Technician	19.84
	- Medical Transcriptionist	18.73
	- Nuclear Medicine Technologist	39.44
	- Nursing Assistant I	11.78
	- Nursing Assistant II	13.25
	- Nursing Assistant III	14.46
	- Nursing Assistant IV	16.23
	- Optical Dispenser	20.66
	- Optical Technician	18.46
	- Pharmacy Technician	16.45
	- Phlebotomist	17.07
12305	- Radiologic Technologist	29.54
	- Registered Nurse I	29.98
	- Registered Nurse II	36.67
	- Registered Nurse II, Specialist	36.67
	- Registered Nurse III	43.96
	- Registered Nurse III, Anesthetist	43.96
	- Registered Nurse IV	53.17
12317	- Scheduler (Drug and Alcohol Testing)	27.05
12320	- Substance Abuse Treatment Counselor	20.40
13000 -	Information and Arts Occupations	
13011	- Exhibits Specialist I	18.46
	- Exhibits Specialist II	22.87
13013	- Exhibits Specialist III	27.97
13041	- Illustrator I	20.05
13042	- Illustrator II	23.10

13043 - Illustrator III 28.26 13047 - Library Aide/Clerk 15.88 13050 - Library Thformation Technology Systems 26.73 Nadministrator 17.64 13058 - Library Technician 17.64 13061 - Media Specialist I 19.28 13062 - Media Specialist II 21.58 13071 - Photographer I 16.89 13072 - Photographer II 18.90 13074 - Photographer IV 28.63 13075 - Photographer IV 28.63 13070 - Technical Order Library Clerk 17.64 13100 - Video Teleconference Technician 20.09 14000 - Information Technology Occupations 14041 - Computer Operator I 14041 - Computer Operator II 19.93 14042 - Computer Operator V 28.56 14071 - Computer Programmer II (see 1) 24.31 14072 - Computer Programmer II (see 1) 14073 14073 - Computer Programmer II (see 1) 14004 14100 - Peripheral Eguipment Operator 17.81 14102 - Computer Systems Analyst II (see 1) 14007 14073 - Computer Systems Analyst II (see 1) 14100 14103 - Computer Systems Nanalyst II (see 1) 14100
13050 - Library Aide/Clerk 15.88 13054 - Library Information Technology Systems 26.73 Administrator 13058 13058 - Library Technician 17.64 13051 - Media Specialist II 21.58 13052 - Media Specialist III 21.58 13071 - Photographer I 18.90 13072 - Photographer II 23.61 13074 - Photographer IV 28.63 13075 - Photographer IV 28.63 13075 - Photographer V 34.64 13090 - Technical Order Library Clerk 17.64 13104 - Video Teleconference Technician 20.09 14041 - Computer Operator I 17.81 14042 - Computer Operator II 22.21 14043 - Computer Operator IV 24.65 14043 - Computer Operator IV 24.65 14071 - Computer Programmer II (see 1) 24.31 14073 - Computer Programmer II (see 1) 14.01 14074 - Computer Systems Analyst I (see 1) 14.10 14102 - Computer Systems Analyst II (see 1) 14.10 14103 - Computer Systems Analyst I (see 1) 14.11 14104 - Personal Computer Support Technician 24.69 14105 - Periph
13054 - Library Information Technology Systems 26.73 Administrator 13056 - Library Technician 17.64 13065 - Media Specialist I 19.28 13062 - Media Specialist III 24.05 13071 - Photographer I 16.89 13072 - Photographer III 28.10 13073 - Photographer IV 28.63 13075 - Photographer IV 28.63 13075 - Photographer V 28.63 13070 - Technical Order Library Clerk 17.64 13100 - Video Teleconference Technician 19.93 14000 - Information Technology Occupations 14044 14042 - Computer Operator II 29.33 14043 - Computer Operator V 28.56 14071 - Computer Pogrammer II (see 1) 14073 - Computer Programmer III (see 1) 14074 - Computer Programmer IV (see 1) 14102 - Computer Systems Analyst II (see 1) 14103 - Computer Systems Analyst II (see 1) 141042 - Computer Systems Analyst II (see 1) 14105 - Peripheral Equipment Operator 17.81 14106 - Personal Computer Support Technician 24.69
Administrator 17.64 13058 - Library Technician 17.64 13061 - Media Specialist I 19.28 13062 - Media Specialist II 21.58 13063 - Media Specialist III 24.05 13071 - Photographer I 16.89 13072 - Photographer II 18.90 13073 - Photographer II 23.41 13074 - Photographer IV 28.63 13075 - Photographer V 28.63 13075 - Photographer V 28.63 13076 - Computer Operator I 17.64 1310 - Video Teleconference Technician 20.09 14001 - Information Technology Occupations 17.81 14042 - Computer Operator I 19.93 14043 - Computer Operator IV 24.69 14044 - Computer Operator V 24.69 14072 - Computer Programmer II (see 1) 14073 - Computer Programmer II (see 1) 14101 - Computer Systems Analyst II (see 1) 14102 - Computer Systems Analyst II (see 1) 14103 - Computer Systems Analyst II (see 1) 14104 - System Support Specialist 22.30
13058 - Library Technician 17.64 13061 - Media Specialist I 19.28 13062 - Media Specialist III 21.58 13063 - Media Specialist III 24.05 13071 - Photographer I 16.89 13073 - Photographer II 23.41 13074 - Photographer IV 23.41 13075 - Photographer V 23.41 13075 - Photographer V 24.65 1310 - Video Teleconference Technician 20.09 14000 - Information Technology Occupations 14.64 14041 - Computer Operator I 17.81 14042 - Computer Operator II 22.21 14044 - Computer Operator IV 24.69 14045 - Computer Operator IV 24.69 14072 - Computer Programmer I (see 1) 14073 - Computer Programmer II (see 1) 14101 - Computer Systems Analyst I (see 1) 14102 - Computer Systems Analyst II (see 1) 14103 - Computer Systems Analyst II (see 1) 14104 - System Support Specialist 32.30 15000 - Instructional Occupations 17.81 14103 - Computer Systems Analyst II (see 1) 14104 - System Support Specialist
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15060 - Educational Technologist32.3915070 - Flight Instructor (Pilot)49.1515080 - Graphic Artist22.3815085 - Maintenance Test Pilot, Fixed, Jet/Prop40.6215086 - Maintenance Test Pilot, Rotary Wing40.6215088 - Non-Maintenance Test/Co-Pilot40.6215090 - Technical Instructor24.1915095 - Technical Instructor/Course Developer29.5815110 - Test Proctor19.51
15070 - Flight Instructor (Pilot)49.1515080 - Graphic Artist22.3815085 - Maintenance Test Pilot, Fixed, Jet/Prop40.6215086 - Maintenance Test Pilot, Rotary Wing40.6215088 - Non-Maintenance Test/Co-Pilot40.6215090 - Technical Instructor24.1915095 - Technical Instructor/Course Developer29.5815110 - Test Proctor19.51
15080 - Graphic Artist22.3815085 - Maintenance Test Pilot, Fixed, Jet/Prop40.6215086 - Maintenance Test Pilot, Rotary Wing40.6215088 - Non-Maintenance Test/Co-Pilot40.6215090 - Technical Instructor24.1915095 - Technical Instructor/Course Developer29.5815110 - Test Proctor19.51
15085 - Maintenance Test Pilot, Fixed, Jet/Prop40.6215086 - Maintenance Test Pilot, Rotary Wing40.6215088 - Non-Maintenance Test/Co-Pilot40.6215090 - Technical Instructor24.1915095 - Technical Instructor/Course Developer29.5815110 - Test Proctor19.51
15086 - Maintenance Test Pilot, Rotary Wing40.6215088 - Non-Maintenance Test/Co-Pilot40.6215090 - Technical Instructor24.1915095 - Technical Instructor/Course Developer29.5815110 - Test Proctor19.51
15088 - Non-Maintenance Test/Co-Pilot40.6215090 - Technical Instructor24.1915095 - Technical Instructor/Course Developer29.5815110 - Test Proctor19.51
15090 - Technical Instructor24.1915095 - Technical Instructor/Course Developer29.5815110 - Test Proctor19.51
15095 - Technical Instructor/Course Developer29.5815110 - Test Proctor19.51
15110 - Test Proctor 19.51
15120 - Tutor 1951
16000 - Laundry, Dry-Cleaning, Pressing And Related Occupations
16010 – Assembler 9.84
16030 - Counter Attendant 9.84
16040 - Dry Cleaner 12.71
16070 - Finisher, Flatwork, Machine 9.84
16090 - Presser, Hand 9.84
16110 - Presser, Machine, Dry Cleaning 9.84

16120	- Presser, Machine, Shirts 9.84	
	- Presser, Machine, Shirts 9.84 - Presser, Machine, Wearing Apparel, Laundry	9.84
	- Sewing Machine Operator	13.57
	- Tailor	14.48
	- Washer, Machine	10.93
	Machine Tool Operation and Repair Occupations	10.95
	- Machine-Tool Operator (Tool Room)	20.15
	- Tool and Die Maker	23.73
	Materials Handling And Packing Occupations	23.15
	- Forklift Operator	16.25
	- Material Coordinator	22.47
	- Material Expediter	22.47
	- Material Handling Laborer	17.36
	- Order Filler	13.44
	- Production Line Worker (Food Processing)	16.25
	- Shipping Packer	15.20
	- Shipping/Receiving Clerk	15.20
	- Shipping/Receiving Clerk - Store Worker I	11.90
	- Store worker I - Stock Clerk	
		16.32
	- Tools and Parts Attendant	16.28
	- Warehouse Specialist	16.25
	Mechanics and Maintenance and Repair Occupations	
	- Aerospace Structural Welder	30.50 24.74
	- Aircraft Logs and Records Technician	
	- Aircraft Mechanic I	29.81
	- Aircraft Mechanic II	31.38
	- Aircraft Mechanic III	32.67
	- Aircraft Mechanic Helper	21.14
	- Aircraft, Painter	28.38
	- Aircraft Servicer	24.74
	- Aircraft Survival Flight Equipment Technician	28.38
	- Aircraft Worker	26.54
	- Aircrew Life Support Equipment (ALSE) Mechanic I	26.54
	- Aircrew Life Support Equipment (ALSE) Mechanic II	
	- Appliance Mechanic	22.34
	- Bicycle Repairer	14.98
	- Cable Splicer	33.63
	- Carpenter, Maintenance	20.25
	- Carpet Layer	19.92
	- Electrician, Maintenance	24.90
	- Electronics Technician Maintenance I	24.35
	- Electronics Technician Maintenance II	26.02
	- Electronics Technician Maintenance III	27.63
	- Fabric Worker	20.52
	- Fire Alarm System Mechanic	21.09
	- Fire Extinguisher Repairer	19.57
	- Fuel Distribution System Mechanic	25.81
	- Fuel Distribution System Operator	20.87
	- General Maintenance Worker	19.16
	- Ground Support Equipment Mechanic	29.81
	- Ground Support Equipment Servicer	24.74
	- Ground Support Equipment Worker	26.54
	- Gunsmith I	18.84
23392	- Gunsmith II	21.79

23393 - Gunsmith III	24.73
23410 - Heating, Ventilation and Air-Conditioning	23.39
Mechanic	
23411 - Heating, Ventilation and Air Conditioning	24.62
Mechanic (Research Facility)	
23430 - Heavy Equipment Mechanic	23.73
23440 - Heavy Equipment Operator	21.10
23460 - Instrument Mechanic	31.33
23465 - Laboratory/Shelter Mechanic	23.29
23470 - Laborer	13.87
23510 - Locksmith	21.02
23530 - Machinery Maintenance Mechanic	25.59
23550 - Machinist, Maintenance	21.26
23580 - Maintenance Trades Helper	15.26
23591 - Metrology Technician I	31.33
23592 - Metrology Technician II	32.90
23593 - Metrology Technician III	34.28
23640 - Millwright	24.73
23710 - Office Appliance Repairer	21.44
23760 - Painter, Maintenance	17.84
23790 - Pipefitter, Maintenance	24.65
23810 - Plumber, Maintenance	23.20
23820 - Pneudraulic Systems Mechanic	24.73
23850 - Rigger	24.73
23870 - Scale Mechanic	21.79
23890 - Sheet-Metal Worker, Maintenance	20.75
23910 - Small Engine Mechanic	17.93
23931 - Telecommunications Mechanic I	29.79
23932 - Telecommunications Mechanic II	31.35
23950 - Telephone Lineman	23.34
23960 - Welder, Combination, Maintenance	19.79
23965 - Well Driller	21.87
23970 - Woodcraft Worker	24.73
23980 - Woodworker	18.84
24000 - Personal Needs Occupations	
24550 - Case Manager	15.93
24570 - Child Care Attendant	11.76
24580 - Child Care Center Clerk	14.71
24610 - Chore Aide	10.52
24620 - Family Readiness and Support Services	15.93
Coordinator	
24630 - Homemaker	16.29
25000 - Plant and System Operations Occupations	
25010 - Boiler Tender	24.82
25040 - Sewage Plant Operator	25.07
25070 - Stationary Engineer	24.82
25190 - Ventilation Equipment Tender	17.42
25210 - Water Treatment Plant Operator	25.07
27000 - Protective Service Occupations	
27004 - Alarm Monitor	22.72
27007 - Baggage Inspector	13.62
27008 - Corrections Officer	25.17
27010 - Court Security Officer	27.27
27030 - Detection Dog Handler	21.32

	- Detention Officer	25.17
	- Firefighter	29.32
	- Guard I	13.62
	- Guard II	21.32
	- Police Officer I	30.89
	- Police Officer II	34.33
	Recreation Occupations	
	- Carnival Equipment Operator	13.08
	- Carnival Equipment Repairer	14.10
	- Carnival Worker	10.23
	- Gate Attendant/Gate Tender	15.14
	- Lifeguard	11.73
	- Park Attendant (Aide)	16.75
	- Recreation Aide/Health Facility Attendant	12.36
	- Recreation Specialist	17.91
	- Sports Official	13.49
	- Swimming Pool Operator	17.05
29000 -	Stevedoring/Longshoremen Occupational Services	
29010	- Blocker and Bracer	23.50
	- Hatch Tender	23.50
29030	- Line Handler	23.50
29041	- Stevedore I	21.91
29042	- Stevedore II	25.48
30000 -	Technical Occupations	
30010	- Air Traffic Control Specialist, Center (HFO) (see 2)	
	39.17	
30011	- Air Traffic Control Specialist, Station (HFO) (see 2)	27.01
30012	- Air Traffic Control Specialist, Terminal (HFO) (see 2)	29.74
30021	- Archeological Technician I	19.40
30022	- Archeological Technician II	21.70
30023	- Archeological Technician III	26.89
30030	- Cartographic Technician	26.41
30040	- Civil Engineering Technician	25.16
30051	- Cryogenic Technician I	26.17
30052	- Cryogenic Technician II	28.90
30061	- Drafter/CAD Operator I	18.45
30062	- Drafter/CAD Operator II	20.65
30063	- Drafter/CAD Operator III	23.84
30064	- Drafter/CAD Operator IV	31.50
30081	- Engineering Technician I	18.44
30082	- Engineering Technician II	20.69
30083		
30084	- Engineering Technician III	23.15
20005		
30085	- Engineering Technician III	23.15
	- Engineering Technician III - Engineering Technician IV	23.15 28.69
30086	- Engineering Technician III - Engineering Technician IV - Engineering Technician V	23.15 28.69 35.09
30086 30090	- Engineering Technician III - Engineering Technician IV - Engineering Technician V - Engineering Technician VI	23.15 28.69 35.09 42.45
30086 30090 30095	 Engineering Technician III Engineering Technician IV Engineering Technician V Engineering Technician VI Environmental Technician 	23.15 28.69 35.09 42.45 24.08
30086 30090 30095 30210	 Engineering Technician III Engineering Technician IV Engineering Technician V Engineering Technician VI Environmental Technician Evidence Control Specialist 	23.15 28.69 35.09 42.45 24.08 23.63
30086 30090 30095 30210 30221	 Engineering Technician III Engineering Technician IV Engineering Technician V Engineering Technician VI Environmental Technician Evidence Control Specialist Laboratory Technician 	23.15 28.69 35.09 42.45 24.08 23.63 21.37
30086 30090 30095 30210 30221 30222	 Engineering Technician III Engineering Technician IV Engineering Technician V Engineering Technician VI Environmental Technician Evidence Control Specialist Laboratory Technician Latent Fingerprint Technician I 	23.15 28.69 35.09 42.45 24.08 23.63 21.37 26.99
30086 30090 30095 30210 30221 30222 30240	 Engineering Technician III Engineering Technician IV Engineering Technician V Engineering Technician VI Environmental Technician Evidence Control Specialist Laboratory Technician Latent Fingerprint Technician I Latent Fingerprint Technician II 	23.15 28.69 35.09 42.45 24.08 23.63 21.37 26.99 29.81
30086 30090 30210 30221 30222 30240 30361	 Engineering Technician III Engineering Technician IV Engineering Technician V Engineering Technician VI Environmental Technician Evidence Control Specialist Laboratory Technician Latent Fingerprint Technician I Latent Fingerprint Technician II Mathematical Technician 	23.15 28.69 35.09 42.45 24.08 23.63 21.37 26.99 29.81 26.62
30086 30090 30210 30221 30222 30240 30361 30362	 Engineering Technician III Engineering Technician IV Engineering Technician V Engineering Technician VI Environmental Technician Evidence Control Specialist Laboratory Technician Latent Fingerprint Technician II Latent Fingerprint Technician III Mathematical Technician Paralegal/Legal Assistant I 	23.15 28.69 35.09 42.45 24.08 23.63 21.37 26.99 29.81 26.62 20.06

30364 - Paralegal/Legal Assistant IV36.7730375 - Petroleum Supply Specialist28.9030390 - Photo-Optics Technician26.6230395 - Radiation Control Technician28.9030461 - Technical Writer I26.6230462 - Technical Writer III32.1230463 - Technical Writer III38.8630491 - Unexploded Ordnance (UXO) Technician II30.1130493 - Unexploded Ordnance (UXO) Technician III30.1130494 - Unexploded Ordnance (UXO) Technician III36.1030495 - Unexploded Ordnance (UXO) Technician III36.1030494 - Unexploded (UXO) Safety Escort24.8930501 - Weather Forecaster I26.1730502 - Weather Forecaster II31.8230620 - Weather Observer, Combined Upper Air or (see 2)23.84Surface Programs30.1131010 - Airplane Pilot30.1131030 - Bus Driver16.2631043 - Driver Courier14.4931260 - Parking and Lot Attendant9.5231301 - Taxi Driver15.5531310 - Taxi Driver13.3931361 - Truck Driver, Light15.55
30390 - Photo-Optics Technician26.6230395 - Radiation Control Technician28.9030461 - Technical Writer I26.2630462 - Technical Writer III32.1230463 - Technical Writer III38.8630491 - Unexploded Ordnance (UXO) Technician I30.1130492 - Unexploded Ordnance (UXO) Technician III30.1130493 - Unexploded Ordnance (UXO) Technician III36.1030494 - Unexploded Ordnance (UXO) Technician III36.1030495 - Unexploded (UXO) Safety Escort24.8930501 - Weather Forecaster I26.1730502 - Weather Forecaster II31.8230620 - Weather Observer, Combined Upper Air or (see 2)23.84Surface Programs30.1131000 - Transportation/Mobile Equipment Operation Occupations30.1131030 - Bus Aide11.8931030 - Bus Driver16.2631043 - Driver Courier14.4931260 - Parking and Lot Attendant9.5231290 - Shuttle Bus Driver15.5531310 - Taxi Driver13.39
30395 - Radiation Control Technician28.9030461 - Technical Writer I26.2630462 - Technical Writer III32.1230463 - Technical Writer III38.8630491 - Unexploded Ordnance (UXO) Technician I24.8930492 - Unexploded Ordnance (UXO) Technician III30.1130493 - Unexploded Ordnance (UXO) Technician III30.1130494 - Unexploded Ordnance (UXO) Technician III30.1130495 - Unexploded Ordnance (UXO) Technician III30.1130495 - Unexploded (UXO) Safety Escort24.8930501 - Weather Forecaster I26.1730502 - Weather Forecaster II31.8230620 - Weather Observer, Combined Upper Air or (see 2)23.84Surface Programs30.1131010 - Airplane Pilot30.1131020 - Bus Aide11.8931030 - Bus Driver16.2631043 - Driver Courier14.4931260 - Parking and Lot Attendant9.5231310 - Taxi Driver15.5531310 - Taxi Driver13.39
30461 - Technical Writer I26.2630462 - Technical Writer III32.1230463 - Technical Writer III38.8630491 - Unexploded Ordnance (UXO) Technician I24.8930492 - Unexploded Ordnance (UXO) Technician III30.1130493 - Unexploded Ordnance (UXO) Technician III36.1030494 - Unexploded (UXO) Safety Escort24.8930495 - Unexploded (UXO) Sweep Personnel24.8930501 - Weather Forecaster I26.1730502 - Weather Forecaster II31.8230620 - Weather Observer, Combined Upper Air or (see 2)23.84Surface Programs30.1131010 - Airplane Pilot30.1131030 - Bus Driver16.2631043 - Driver Courier14.4931260 - Parking and Lot Attendant9.5231310 - Taxi Driver13.39
30462 - Technical Writer II32.1230463 - Technical Writer III38.8630491 - Unexploded Ordnance (UXO) Technician I24.8930492 - Unexploded Ordnance (UXO) Technician III30.1130493 - Unexploded Ordnance (UXO) Technician III36.1030494 - Unexploded (UXO) Safety Escort24.8930495 - Unexploded (UXO) Sweep Personnel24.8930501 - Weather Forecaster I26.1730502 - Weather Forecaster II31.8230620 - Weather Observer, Combined Upper Air or (see 2)23.84Surface Programs30.1131000 - Transportation/Mobile Equipment Operation Occupations30.1131010 - Airplane Pilot30.1131030 - Bus Aide11.8931043 - Driver Courier14.4931260 - Parking and Lot Attendant9.5231310 - Taxi Driver13.39
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30491 - Unexploded Ordnance (UXO) Technician I24.8930492 - Unexploded Ordnance (UXO) Technician III30.1130493 - Unexploded Ordnance (UXO) Technician III36.1030494 - Unexploded (UXO) Safety Escort24.8930495 - Unexploded (UXO) Sweep Personnel24.8930501 - Weather Forecaster I26.1730502 - Weather Forecaster III31.8230620 - Weather Observer, Combined Upper Air or (see 2)23.84Surface Programs30621 - Weather Observer, Senior(see 2)31000 - Transportation/Mobile Equipment Operation Occupations30.1131020 - Bus Aide11.8931030 - Bus Driver16.2631043 - Driver Courier14.4931260 - Parking and Lot Attendant9.5231310 - Taxi Driver13.39
30492 - Unexploded Ordnance (UXO) Technician II30.1130493 - Unexploded Ordnance (UXO) Technician III36.1030494 - Unexploded (UXO) Safety Escort24.8930495 - Unexploded (UXO) Sweep Personnel24.8930501 - Weather Forecaster I26.1730502 - Weather Forecaster II31.8230620 - Weather Observer, Combined Upper Air or (see 2)23.84Surface Programs26.413000 - Transportation/Mobile Equipment Operation Occupations30.1131010 - Airplane Pilot30.1131020 - Bus Aide11.8931030 - Bus Driver16.2631043 - Driver Courier14.4931260 - Parking and Lot Attendant9.5231310 - Taxi Driver13.39
30492 - Unexploded Ordnance (UXO) Technician II30.1130493 - Unexploded Ordnance (UXO) Technician III36.1030494 - Unexploded (UXO) Safety Escort24.8930495 - Unexploded (UXO) Sweep Personnel24.8930501 - Weather Forecaster I26.1730502 - Weather Forecaster II31.8230620 - Weather Observer, Combined Upper Air or (see 2)23.84Surface Programs26.413000 - Transportation/Mobile Equipment Operation Occupations30.1131010 - Airplane Pilot30.1131020 - Bus Aide11.8931030 - Bus Driver16.2631043 - Driver Courier14.4931260 - Parking and Lot Attendant9.5231310 - Taxi Driver13.39
30493 - Unexploded Ordnance (UXO) Technician III36.1030494 - Unexploded (UXO) Safety Escort24.8930495 - Unexploded (UXO) Sweep Personnel24.8930501 - Weather Forecaster I26.1730502 - Weather Forecaster II31.8230620 - Weather Observer, Combined Upper Air or (see 2)23.84Surface Programs30621 - Weather Observer, Senior(see 2)31000 - Transportation/Mobile Equipment Operation Occupations30.1131020 - Bus Aide11.8931030 - Bus Driver16.2631043 - Driver Courier14.4931260 - Parking and Lot Attendant9.5231310 - Taxi Driver13.39
30494 - Unexploded (UXO) Safety Escort24.8930495 - Unexploded (UXO) Sweep Personnel24.8930501 - Weather Forecaster I26.1730502 - Weather Forecaster II31.8230620 - Weather Observer, Combined Upper Air or (see 2)23.84Surface Programs26.4131000 - Transportation/Mobile Equipment Operation Occupations30.1131020 - Bus Aide11.8931030 - Bus Driver16.2631043 - Driver Courier14.4931260 - Parking and Lot Attendant9.5231310 - Taxi Driver13.39
30495 - Unexploded (UXO) Sweep Personnel24.8930501 - Weather Forecaster I26.1730502 - Weather Forecaster II31.8230620 - Weather Observer, Combined Upper Air or (see 2)23.84Surface Programs26.1730621 - Weather Observer, Combined Upper Air or (see 2)26.4131000 - Transportation/Mobile Equipment Operation Occupations30.1131020 - Bus Aide11.8931030 - Bus Driver16.2631043 - Driver Courier14.4931260 - Parking and Lot Attendant9.5231290 - Shuttle Bus Driver15.5531310 - Taxi Driver13.39
30501 - Weather Forecaster I26.1730502 - Weather Forecaster II31.8230620 - Weather Observer, Combined Upper Air or (see 2)23.84Surface Programs26.4131000 - Transportation/Mobile Equipment Operation Occupations30.1131010 - Airplane Pilot30.1131020 - Bus Aide11.8931030 - Bus Driver16.2631043 - Driver Courier14.4931260 - Parking and Lot Attendant9.5231290 - Shuttle Bus Driver15.5531310 - Taxi Driver13.39
30502 - Weather Forecaster II31.8230620 - Weather Observer, Combined Upper Air or (see 2)23.84Surface Programs26.4131000 - Transportation/Mobile Equipment Operation Occupations30.1131020 - Bus Aide30.1131030 - Bus Driver16.2631043 - Driver Courier14.4931260 - Parking and Lot Attendant9.5231290 - Shuttle Bus Driver15.5531310 - Taxi Driver13.39
30620 - Weather Observer, Combined Upper Air or (see 2)23.84Surface Programs30621 - Weather Observer, Senior(see 2)31000 - Transportation/Mobile Equipment Operation Occupations30.1131010 - Airplane Pilot30.1131020 - Bus Aide11.8931030 - Bus Driver16.2631043 - Driver Courier14.4931260 - Parking and Lot Attendant9.5231290 - Shuttle Bus Driver15.5531310 - Taxi Driver13.39
Surface Programs26.4130621 - Weather Observer, Senior(see 2)31000 - Transportation/Mobile Equipment Operation Occupations31010 - Airplane Pilot30.1131020 - Bus Aide11.8931030 - Bus Driver16.2631043 - Driver Courier14.4931260 - Parking and Lot Attendant9.5231290 - Shuttle Bus Driver15.5531310 - Taxi Driver13.39
30621 - Weather Observer, Senior(see 2)26.4131000 - Transportation/Mobile Equipment Operation Occupations30.1131010 - Airplane Pilot30.1131020 - Bus Aide11.8931030 - Bus Driver16.2631043 - Driver Courier14.4931260 - Parking and Lot Attendant9.5231290 - Shuttle Bus Driver15.5531310 - Taxi Driver13.39
31000 - Transportation/Mobile Equipment Operation Occupations31010 - Airplane Pilot30.1131020 - Bus Aide11.8931030 - Bus Driver16.2631043 - Driver Courier14.4931260 - Parking and Lot Attendant9.5231290 - Shuttle Bus Driver15.5531310 - Taxi Driver13.39
31010 - Airplane Pilot 30.11 31020 - Bus Aide 11.89 31030 - Bus Driver 16.26 31043 - Driver Courier 14.49 31260 - Parking and Lot Attendant 9.52 31290 - Shuttle Bus Driver 15.55 31310 - Taxi Driver 13.39
31020 - Bus Aide 11.89 31030 - Bus Driver 16.26 31043 - Driver Courier 14.49 31260 - Parking and Lot Attendant 9.52 31290 - Shuttle Bus Driver 15.55 31310 - Taxi Driver 13.39
31030 - Bus Driver 16.26 31043 - Driver Courier 14.49 31260 - Parking and Lot Attendant 9.52 31290 - Shuttle Bus Driver 15.55 31310 - Taxi Driver 13.39
31043 - Driver Courier 14.49 31260 - Parking and Lot Attendant 9.52 31290 - Shuttle Bus Driver 15.55 31310 - Taxi Driver 13.39
31260 - Parking and Lot Attendant 9.52 31290 - Shuttle Bus Driver 15.55 31310 - Taxi Driver 13.39
31290 - Shuttle Bus Driver 15.55 31310 - Taxi Driver 13.39
31310 - Taxi Driver 13.39
31361 - Truck Driver, Light 15.55
31362 - Truck Driver, Medium 19.65
31363 - Truck Driver, Heavy 21.63
31364 - Truck Driver, Tractor-Trailer 21.63
99000 - Miscellaneous Occupations
99020 - Cabin Safety Specialist 14.68
99030 - Cashier 10.78
99050 - Desk Clerk 10.48
99095 - Embalmer 24.19
99130 - Flight Follower 24.89
99251 - Laboratory Animal Caretaker I 12.01
99252 - Laboratory Animal Caretaker II 12.91
99260 - Marketing Analyst 34.05
99310 - Mortician 24.19
99410 - Pest Controller 20.41
99510 - Photofinishing Worker 13.23
13.23
99710 - Recycling Laborer 18.94
99710 - Recycling Laborer18.9499711 - Recycling Specialist22.82
99710 - Recycling Laborer 18.94 99711 - Recycling Specialist 22.82 99730 - Refuse Collector 17.02
99710 - Recycling Laborer 18.94 99711 - Recycling Specialist 22.82 99730 - Refuse Collector 17.02 99810 - Sales Clerk 12.60
99710 - Recycling Laborer 18.94 99711 - Recycling Specialist 22.82 99730 - Refuse Collector 17.02 99810 - Sales Clerk 12.60 99820 - School Crossing Guard 12.64
99710 - Recycling Laborer 18.94 99711 - Recycling Specialist 22.82 99730 - Refuse Collector 17.02 99810 - Sales Clerk 12.60 99820 - School Crossing Guard 12.64 99830 - Survey Party Chief 24.97
99710 - Recycling Laborer18.9499711 - Recycling Specialist22.8299730 - Refuse Collector17.0299810 - Sales Clerk12.6099820 - School Crossing Guard12.6499830 - Survey Party Chief24.9799831 - Surveying Aide13.86
99710 - Recycling Laborer18.9499711 - Recycling Specialist22.8299730 - Refuse Collector17.0299810 - Sales Clerk12.6099820 - School Crossing Guard12.6499830 - Survey Party Chief24.9799831 - Surveying Aide13.8699832 - Surveying Technician22.70
99710 - Recycling Laborer18.9499711 - Recycling Specialist22.8299730 - Refuse Collector17.0299810 - Sales Clerk12.6099820 - School Crossing Guard12.6499830 - Survey Party Chief24.9799831 - Surveying Aide13.8699832 - Surveying Technician22.7099840 - Vending Machine Attendant14.38
99710 - Recycling Laborer18.9499711 - Recycling Specialist22.8299730 - Refuse Collector17.0299810 - Sales Clerk12.6099820 - School Crossing Guard12.6499830 - Survey Party Chief24.9799831 - Surveying Aide13.8699832 - Surveying Technician22.70

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors, applies to all contracts subject to the Service Contract Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is the victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

ALL OCCUPATIONS LISTED ABOVE RECEIVE THE FOLLOWING BENEFITS:

HEALTH & WELFARE: \$4.27 per hour or \$170.80 per week or \$740.13 per month

VACATION: 2 weeks paid vacation after 1 year of service with a contractor or successor, 3 weeks after 5 years, and 4 weeks after 15 years. Length of service includes the whole span of continuous service with the present contractor or successor, wherever employed, and with the predecessor contractors in the performance of similar work at the same Federal facility. (Reg. 29 CFR 4.173)

HOLIDAYS: A minimum of ten paid holidays per year: New Year's Day, Martin Luther King Jr.'s Birthday, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day, and Christmas Day. (A contractor may substitute for any of the named holidays another day off with pay in accordance with a plan communicated to the employees involved.) (See 29 CFR 4.174)

THE OCCUPATIONS WHICH HAVE NUMBERED FOOTNOTES IN PARENTHESES RECEIVE THE FOLLOWING:

1) COMPUTER EMPLOYEES: Under the SCA at section 8(b), this wage determination does not apply to any employee who individually qualifies as a bona fide executive, administrative, or professional employee as defined in 29 C.F.R. Part 541. Because most Computer System Analysts and Computer Programmers who are compensated at a rate not less than \$27.63 (or on a salary or fee basis at a rate not less than \$455 per week) an hour would likely qualify as exempt computer professionals, (29 C.F.R. 541.400) wage rates may not be listed on this wage determination for all occupations within those job families. In addition, because this wage determination may not list a wage rate for some or all occupations within those job families if the survey data indicates that the prevailing wage rate for the occupation equals or exceeds \$27.63 per hour conformances may be necessary for certain nonexempt employees. For example, if an individual employee is nonexempt but nevertheless performs duties within the scope of one of the Computer Systems Analyst or Computer Programmer occupations for which this wage determination does not specify an SCA wage rate, then the wage rate for that employee must be conformed in accordance with the conformance procedures described in the conformance note included on this wage determination.

Additionally, because job titles vary widely and change quickly in the computer industry, job titles are not determinative of the application of the computer professional exemption. Therefore, the exemption applies only to computer employees who satisfy the compensation requirements and whose primary duty consists of:

(1) The application of systems analysis techniques and procedures, including consulting with users, to determine hardware, software or system functional specifications;

(2) The design, development, documentation, analysis, creation, testing or modification of computer systems or programs, including prototypes, based on and related to user or system design specifications;

(3) The design, documentation, testing, creation or modification of computer programs related to machine operating systems; or

(4) A combination of the aforementioned duties, the performance of which requires the same level of skills. (29 C.F.R. 541.400).

2) AIR TRAFFIC CONTROLLERS AND WEATHER OBSERVERS - NIGHT PAY & SUNDAY PAY: If you work at night as part of a regular tour of duty, you will earn a night differential and receive an additional 10% of basic pay for any hours worked between 6pm and 6am.

If you are a full-time employed (40 hours a week) and Sunday is part of your regularly scheduled workweek, you are paid at your rate of basic pay plus a Sunday premium of 25% of your basic rate for each hour of Sunday work which is not overtime (i.e. occasional work on Sunday outside the normal tour of duty is considered overtime work).

** HAZARDOUS PAY DIFFERENTIAL **

An 8 percent differential is applicable to employees employed in a position that represents a high degree of hazard when working with or in close proximity to ordnance, explosives, and incendiary materials. This includes work such as screening, blending, dying, mixing, and pressing of sensitive ordnance, explosives, and pyrotechnic compositions such as lead azide, black powder and photoflash powder.

All dry-house activities involving propellants or explosives. Demilitarization, modification, renovation, demolition, and maintenance operations on sensitive ordnance, explosives and incendiary materials. All operations involving re-grading and cleaning of artillery ranges.

A 4 percent differential is applicable to employees employed in a position that represents a low degree of hazard when working with, or in close proximity to ordnance, (or employees possibly adjacent to) explosives and incendiary materials which involves potential injury such as laceration of hands, face, or arms of the employee engaged in the operation, irritation of the skin, minor burns and the like; minimal damage to immediate or adjacent work area or equipment being used. All operations involving, unloading, storage, and hauling of ordnance, explosive, and incendiary ordnance material other than small arms ammunition. These differentials are only applicable to work that has been specifically designated by the agency for ordnance, explosives, and incendiary material differential pay.

** UNIFORM ALLOWANCE **

If employees are required to wear uniforms in the performance of this contract (either by the terms of the Government contract, by the employer, by the state or local law, etc.), the cost of furnishing such uniforms and maintaining (by laundering or dry cleaning) such uniforms is an expense that may not be borne by an employee where such cost reduces the hourly rate below that required by the wage determination. The Department of Labor will accept payment in accordance with the following standards as compliance:

The contractor or subcontractor is required to furnish all employees with an adequate number of uniforms without cost or to reimburse employees for the actual cost of the uniforms. In addition, where uniform cleaning and maintenance is made the responsibility of the employee, all contractors and subcontractors subject to this wage determination shall (in the absence of a bona fide collective bargaining agreement providing for a different amount, or the furnishing of contrary affirmative proof as to the actual cost), reimburse all employees for such cleaning and maintenance at a rate of \$3.35 per week (or \$.67 cents per day). However, in those instances where the uniforms furnished are made of "wash and wear" materials, may be routinely washed and dried with other personal garments, and do not require any special treatment such as dry cleaning, daily washing, or commercial laundering in order to meet the cleanliness or appearance standards set by the terms of the Government contract, by the contractor, by law, or by the nature of the work, there is no requirement that employees be reimbursed for uniform maintenance costs.

** SERVICE CONTRACT ACT DIRECTORY OF OCCUPATIONS **

The duties of employees under job titles listed are those described in the "Service Contract Act Directory of Occupations", Fifth Edition (Revision 1), dated September 2015, unless otherwise indicated.

** REQUEST FOR AUTHORIZATION OF ADDITIONAL CLASSIFICATION AND WAGE RATE, Standard Form 1444 (SF-1444) **

Conformance Process:

The contracting officer shall require that any class of service employee which is not listed herein and which is to be employed under the contract (i.e., the work to be performed is not performed by any classification listed in the wage determination), be classified by the contractor so as to provide a reasonable relationship (i.e., appropriate level of skill comparison) between such unlisted classifications and the classifications listed in the wage determination (See 29 CFR 4.6(b) (2) (i)). Such conforming procedures shall be initiated by the contractor prior to the performance of contract work by such unlisted class (es) of employees (See 29 CFR 4.6(b) (2) (ii)). The Wage and Hour Division shall make a final determination of conformed classification, wage rate, and/or fringe benefits which shall be paid to all employees performing in the classification from the first day of work on which contract work is performed by them in the classification. Failure to pay such unlisted employees the compensation agreed upon by the interested parties and/or fully determined by the Wage and Hour Division retroactive to the date such class of employees commenced contract work shall be a violation of the Act and this contract. (See 29 CFR 4.6(b) (2) (v)). When multiple

wage determinations are included in a contract, a separate SF-1444 should be prepared for each wage determination to which a class (es) is to be conformed.

The process for preparing a conformance request is as follows:

1) When preparing the bid, the contractor identifies the need for a conformed occupation(s) and computes a proposed rate(s).

2) After contract award, the contractor prepares a written report listing in order the proposed classification title(s), a Federal grade equivalency (FGE) for each proposed classification(s), job description(s), and rationale for proposed wage rate(s), including information regarding the agreement or disagreement of the authorized representative of the employees involved, or where there is no authorized representative, the employees themselves. This report should be submitted to the contracting officer no later than 30 days after such unlisted class (es) of employees performs any contract work.

3) The contracting officer reviews the proposed action and promptly submits a report of the action, together with the agency's recommendations and pertinent information including the position of the contractor and the employees, to the U.S. Department of Labor, Wage and Hour Division, for review (See 29 CFR 4.6(b)(2)(ii)).

4) Within 30 days of receipt, the Wage and Hour Division approves, modifies, or disapproves the action via transmittal to the agency contracting officer, or notifies the contracting officer that additional time will be required to process the request.

5) The contracting officer transmits the Wage and Hour Division's decision to the contractor.

6) Each affected employee shall be furnished by the contractor with a written copy of such determination or it shall be posted as a part of the wage determination (See29 CFR 4.6(b) (2) (iii)).

Information required by the Regulations must be submitted on SF-1444 or bond paper.

When preparing a conformance request, the "Service Contract Act Directory of Occupations" should be used to compare job definitions to ensure that duties requested are not performed by a classification already listed in the wage determination. Remember, it is not the job title, but the required tasks that determine whether a class is included in an established wage determination. Conformances may not be used to artificially split, combine, or subdivide classifications listed in the wage determination (See 29 CFR 4.152(c) (1)).

Los Alamos, New Mexico

WD 15-5463 (Rev1) was first posted on	
REGISTER OF WAGE DETERMINATIONS UNDER THE SERVICE CONTRACT ACT By direction of the Secretary of Labor	U.S. DEPARTMENT OF LABOR EMPLOYMENT STANDARDS ADMINISTRATION WAGE AND HOUR DIVISION WASHINGTON D.C. 20210
Daniel W. Simms Division of Director Wage Determinations	Wage Determination No.: 2015-5463 Revision No.: 1 Date of Revision: 01/25/2017

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.20 for calendar year 2017 applies to all contracts subject to the Service Contract Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2017. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

State: New Mexico Area: New Mexico County of Los Alamos

Fringe Benefits Required Follow the Occupational	Listing
OCCUPATION CODE - TITLE FOOTNOTE	RATE
01000 - Administrative Support and Clerical Occupations	
01011 - Accounting Clerk I	14.31
01012 - Accounting Clerk II	16.06
01013 - Accounting Clerk III	17.96
01020 - Administrative Assistant	19.99
01035 - Court Reporter	20.47
01041 - Customer Service Representative I	12.79
01042 - Customer Service Representative II	14.38
01043 - Customer Service Representative III	15.69
01051 - Data Entry Operator I	12.13
01052 - Data Entry Operator II	14.78
01060 - Dispatcher, Motor Vehicle	16.51
01070 - Document Preparation Clerk	15.25
01090 - Duplicating Machine Operator	15.25
01111 - General Clerk I	11.46
01112 - General Clerk II	12.50
01113 - General Clerk III	14.03
01120 - Housing Referral Assistant	18.41
01141 - Messenger Courier	10.98
01191 - Order Clerk I	12.46
01192 - Order Clerk II	14.20
01261 - Personnel Assistant (Employment) I	15.18
01262 - Personnel Assistant (Employment) II	16.98

	- Personnel Assistant (Employment) III	18.94
	- Production Control Clerk	23.17
	- Rental Clerk	13.48
	- Scheduler, Maintenance	14.76
	- Secretary I	14.76
	- Secretary II	16.51
	- Secretary III	18.41
01320	- Service Order Dispatcher	14.76
	- Supply Technician	19.99
01420	- Survey Worker	15.41
	- Switchboard Operator/Receptionist	11.44
	- Travel Clerk I	11.82
01532	- Travel Clerk II	12.76
01533	- Travel Clerk III	13.57
01611	- Word Processor I	13.10
	- Word Processor II	14.71
01613	- Word Processor III	16.45
05000 -	Automotive Service Occupations	
05005	- Automobile Body Repairer, Fiberglass	18.12
	- Automotive Electrician	18.12
05040	- Automotive Glass Installer	15.82
05070	- Automotive Worker	15.82
05110	- Mobile Equipment Servicer	13.50
05130	- Motor Equipment Metal Mechanic	18.12
05160	- Motor Equipment Metal Worker	15.82
05190	- Motor Vehicle Mechanic	18.12
05220	- Motor Vehicle Mechanic Helper	13.62
05250	- Motor Vehicle Upholstery Worker	15.82
05280	- Motor Vehicle Wrecker	15.82
05310	- Painter, Automotive	17.19
05340	- Radiator Repair Specialist	15.82
05370	- Tire Repairer	11.49
05400	- Transmission Repair Specialist	18.12
07000 -	Food Preparation and Service Occupations	
07010	- Baker	11.60
07041	- Cook I	9.75
07042	- Cook II	11.64
07070	- Dishwasher	7.89
07130	- Food Service Worker	9.36
07210	- Meat Cutter	16.07
07260	- Waiter/Waitress	7.80
09000 -	Furniture Maintenance and Repair Occupations	
09010	- Electrostatic Spray Painter	16.12
09040	- Furniture Handler	12.58
09080	- Furniture Refinisher	16.12
09090	- Furniture Refinisher Helper	13.70
09110	- Furniture Repairer, Minor	15.24
09130	- Upholsterer	16.12
11000 -	General Services and Support Occupations	
	- Cleaner, Vehicles	9.21
	- Elevator Operator	9.21
11090	- Gardener	15.72
11122	- Housekeeping Aide	10.70
	- Janitor	10.70

11010		10 10
	- Laborer, Grounds Maintenance	10.49
	- Maid or Houseman	8.76
	- Pruner	9.77
	- Tractor Operator	14.54
	- Trail Maintenance Worker	10.49
	- Window Cleaner	12.53
	Health Occupations	15 04
	- Ambulance Driver	15.94
	- Breath Alcohol Technician	19.84
	- Certified Occupational Therapist Assistant	25.32
	- Certified Physical Therapist Assistant	21.25
	- Dental Assistant	15.49
	- Dental Hygienist	39.93
	- EKG Technician	26.19
	- Electroneurodiagnostic Technologist	26.19
	- Emergency Medical Technician	15.94
	- Licensed Practical Nurse I	18.73
	- Licensed Practical Nurse II	20.92
	- Licensed Practical Nurse III	23.32
	- Medical Assistant	14.09
	- Medical Laboratory Technician	18.44
	- Medical Record Clerk	13.62
	- Medical Record Technician	15.65
	- Medical Transcriptionist	14.42
	- Nuclear Medicine Technologist	36.03
	- Nursing Assistant I	10.38
	- Nursing Assistant II	11.67
	- Nursing Assistant III	12.74
	- Nursing Assistant IV	14.29
	- Optical Dispenser	15.49
	- Optical Technician	14.53
	- Pharmacy Technician	15.50
	- Phlebotomist	14.29
	- Radiologic Technologist	26.71
	- Registered Nurse I	25.39
	- Registered Nurse II	31.06
	- Registered Nurse II, Specialist	31.06
	- Registered Nurse III	37.58
	- Registered Nurse III, Anesthetist	37.58
	- Registered Nurse IV	45.04 20.31
	- Scheduler (Drug and Alcohol Testing) - Substance Abuse Treatment Counselor	
		19.19
	Information and Arts Occupations - Exhibits Specialist I	17 25
	- Exhibits Specialist II	17.35 21.18
	- Exhibits Specialist III	25.33
	- Illustrator I	16.10
	- Illustrator II	19.95
	- Illustrator III	23.03
	- Librarian	23.03
	- Library Aide/Clerk	9.11
	- Library Information Technology Systems	20.67
	strator	20.07
	- Library Technician	13.73
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	- Media Specialist I		15.31
	- Media Specialist II		17.18
	- Media Specialist III		19.07
	- Photographer I		15.88
	- Photographer II		17.63
	- Photographer III		21.70
	- Photographer IV		24.30
	- Photographer V		29.39
	- Technical Order Library Clerk		15.49
	- Video Teleconference Technician		18.57
	Information Technology Occupations		
	- Computer Operator I		14.98
	- Computer Operator II		16.76
14043	- Computer Operator III		19.12
	- Computer Operator IV		21.26
14045	- Computer Operator V		24.34
14071	- Computer Programmer I	(see 1)	22.41
14072	- Computer Programmer II	(see 1)	26.14
14073	- Computer Programmer III	(see 1)	
14074	- Computer Programmer IV	(see 1)	
14101	- Computer Systems Analyst I	(see 1)	
14102	- Computer Systems Analyst II	(see 1)	
		(see 1)	
14150	- Peripheral Equipment Operator		14.98
	- Personal Computer Support Technician		21.52
	- System Support Specialist		21.25
	Instructional Occupations		
	- Aircrew Training Devices Instructor	(Non-Rated)	27.62
	- Aircrew Training Devices Instructor		33.39
	- Air Crew Training Devices Instructor		40.05
	- Computer Based Training Specialist /		27.62
	- Educational Technologist		25.93
	- Flight Instructor (Pilot)		40.05
	- Graphic Artist		24.65
	- Maintenance Test Pilot, Fixed, Jet/P	rop	40.05
	- Maintenance Test Pilot, Rotary Wing	-	40.05
	- Non-Maintenance Test/Co-Pilot		40.05
15090	- Technical Instructor		20.47
	- Technical Instructor/Course Develope	r	27.57
	- Test Proctor		16.51
	- Tutor		16.51
	Laundry, Dry-Cleaning, Pressing and Re	lated Occupations	
	- Assembler	-	9.68
	- Counter Attendant		9.68
	- Dry Cleaner		11.06
	- Finisher, Flatwork, Machine		9.68
	- Presser, Hand		9.68
	- Presser, Machine, Dry Cleaning		9.68
	- Presser, Machine, Shirts		9.68
	- Presser, Machine, Wearing Apparel, L	aundry	9.68
	- Sewing Machine Operator	1	11.54
	- Tailor		12.13
	- Washer, Machine		10.14
	Machine Tool Operation and Repair Occu	pations	
		▲ · · · ·	

19010 - Machine-Tool Operator (Tool Room)	21.94
19040 - Tool and Die Maker	26.50
21000 - Materials Handling and Packing Occupations	
21020 - Forklift Operator	14.21
21030 - Material Coordinator	21.06
21040 - Material Expediter	21.06
21050 - Material Handling Laborer	10.90
21071 - Order Filler	11.53
21080 - Production Line Worker (Food Processing)	14.21
21110 - Shipping Packer	13.14
21130 - Shipping/Receiving Clerk	13.14
21140 - Store Worker I	8.82
21150 - Stock Clerk	14.25
21210 - Tools and Parts Attendant	14.21
21410 - Warehouse Specialist	14.21
23000 - Mechanics and Maintenance and Repair Occupations	06.41
23010 - Aerospace Structural Welder	26.41
23019 - Aircraft Logs and Records Technician	20.67
23021 - Aircraft Mechanic I	24.73
23022 - Aircraft Mechanic II	26.41
23023 - Aircraft Mechanic III	27.84
23040 - Aircraft Mechanic Helper	18.28
23050 - Aircraft, Painter	22.62
23060 - Aircraft Servicer	20.67
23070 - Aircraft Survival Flight Equipment Technician	22.62
23080 - Aircraft Worker	22.12
23091 - Aircrew Life Support Equipment (ALSE) Mechanic I	22.12
23092 - Aircrew Life Support Equipment (ALSE) Mechanic II	
23110 - Appliance Mechanic	16.17
23120 - Bicycle Repairer	12.03
23125 - Cable Splicer	23.84 18.37
23130 - Carpenter, Maintenance	18.88
23140 - Carpet Layer 23160 - Electrician, Maintenance	18.88 23.67
23180 - Electronics Technician Maintenance I	23.67
23181 - Electronics Technician Maintenance I 23182 - Electronics Technician Maintenance II	30.05
23182 - Electronics Technician Maintenance II	32.42
23163 - Electronics rechnician Maintenance III 23260 - Fabric Worker	17.27
23290 - Fabric Worker 23290 - Fire Alarm System Mechanic	20.64
23290 - Fire Alarm System Mechanic 23310 - Fire Extinguisher Repairer	15.65
23310 - File Extinguisher Repairer 23311 - Fuel Distribution System Mechanic	23.21
23312 - Fuel Distribution System Operator	18.02
23370 - General Maintenance Worker	16.61
23380 - Ground Support Equipment Mechanic	24.73
23381 - Ground Support Equipment Servicer	20.67
23382 - Ground Support Equipment Worker	22.12
23391 - Gunsmith I	15.65
23392 - Gunsmith II	18.88
23393 - Gunsmith III	22.12
23410 - Heating, Ventilation and Air-Conditioning Mechanic	21.18
23411 - Heating, Ventilation and Air Conditioning	21.10
Mechanic (Research Facility)	
23430 - Heavy Equipment Mechanic	21.43
23440 - Heavy Equipment Operator	18.98
	20.20

23460 - Instrument Mechanic	30.22
23465 – Laboratory/Shelter Mechanic	20.50
23470 - Laborer	10.90
23510 - Locksmith	20.50
23530 - Machinery Maintenance Mechanic	24.86
23550 - Machinist, Maintenance	23.38
23580 - Maintenance Trades Helper	13.82
23591 - Metrology Technician I	30.22
23592 - Metrology Technician II	32.27
23593 - Metrology Technician III	33.90
23640 - Millwright	22.12
23710 - Office Appliance Repairer	21.13
23760 - Painter, Maintenance	17.53
23790 - Pipefitter, Maintenance	24.23
23810 - Plumber, Maintenance	22.66
23820 - Pneudraulic Systems Mechanic	22.12
23850 - Rigger	22.12
23870 - Scale Mechanic	18.88
23890 - Sheet-Metal Worker, Maintenance	21.14
23910 - Small Engine Mechanic	16.58
23931 - Telecommunications Mechanic I	24.06
23932 - Telecommunications Mechanic II	25.71
23950 - Telephone Lineman	23.39
23960 - Welder, Combination, Maintenance	20.23
23965 - Well Driller	21.75
23970 - Woodcraft Worker	22.12
23980 - Woodworker	18.27
24000 - Personal Needs Occupations	
24550 - Case Manager	13.49
24570 - Child Care Attendant	10.31
24580 - Child Care Center Clerk	14.77
24610 - Chore Aide	9.40
24620 - Family Readiness and Support Services	13.49
Coordinator	
24630 - Homemaker	17.49
25000 - Plant and System Operations Occupations	
25010 - Boiler Tender	21.75
25040 - Sewage Plant Operator	20.15
25070 - Stationary Engineer	21.75
25190 - Ventilation Equipment Tender	13.82
25210 - Water Treatment Plant Operator	19.12
27000 - Protective Service Occupations	
27004 - Alarm Monitor	13.86
27007 - Baggage Inspector	12.35
27008 - Corrections Officer	15.36
27010 - Court Security Officer	16.86
27030 - Detection Dog Handler	13.82
27040 - Detention Officer	15.36
27070 - Firefighter	16.86
27101 - Guard I	12.35
27102 - Guard II	13.82
27131 - Police Officer I	18.47
27132 - Police Officer II	20.52
28000 - Recreation Occupations	

28041 - Carnival Equipment Operator	13.55
28042 - Carnival Equipment Repairer	14.77
28043 - Carnival Worker	9.34
28210 - Gate Attendant/Gate Tender	13.59
28310 - Lifeguard	11.86
28350 - Park Attendant (Aide)	15.21
28510 - Recreation Aide/Health Facility Attendant	11.10
28515 - Recreation Specialist	18.46
28630 - Sports Official	12.11
28690 - Swimming Pool Operator	20.20
	20.20
29000 - Stevedoring/Longshoremen Occupational Services	00.46
29010 - Blocker and Bracer	22.46
29020 - Hatch Tender	22.46
29030 - Line Handler	22.46
29041 - Stevedore I	20.94
29042 - Stevedore II	24.39
30000 - Technical Occupations	
30010 - Air Traffic Control Specialist, Center (HFO) (see 2)	36.93
30011 - Air Traffic Control Specialist, Station (HFO)(see 2)	25.46
30012 - Air Traffic Control Specialist, Terminal (HFO)(see 2)	28.04
30021 - Archeological Technician I	19.13
30022 - Archeological Technician II	21.45
30023 - Archeological Technician III	26.26
30030 - Cartographic Technician	26.59
30040 - Civil Engineering Technician	26.40
30051 - Cryogenic Technician I	29.45
30052 - Cryogenic Technician II	32.53
30061 - Drafter/CAD Operator I	19.13
30062 - Drafter/CAD Operator II	21.45
	21.45
30063 - Drafter/CAD Operator III	
30064 - Drafter/CAD Operator IV	28.50
30081 - Engineering Technician I	16.70
30082 - Engineering Technician II	18.73
30083 - Engineering Technician III	20.96
30084 - Engineering Technician IV	25.97
30085 - Engineering Technician V	31.77
30086 - Engineering Technician VI	38.43
30090 - Environmental Technician	22.40
30095 - Evidence Control Specialist	26.60
30210 - Laboratory Technician	23.92
30221 - Latent Fingerprint Technician I	29.45
30222 - Latent Fingerprint Technician II	32.53
30240 - Mathematical Technician	26.59
30361 - Paralegal/Legal Assistant I	15.49
30362 - Paralegal/Legal Assistant II	19.19
30363 - Paralegal/Legal Assistant III	23.47
30364 - Paralegal/Legal Assistant IV	28.39
30375 - Petroleum Supply Specialist	32.53
30390 - Photo-Optics Technician	26.59
30395 - Radiation Control Technician	32.53
30461 - Technical Writer I	23.34
30462 - Technical Writer II	28.56
30463 - Technical Writer III	34.54
30491 - Unexploded Ordnance (UXO) Technician I	23.47
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30492 - Unexploded Ordnance (UXO) Technician II	28.39
30493 - Unexploded Ordnance (UXO) Technician III	34.03
30494 - Unexploded (UXO) Safety Escort	23.47
30495 - Unexploded (UXO) Sweep Personnel	23.47
30501 - Weather Forecaster I	29.45
30502 - Weather Forecaster II	35.82
30620 - Weather Observer, Combined Upper Air or (see 2)	23.92
Surface Programs	
30621 - Weather Observer, Senior (see 2)	26.59
31000 - Transportation/Mobile Equipment Operation Occupations	
31010 - Airplane Pilot	28.39
31020 - Bus Aide	10.73
31030 - Bus Driver	17.17
31043 - Driver Courier	13.34
31260 - Parking and Lot Attendant	9.72
31290 - Shuttle Bus Driver	13.56
31310 - Taxi Driver	
	10.53
31361 - Truck Driver, Light	13.56
31362 - Truck Driver, Medium	16.66
31363 - Truck Driver, Heavy	18.93
31364 - Truck Driver, Tractor-Trailer	18.93
99000 - Miscellaneous Occupations	
99020 - Cabin Safety Specialist	13.84
99030 - Cashier	9.11
99050 - Desk Clerk	10.05
99095 - Embalmer	23.75
99130 - Flight Follower	23.47
99251 - Laboratory Animal Caretaker I	12.24
99252 - Laboratory Animal Caretaker II	13.66
99260 - Marketing Analyst	23.47
99310 - Mortician	23.75
99410 - Pest Controller	18.78
99510 - Photofinishing Worker	12.33
99710 - Recycling Laborer	12.45
99711 - Recycling Specialist	16.10
99730 - Refuse Collector	10.99
99810 - Sales Clerk	12.33
99820 - School Crossing Guard	10.64
99830 - Survey Party Chief	19.48
99831 - Surveying Aide	17.72
99832 - Surveying Technician	17.87
99840 - Vending Machine Attendant	12.89
99841 - Vending Machine Repairer	16.05
99841 - Vending Machine Repairer Helper	11.56
John Mending Machine Repairer nerber	11.00

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors, applies to all contracts subject to the Service Contract Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is the victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

ALL OCCUPATIONS LISTED ABOVE RECEIVE THE FOLLOWING BENEFITS:

HEALTH & WELFARE: \$4.27 per hour or \$170.80 per week or \$740.13 per month

VACATION: 2 weeks paid vacation after 1 year of service with a contractor or successor, 3 weeks after 10 years, and 4 weeks after 15 years. Length of service includes the whole span of continuous service with the present contractor or successor, wherever employed, and with the predecessor contractors in the performance of similar work at the same Federal facility. (See 29 CFR 4.173)

HOLIDAYS: A minimum of ten paid holidays per year: New Year's Day, Martin Luther King Jr.'s Birthday, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day, and Christmas Day. (A contractor may substitute for any of the named holidays another day off with pay in accordance with a plan communicated to the employees involved.) (See 29 CFR 4.174)

THE OCCUPATIONS WHICH HAVE NUMBERED FOOTNOTES IN PARENTHESES RECEIVE THE FOLLOWING:

1) COMPUTER EMPLOYEES: Under the SCA at section 8(b), this wage determination does not apply to any employee who individually qualifies as a bona fide executive, administrative, or professional employee as defined in 29 C.F.R. Part 541. Because most Computer System Analysts and Computer Programmers who are compensated at a rate not less than \$27.63 (or on a salary or fee basis at a rate not less than \$455 per week) an hour would likely qualify as exempt computer professionals, (29 C.F.R. 541.400) wage rates may not be listed on this wage determination for all occupations within those job families. In addition, because this wage determination may not list a wage rate for some or all occupations within those job families if the survey data indicates that the prevailing wage rate for the occupation equals or exceeds \$27.63 per hour conformances may be necessary for certain nonexempt employees. For example, if an individual employee is nonexempt but nevertheless performs duties within the scope of one of the Computer Systems Analyst or Computer Programmer occupations for which this wage determination does not specify an SCA wage rate, then the wage rate for that employee must be conformed in accordance with the conformance procedures described in the conformance note included on this wage determination.

Additionally, because job titles vary widely and change quickly in the computer industry, job titles are not determinative of the application of the computer professional exemption. Therefore, the exemption applies only to computer employees who satisfy the compensation requirements and whose primary duty consists of:

(1) The application of systems analysis techniques and procedures, including consulting with users, to determine hardware, software or system functional specifications;

(2) The design, development, documentation, analysis, creation, testing or modification of computer systems or programs, including prototypes, based on and related to user or system design specifications;

(3) The design, documentation, testing, creation or modification of computer programs related to machine operating systems; or(4) A combination of the aforementioned duties, the performance of which requires the same level of skills.(29 C.F.R. 541.400).

2) AIR TRAFFIC CONTROLLERS AND WEATHER OBSERVERS - NIGHT PAY & SUNDAY PAY: If you work at night as part of a regular tour of duty, you will earn a night differential and receive an additional 10% of basic pay for any hours worked between 6pm and 6am.

If you are a full-time employed (40 hours a week) and Sunday is part of your regularly scheduled workweek, you are paid at your rate of basic pay plus a Sunday premium of 25% of your basic rate for each hour of Sunday work which is not overtime (i.e. occasional work on Sunday outside the normal tour of duty is considered overtime work).

** HAZARDOUS PAY DIFFERENTIAL **

An 8 percent differential is applicable to employees employed in a position that represents a high degree of hazard when working with or in close proximity to ordnance, explosives, and incendiary materials. This includes work such as screening, blending, dying, mixing, and pressing of sensitive ordnance, explosives, and pyrotechnic compositions such as lead azide, black powder and photoflash powder.

All dry-house activities involving propellants or explosives. Demilitarization, modification, renovation, demolition, and maintenance operations on sensitive ordnance, explosives and incendiary materials. All operations involving re-grading and cleaning of artillery ranges.

A 4 percent differential is applicable to employees employed in a position that represents a low degree of hazard when working with, or in close proximity to ordnance, (or employees possibly adjacent to) explosives and incendiary materials which involves potential injury such as laceration of hands, face, or arms of the employee engaged in the operation, irritation of the skin, minor burns and the like; minimal damage to immediate or adjacent work area or equipment being used. All operations involving, unloading, storage, and hauling of ordnance, explosive, and incendiary ordnance material other than small arms ammunition. These differentials are only applicable to work that has been specifically designated by the agency for ordnance, explosives, and incendiary material differential pay.

** UNIFORM ALLOWANCE **

If employees are required to wear uniforms in the performance of this contract (either by the terms of the Government contract, by the employer, by the state or local law, etc.), the cost of furnishing such uniforms and maintaining (by laundering or dry cleaning) such uniforms is an expense that may not be borne by an employee where such cost reduces the hourly rate below that required by the wage determination. The Department of Labor will accept payment in accordance with the following standards as compliance:

The contractor or subcontractor is required to furnish all employees with an adequate number of uniforms without cost or to reimburse employees for the actual cost of the uniforms. In addition, where uniform cleaning and maintenance is made the responsibility of the employee, all contractors and subcontractors subject to this wage determination shall (in the absence of a bona fide collective bargaining agreement providing for a different amount, or the furnishing of contrary affirmative proof as to the actual cost), reimburse all employees for such cleaning and maintenance at a rate of \$3.35 per week (or \$.67 cents per day). However, in those instances where the uniforms furnished are made of "wash and wear" materials, may be routinely washed and dried with other personal garments, and do not require any special treatment such as dry cleaning, daily washing, or commercial laundering in order to meet the cleanliness or appearance standards set by the terms of the Government contract, by the contractor, by law, or by the nature of the work, there is no requirement that employees be reimbursed for uniform maintenance costs.

** SERVICE CONTRACT ACT DIRECTORY OF OCCUPATIONS **

The duties of employees under job titles listed are those described in the "Service Contract Act Directory of Occupations", Fifth Edition (Revision 1), dated September 2015, unless otherwise indicated.

** REQUEST FOR AUTHORIZATION OF ADDITIONAL CLASSIFICATION AND WAGE RATE, Standard Form 1444 (SF-1444) **

Conformance Process:

The contracting officer shall require that any class of service employee which is not listed herein and which is to be employed under the contract (i.e., the work to be performed is not performed by any classification listed in the wage determination), be classified by the contractor so as to provide a reasonable relationship (i.e., appropriate level of skill comparison) between such unlisted classifications and the classifications listed in the wage determination (See 29 CFR 4.6(b) (2) (i)). Such conforming procedures shall be initiated by the contractor prior to the performance of contract work by such unlisted class (es) of employees (See 29 CFR 4.6(b) (2) (ii)). The Wage and Hour Division shall make a final determination of conformed classification, wage rate, and/or fringe benefits which shall be paid to all employees performing in the classification from the first day of work on which contract work is performed by them in the classification. Failure to pay such unlisted employees the compensation agreed upon by the interested parties and/or fully determined by the Wage and Hour Division retroactive to the date such class of employees commenced contract work shall be a violation of the Act and this contract. (See 29 CFR 4.6(b)(2)(v)). When multiple wage determinations are included in a contract, a separate SF-1444 should be prepared for each wage determination to which a class (es) is to be conformed.

The process for preparing a conformance request is as follows:

1) When preparing the bid, the contractor identifies the need for a conformed occupation(s) and computes a proposed rate(s).

2) After contract award, the contractor prepares a written report listing in order the proposed classification title(s), a Federal grade equivalency (FGE) for each proposed classification(s), job description(s), and rationale for proposed wage rate(s), including information regarding the agreement or disagreement of the authorized representative of the employees involved, or where there is no authorized representative, the employees themselves. This report should be submitted to the contracting officer no later than 30 days after such unlisted class (es) of employees performs any contract work.

3) The contracting officer reviews the proposed action and promptly submits a report of the action, together with the agency's recommendations and pertinent information including the position of the contractor and the employees, to the U.S. Department of Labor, Wage and Hour Division, for review (See 29 CFR 4.6(b)(2)(ii)).

4) Within 30 days of receipt, the Wage and Hour Division approves, modifies, or disapproves the action via transmittal to the agency contracting officer, or notifies the contracting officer that additional time will be required to process the request.

5) The contracting officer transmits the Wage and Hour Division's decision to the contractor.

6) Each affected employee shall be furnished by the contractor with a written copy of such determination or it shall be posted as a part of the wage determination (See 29 CFR 4.6(b) (2) (iii)).

Information required by the Regulations must be submitted on SF-1444 or bond paper.

When preparing a conformance request, the "Service Contract Act Directory of Occupations" should be used to compare job definitions to ensure that duties requested are not performed by a classification already listed in the wage determination. Remember, it is not the job title, but the required tasks that determine whether a class is included in an established wage determination. Conformances may not be used to artificially split, combine, or subdivide classifications listed in the wage determination (See 29 CFR 4.152(c) (1)).

ATTACHMENT J-6 QUALITY ASSURANCE FOR WORK AFFECTING NUCLEAR SAFETY

J-7 DOE O 206.2 IDENTITY, CREDENTIAL AND ACCESS MANAGEMENT (ICAM) (FEB 2013)

Reference: https://www.directives.doe.gov

J-8 RESTRICTED SOFTWARE LIST

C.04 Scope of Work

Restricted Software:

- 4.1 Develop GoldSim RRA Model
- 4.2 Develop Preliminary RRA Model
- 4.2.1 Define the Inventory for the RRA Model
- 4.2.1.1 Develop stochastic waste inventories
- 4.2.1.2 Develop comprehensive Species list for the model
- 4.2.1.3 Account for Specialized Release of Waste Forms
- 4.2.1.4 Develop Physical Material Properties
- 4.2.1.5 Develop an External Process-Level Unsaturated Zone (UZ) Model and Abstract Results
- 4.2.1.6 Develop an External Process-Level Saturated Zone (SZ) Model and Abstract Results
- 4.2.1.7 Develop an External Process-Level Atmospheric Dispersion Model and Abstract Results
- 4.2.1.8 Develop and Implement Models for Biotically-Induced Contamination Transport (CT)
- 4.2.1.9 Develop Bases for Diffusion Modeling
- 4.2.1.10 Develop Stochastic Geochemical Parameters
- 4.2.1.11 Develop model(s) and Parameters for Erosion of Area G
- 4.2.1.12 Develop and Implement Human Exposure Modeling in the RRA Model
- 4.2.1.13 Construct and Perform ALARA Analysis (per DOE O 458.1).
- 4.2.1.14 Develop Ecological Exposure Models (per DOE O 458.1)
- 4.3 Develop Decision Support Module, Decision Analysis, and ALARA
- 4.4 Conduct Sensitivity/Uncertainty Analysis
- 4.5 Prepare RRA Model Documents