

Statement of Work

PROJECT NO. 23350

Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project

Prepared for:
U.S. Department of Energy
Idaho Operations Office
Idaho Falls, Idaho



Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project

SOW-698
Revision 0

May 2003

Approved by



Douglas K. Jorgensen, ICDF
Project Manager

5/19/03

Date

for 

Patrick Gibson, ICDF
Project Engineer

5/19/03

Date

Identifier: SOW-698 Revision: 0 Page: 1 of 61	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
---	---	---

1. SCOPE

1.1 Introduction

The Idaho National Engineering and Environmental Laboratory (INEEL) site is a government facility, located 51.5 km (32 mi) west of Idaho Falls, Idaho. The site area is 2,305 km² (890 mi²) and located at the northeastern portion of the Eastern Snake River Plain. The U.S. Department of Energy (DOE) Idaho operation office manages the INEEL. The primary mission of the INEEL is nuclear energy research and waste management/restoration (see Figure 1).

For the past 50 years, facilities at the INEEL were used for the development and testing of nuclear power peaceful applications. As a result, waste-disposal processes have been generated and implemented to comply with the state and federal, regulations and policies established by DOE. Contaminated structures and buildings, soil, and water resulted from historical disposals.

In keeping with the contemporary emphasis on environmental cleanup and other waste-related issues. The INEEL is focusing within its research program on environmental restoration solutions to address these contaminated media and waste management issues (to minimize and/or control further contamination from current and future operations). Spent Nuclear Fuel (SNF) management; hazardous and mixed waste management and minimization; cultural resources preservation; and environmental engineering, protection, and remediation are challenges addressed by current INEEL activities.

From 1952 to 1992, the Idaho Nuclear Technology and Engineering (INTEC)—formerly known as the Idaho Chemical Processing Plant (ICPP)—was primarily concerned with reprocessing SNF from defense and commercial projects. The liquid waste generated from the reprocessing activities ended in 1992 and is stored in several underground storage tanks at INTEC. These reprocessing operations resulted in some contamination of both the soil and the groundwater at the facility. Presently, DOE, the Environmental Protection Agency and Idaho Department of Environmental Quality are actively directing cleanup activities at the INEEL, to reduce the human health and environmental risks to acceptable levels in accordance with the Federal Facility Agreement and Consent Order (FFA/CO). The INEEL Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Disposal Facility (ICDF) is a major component of the above activity. The ICDF complex is designated as part of Waste Area Group (WAG) 3, and Operable Unit (OU) 3-13, in accordance with the current remediation management strategy outlined in the OU 3-13 remedial design/remedial action (RD/RA) work plan. The major components of the ICDF complex include the following:

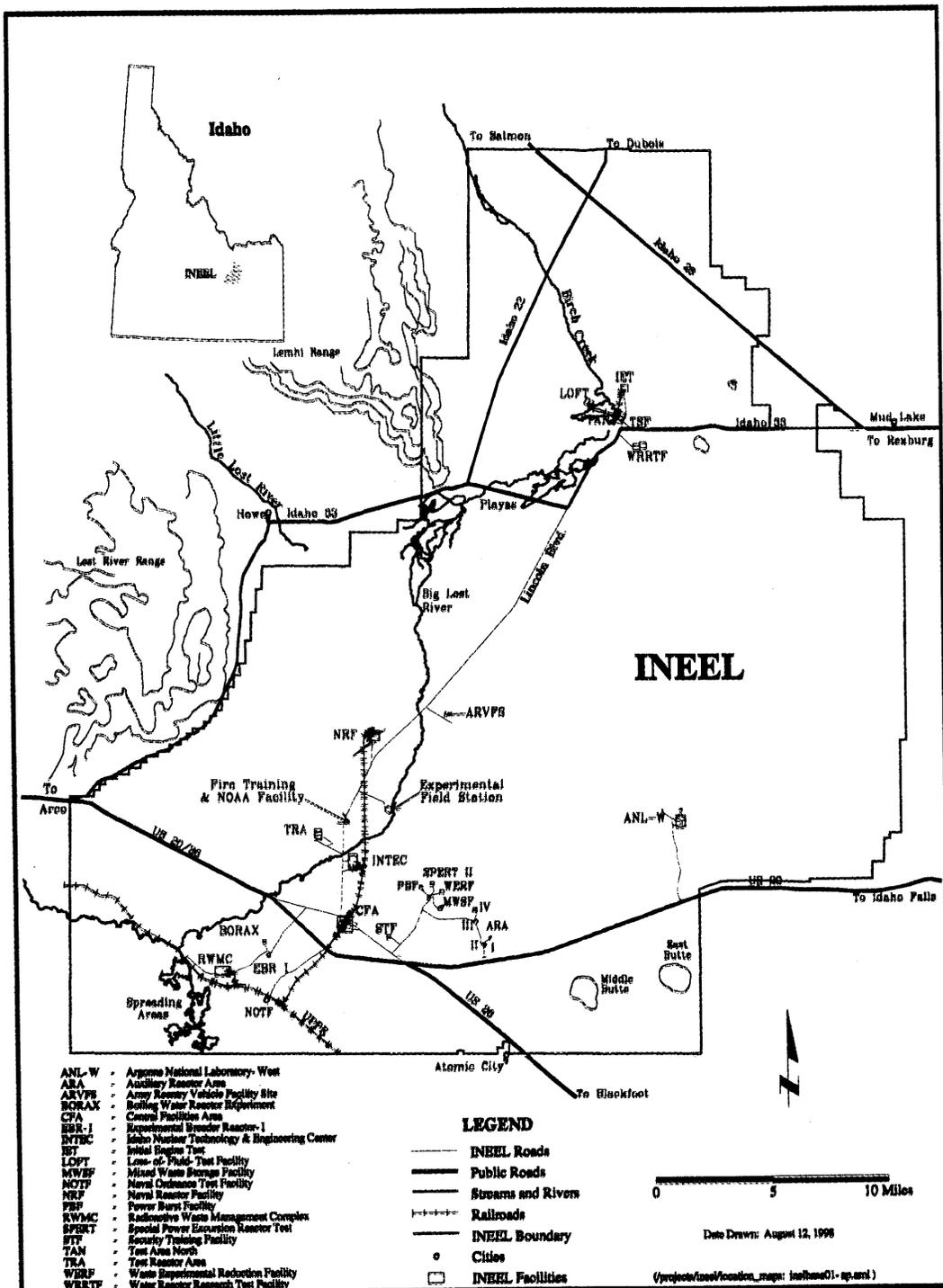


Figure 1. Idaho National Engineering and Environmental Laboratory.

Identifier: SOW-698 Revision: 0 Page: 3 of 61	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
---	---	---

- Disposal cells (landfill)
- Evaporation pond which consists of two cells
- Administration trailer
- Truck-weighing scale
- Decontamination building, with treatment area, (construction ongoing; anticipate turnover for operations summer of 2004)
- Contaminated equipment pad (construction ongoing; anticipate turnover for operations summer of 2004)
- Staging and storage areas (includes three staging areas, two storage areas, and vehicle/equipment parking areas to facilitate ICDF Complex operations).

Together, the above components of the ICDF complex provide centralized waste acceptance, inspection, treatment if necessary, and disposal of CERCLA-generated waste from remediation and deactivation, decontamination, and decommissioning (D&D&D) sites at the INEEL. The ICDF is adjacent to INTEC, outside the fence as shown in Figure 2.

This statement of work (SOW) defines the scope, requirements, and schedule for performing the remedial action of the contaminated soils at the INEEL (see Figure 1) in support of the Idaho Completion Project (ICP). The INEEL Idaho Closure Project Balance of the INEEL cleanup program is seeking a qualified commercial SUBCONTRACTOR to perform all requisite activities associated with (1) excavation, loading, and transporting contaminated soils from the various sites to the ICDF. The ICDF is (2) recording, tracking, treating, and placing contaminated waste into the designated ICDF landfill; (3) transferring liquid waste and leachate into the evaporation pond, and tracking, recording, and managing the respective waste; (4) providing overall site maintenance, surveillance, and management; and (5) constructing the second cell of the ICDF landfill.

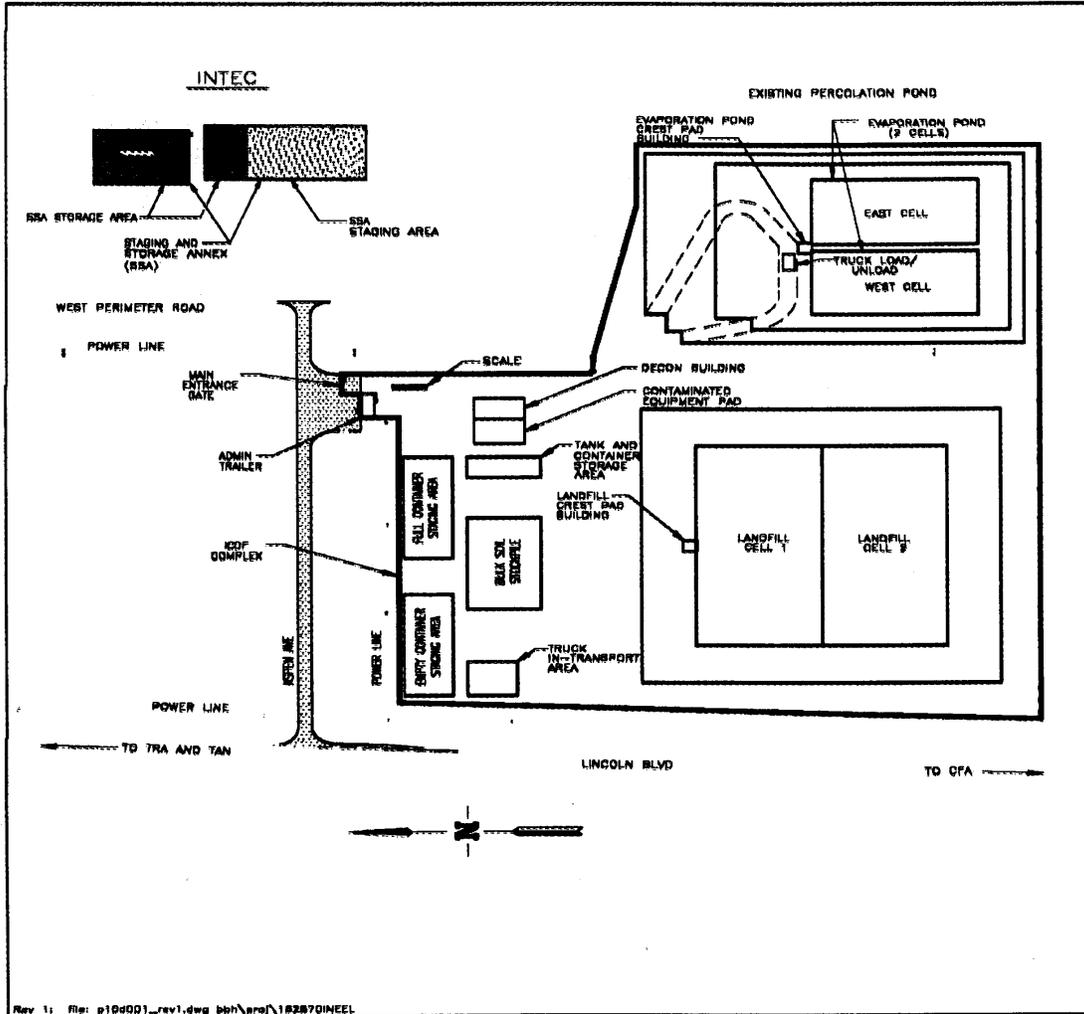


Figure 2. INEEL CERCLA Disposal Facility layout.

1.2 Work Included

1.2.1 Excavation of Contaminated Soil

Contaminated soil has been documented in six WAGs. Each of these groups contains one or more specific areas of identified remedial actions that will result in the generation of soils to be deposited into the ICDF landfill. A separate SOW, "Scope of Work for Environmental Restoration Contaminated Soils Remedial Action," (SOW-691) was prepared to cover the specific actions required for this work. A

Identifier: SOW-698 Revision: 0 Page: 5 of 61	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
---	---	---

preliminary profile of the amount of waste to be excavated and transported to the ICDF is presented in Table 1.

1.2.2 Transportation of Waste

Waste excavated and generated as part of the remedial action in the identified areas of the WAG sites is to be transported to the ICDF for treatment and/or disposal. The scope and requirements for the transportation of this waste also is addressed in SOW-691.

1.2.3 Treatment and Stabilization of Waste

Waste treatment and stabilization will be performed in the decontamination facility. This facility is currently under construction with a planned turnover for operations in the spring or summer of 2004. The SUBCONTRACTOR shall provide support for testing and turnover of this facility by revising system operational (SO) test procedures, assisting with the conduct of SO testing, and preparing operating procedures for the facility and associated systems.

1.2.3.1 Minimum Treatment of Soils

Soil treatment will be performed on selected waste. Estimated waste volumes are found in Table 1. Mixing the waste stream with water, Portland cement, and possibly some fly ash will stabilize soils. It also is possible that some soils may require the use of chemical reagents. The selection of the treatment process and the basis for the design can be found in EDF-ER-296, "Process and Treatment Overview for the Minimum Treatment Process;" and EDF-1542, "Stabilization Treatment Process Selection."

1.2.3.2 Stabilization of Debris Waste

Micro encapsulation of debris has been approved by the agencies as the accepted performance standard for debris treatment.

Design of the system for the selected treatment process, micro-encapsulation, has not been finalized. A presentation of the conceptual design and the basis for selection of the treatment process is available in EDF-1730, "Staging, Storage, Sizing, and Treatment Facility (SSSTF) Debris Treatment Process Selection and Design. Estimated volumes

Identifier: SOW-698 Revision: 0 Page: 7 of 61	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
---	---	---

of debris waste to be processed are provided in Table 1. Additional debris waste requiring treatment may be identified as INEEL D&D&D and remediation activities are better defined and the waste is characterized.

1.2.3.3 SUBCONTRACTOR shall provide the following in support of waste treatment processes:

- Waste boxes for transport of soil from bulk soil pile into the treatment facility
- Bulk bags of Portland cement,
- Fly ash, reagent chemicals, custom roll-off containers to place treated waste
- Liners (burrito bags) for roll-off containers, and
- Replacement filters and bags for the dust collection and HEPA filtration systems.

SUBCONTRACTOR shall also provide a grout pump for debris treatment.

1.2.4 Landfill – Waste Placement

1.2.4.1 Receipt of Waste

Waste arriving at the complex requires a verification of the waste profiles, incorporated into the waste-tracking system. In addition, a verification is required showing that the storing, the staging, and the disposal limits are not exceeded.

A table of quantities of soil and debris waste to be transported to the ICDF complex is found in the WAGs, Table 1.

1.2.4.2 Tracking and Control of Waste

All waste managed at the ICDF Complex shall be tracked and reported in accordance with requirements stated in PLN-914. At the present time, hard-copy forms are available for this purpose; however, an electronic waste-tracking system is required. The CONTRACTOR has

Identifier: SOW-698 Revision: 0 Page: 8 of 61	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
---	---	---

developed a waste-tracking system for use across the Site and is in the process of revising and upgrading the system for use by the ICDF implementation project.

The SUBCONTRACTOR will be allowed to use this system at their discretion or develop their own tracking system, compatible with and satisfying the requirements stated in the PLN-914, WAC documents DOE/ID-10881, DOE/ID-10866, and DOE/ID-10865. This tracking system shall be made available for the CONTRACTOR to review, report, and trend data as desired (including any required license purchase or transfer for CONTRACTOR machines).

1.2.4.3 Staging and Storing Waste

Waste may be staged or stored within the ICDF complex in the designated staging/storing areas. Complete details regarding the utilization of these areas may be found in Section 5 of the *ICDF Complex Operations and Maintenance Plan* (DOE/ID-11000).

1.2.4.4 Placement of Waste into Landfill

Waste placed into the landfill shall be documented on an x, and y, and z coordinate system. The coordinate system is available from the CONTRACTOR and shall be supplied for SUBCONTRACTOR use. The waste tracking system shall keep track of the location where specific waste is disposed in the landfill. Disposal of waste in the landfill is covered in detail in "Waste Placement Plan," EDF-286.

1.2.5 Management of Leachate and Liquid Waste

Aqueous leachate will be transferred out of the leachate collection system and the landfill leak detection sumps as required by the *Remedial Action Work Plan* (RAWP), (DOE/ID-10984) and *Operating and Maintenance Plan* (DOE/ID-11000) for the ICDF. The evaporation ponds will be maintained to satisfy the requirement of the same documents. Purge and development liquid from WAG 3 sample-and-test wells will also be provided for transfer to the evaporation pond. Currently about 48,000 gal in six 8,000-gal tanks are stored at the SSA within INTEC. This waste is to be transported and transferred into the evaporation pond. An additional 30,000 to 48,000 gal of liquid are

Identifier: SOW-698 Revision: 0 Page: 9 of 61	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
---	---	---

anticipated to be generated on an annual basis; this liquid will usually be provided in 5,000-gal tanks that will usually be 50 to 80% full.

Management of the evaporation ponds and associated sampling, facilities/equipment, transfer of liquids, maintenance of equipment and requisite surveillances, in accordance with the referenced contract documents, is included in the scope of this work.

1.2.6 Expansion of Landfill into Cell 2

Construction work on the expansion of the landfill into Cell 2 cannot begin without specific authorization from the CONTRACTOR. Requirements associated with Cell 2 expansion construction are provided in the technical specifications, special conditions, drawings, and Construction Quality Assurance Plan (DOE/ID-10851).

At the end of Cell 2 construction, a CD-4 decision from DOE will be required before operation. Additionally, a prefinal inspection by the agencies is anticipated. This inspection and subsequent report prepared by the CONTRACTOR will take place before the DOE CD-4 decision process. To ensure readiness for the prefinal inspection and the CD-4 decision, the CONTRACTOR will perform a readiness evaluation, based on the prefinal inspection checklist and required CD-4 review areas. Also required before the CD-4 decision and the prefinal inspection is a quality assurance report submittal in compliance with 40 CFR 264.19. This will be based on the independent quality-inspection agent procured by the CONTRACTOR to oversee and document construction of the landfill.

CGA Letter

1.2.7 Work Applicable to All Areas of Scope

1.2.7.1 Operating Procedures

Operating procedures shall be developed and maintained for all operations, surveillance, and maintenance activities. A set of draft operating and maintenance procedures will be provided (with unincorporated review comments) at the time of contract-award for the operation of the ICDF landfill and evaporation pond, and access control to the ICDF facility. These procedures must be revised for integration of the selected SUBCONTRACTOR's quality program plan and Health and Safety Plan (HASP) considerations. Before acceptance of waste into the ICDF complex, the SUBCONTRACTOR shall have issued the requisite



operating procedures and placed them under configuration management control.

Additional administrative and process control procedures may be required for compliance with an NQA-1 compliant quality plan. These procedures must also be in place prior to declaration of readiness to remediate and place waste.

Operation, maintenance, and surveillance procedures need to be developed for the remediation sites and transportation of waste. The CONTRACTORS' radiological control organization shall have the approval authority for procedures, agreements, and documents involving activities within the Radiological Protection Program.

1.2.7.2 Training

All personnel shall be trained as identified in the RAWP, Operating and Maintenance Plan, and HASP Table 6-1 for the respective unit (WAG or ICDF). A personnel training and qualification plan shall be developed and all personnel used in operation at the respective unit shall be qualified before initiating operations.

1.2.7.3 Surveillance

The RAWP and *Operations and Maintenance (O&M) Plan* (DOE/ID-11000) for the respective units will identify required daily, weekly, monthly and annual inspections. The procedures and training prepared for operation of the respective units shall address all required surveillance activities. Any additional surveillance activities identified in the "Radiological Controls Manual" and the SUBCONTRACTOR's quality program plan shall also be included in the operation procedures.

1.2.7.4 Reporting

The RAWP, *O&M Plan* and associated requirements documents identify various areas and frequencies of required reporting. Most of these reports are summarized in Table 3.8, and Sections 9 and 10 of the *O&M Plan* and in Section 6 of the RAWP. Submittal of these reports shall be in accordance with a schedule agreed upon between the

Stet
Section 6

Identifier: SOW-698 Revision: 0 Page: 11 of 61	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
--	---	---

SUBCONTRACTOR and CONTRACTOR, and documented in a Memorandum of Understanding (MOU) initiated by the SUBCONTRACTOR. While this MOU will be submitted as vendor data, the individual reports shall be provided electronically at the required frequency and before the negotiated due date. All data supporting the reports shall be maintained electronically in dual storage locations; at least one of these storage locations shall be available at all times to the CONTRACTOR for read-only access.

Agency reports will be submitted by the CONTRACTOR.

1.2.7.5 Radiological Controls

The CONTRACTOR will supply all radiological-control engineers and technicians, with radiological control program-based supervision and management, and requisite monitoring equipment. All training, qualifications and performance shall be in accordance with the CONTRACTORS, the "Radiological Controls Manual" and DOE approved Radiological Protection Plan (RPP). A Memorandum of Understanding shall be established as a condition of the award of the subcontract, to determine the minimum level of radiological support and the process and response time for requesting additional support on an as-needed basis. Generally, requests for additional personnel shall be submitted at least 6 weeks before the need, to allow time for procurement and subsequent training and qualification of personnel.

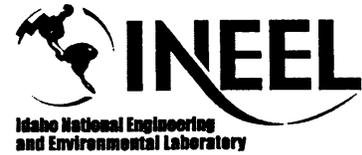
The CONTRACTOR, as specified in the CONTRACTOR'S RPP, will provide ICDF personnel radiation-exposure tracking, dosimetry support, and monitoring equipment-calibration services. These services are provided at no cost to the SUBCONTRACTOR.

1.2.7.6 Maintenance of Equipment and Facilities

The SUBCONTRACTOR is responsible for maintenance and management of availability for all equipment and facilities (SUBCONTRACTOR-supplied or government furnished equipment [GFE]) used in performance to this subcontract (with the exception of radiological controls equipment, as discussed in paragraph 1.2.7.5). The

Identifier: SOW-698
Revision: 0
Page: 12 of 61

Statement of Work for the INEEL
CERCLA Disposal Facility Complex
Implementation Project



SUBCONTRACTOR also is responsible for the maintenance of the roads and grounds, within the ICDF complex fenced areas, which includes all fences and gates. This includes the minimization of weed growth within the complex and along the fence, to prevent danger of fire.

Roll-on/roll-off containers used to transport soil waste shall be maintained so they are leak-tight when staged full of soil.

*Does this mean
"Water-tight"?*

Utilities within the fence are maintained by the SUBCONTRACTOR unless indicated differently below; there has been no estimate as to level of effort for maintenance:

- Sanitary Sewer Lift Station – to be maintained by the CONTRACTOR
- Sanitary sewer piping
- Potable water piping
- Power and communication cabling
- Transformer at the AOT
- Raw water piping
- Firewater piping
- PIVs and hydrants (maintained by the SUBCONTRACTOR but tested by the CONTRACTOR)
- All utilities within the buildings
- Leach^{te}age and process waste piping systems.

1.2.7.7

Demonstration of Readiness for Operations

The SUBCONTRACTOR shall perform a self-assessment to determine readiness for operation, in accordance with the requirements of this SOW and associated subcontract documentation. Upon determination of readiness, the SUBCONTRACTOR shall notify the CONTRACTOR. The CONTRACTOR may perform an independent assessment

Identifier: SOW-698
Revision: 0
Page: 13 of 61

Statement of Work for the INEEL
CERCLA Disposal Facility Complex
Implementation Project



of readiness, before providing approval to proceed with operations. The CONTRACTOR will use a predetermined checklist for the assessment of readiness; this checklist will be provided to the SUBCONTRACTOR for use in a self-assessment. The documentation that may be reviewed during this evaluation will include the following:

- Operating procedures
- Maintenance procedures
- Training plans and records
- HASPs and implementation
- Quality plan implementation
- Organization
- Roles-and-responsibilities definitions, personnel knowledge of roles, responsibilities, accountability, and authorities
- Waste-tracking system
- Traffic plan (within the ICDF complex and within the first site to be remediated)
- Equipment readiness
- Spare-parts availability or equipment-availability contingency plans
- Voluntary Protection Program implementation
- Integrated Safety Management System (48 CFR 970.5223-1 and DOE G 450.4-1B) implementation
- Project implementation plan.

Identifier: SOW-698 Revision: 0 Page: 14 of 61	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
--	---	---

1.3 Work Excluded

The following work is not included in the scope of this Subcontract:

- Sampling of waste for characterization, confirmation or verification at the remediation dig sites is to be performed by the CONTRACTOR. The CONTRACTOR is responsible for filling out the waste profile, and the SUBCONTRACTOR is responsible for approving the waste profile. Close coordination between the SUBCONTRACTOR and the WAGs responsible for the respective remediation dig sites will be required, to ensure data is obtained and processed in a timely manner that supports the SUBCONTRACTOR's schedule.
- The Sample Analysis Management/Sample Management Office is responsible for all data validation.
- Sampling and analysis of purge-and-well-development liquid waste, provided for disposal in the ICDF evaporation pond will determine compliance with the Waste Acceptance Criteria (WAC). Note that sampling of leachate and pond water is included in the scope *subcontractor's*
- Sampling and analysis of verification samples of waste provided to the ICDF complex.
- Ecological (flora and fauna) sampling within the ICDF complex.
- Groundwater sampling from established, or any new wells, whether outside or inside the ICDF complex fence.
- Fire and life safety system tests of fire hydrants, risers, alarms to Central Facilities Area (CFA) alarm station, and paging.
- Maintenance of the roads and grounds outside the ICDF fence, including the parking lot north of the administrative office trailer. The exception is the roads and grounds within an established dig site; the SUBCONTRACTOR shall be responsible for maintenance in this case.
- Maintenance of the sanitary sewer lift station associated with the ICDF.
- Maintenance of all utilities, including power, outside the ICDF complex fence.
- Transportation of liquid waste containers.

Identifier: SOW-698 Revision: 0 Page: 15 of 61	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
--	---	---

- The CONTRACTOR will perform management and control of waste in the SSA.
- Closure of the ICDF complex and construction of the final cap for the landfill.
- Transportation of debris from WAG sites (unless the debris is part of the dig site remediation activities covered by this subcontract).
- Radiological controls personnel and equipment—Radiological control services and initial complement of monitoring equipment are being provided by the CONTRACTOR for management by the SUBCONTRACTOR. Maintenance of all respective monitoring equipment shall be performed by the CONTRACTOR in accordance with the CONTRACTOR's (Requirements Compliance Matrix (RCM).

1.4 INEEL CERCLA Disposal Facility Available Infrastructure for Personnel

The following infrastructure will be available for personnel:

- An administrative office trailer (AOT) approximately 13 × 33 ft (see Drawing 520083) (The CONTRACTOR needs two offices, approximately 10 × 10 ft.)
 - Restrooms
 - Potable drinking water
 - Radio base station
 - Initial set of radios (see schedule X)
 - Sanitary sewer
 - Electric service
 - Phone service
 - Computer/data cable service.
- The Decon Building, when completed, will be approximately 60 × 100 ft (see Drawing 520035 and others).

NOTE: Of the 12,000 cfm air supply requirement for the Treatment System Air Scavenger Unit (ASU), 8,000 cfm will not be heated. The ASU is anticipated to operate for short durations with each treatment/stabilization batch; however, on cold days this could result in a significant drop in ambient room temperature.

Identifier: SOW-698 Revision: 0 Page: 16 of 61	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
--	---	---

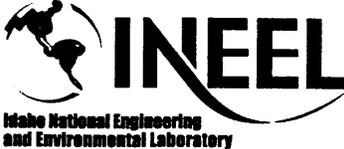
- Restrooms, for males and females
 - Potable drinking water
 - Sanitary sewer
 - Electrical service
 - Phone service
 - PPE change room
 - Locker rooms
 - Radcon room
 - Decon bay
 - Treatment area.
- Fire hydrants near Crest Pad Buildings and at southeast corner of Cell 1
 - ^{Rare} Potable water to Cell 1 and perimeters of the evaporation ponds
 - Perimeter fence including gates
 - Access roads and ramps to ICDF, including evaporation ponds and landfill Cell 1.

2. APPLICABLE CODES, PROCEDURES, AND REFERENCES

The following codes, standards, and documents will be used as the basis for the remediation of the WAGs, placement of waste in the landfill, management of leachate and liquid waste, facility surveillance and facility/equipment maintenance.

Note that in all cases the applicable or relevant and appropriate requirements (ARARs), including to-be-considered items (TBCs) identified in the *Record of Decision for the Idaho Nuclear Technology and Engineering Center, Operable Unit 3-13*, DOE/ID-10660, Table 12-3 (whether listed herein or not) shall be applied to the work of this subcontract. A crosswalk of the ARARs for the ICDF is provided in Table 4-2 of the *ICDF Complex Operations and Maintenance Plan* (DOE/ID-11000). The specific ARARs associated with each of the remediation sites are provided in SOW-691.

All CERCLA remedial-action documents (unless superseded by a subsequent submittal) shall be adhered to.

Identifier: SOW-698 Revision: 0 Page: 17 of 61	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
--	---	---

2.1 DOE-Related Codes, Standards, and Documents

The following DOE-related codes, standards, and documents will be used as the basis for the remediation of the environmental restoration sites:

- DOE G 450.4-1B, "Integrated Safety Management System Guide"
- DOE Order 420.1A, "Facility Safety"
- DOE O 210. 1, (5/1/96) "Performance Indicators and Analysis of Operations Information"
- DOE Order 231.1, "Environment, Safety, and Health Reporting"
- DOE Order 232.1A, "Occurrence Reporting and Processing of Operations Information"
- DOE Order 414.1A, "Quality Assurance"
- DOE Order 435.1, Chapter IV, "Radioactive Waste Management"
- DOE Order 440.1A, "Worker Protection Management for DOE Federal and Contractor Employees"
- DOE Order 460.2, "Departmental Materials Transportation and Packaging Management"
- DOE Order 470.1, "Safeguards and Security Program"
- DOE Order 5400.5, "Radiation Protection of the Public and the Environment"
- DOE Order 5480.4, "Environmental Protection, Safety, and Health Protection Standards"
- DOE Order 5480.19, "Conduct of Operations"
- DOE STD-1090, 2001, "Hoisting and Rigging"
- DOE-ID 1992, *Federal Facility Agreement and Consent Order*.

Operation-specific ARARs that provide the specific regulations applicable to the ICDF can be found in Table 4-2 of the *O&M Plan*.

Identifier: SOW-698 Revision: 0 Page: 18 of 61	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
--	---	---

Regulations specific to construction of Cell 2 and the remediation activities in the WAGs are covered in the respective technical specifications and SOW. Construction-specific ARARs can be found in TFR-71, "WAG 3 INEEL CERCLA Disposal Facility and Evaporation Pond," Table 3.1.4-2, "Other design standards."

2.2 Codified Standards and Regulations

Operation-specific ARARs that provide the specific regulations applicable to the ICDF can be found in Table 4-2 of the *O&M Plan*.

Regulations specific to construction of Cell 2 and the remediation activities in the WAGs are covered in the respective technical specifications and SOW. Construction-specific ARARs can be found in TFR-71, "WAG 3 INEEL CERCLA Disposal Facility and Evaporation Pond," Table 3.1.4-2, "Other design standards."

- 10 CFR 830, Subpart A, "Quality Assurance Requirements"
- 10 CFR 835, "Occupational Radiation Protection at DOE Facilities"
- 29 CFR 1926, "Construction"
- 29 CFR 1910, "General Industry Standards"
- 40 CFR 264.19, "Construction Quality Assurance Program."

2.3 Engineering Standards

ASME NQA-1-1997, "Quality Assurance Requirements for Nuclear Facility Applications"

ASME N510-1989, "Testing of Nuclear Air Treatment Systems."

2.4 Environmental and Safety

Action-specific ARARs that provide the specific regulations applicable to the ICDF can be found in Table 4-2 of the *O&M Plan*.

Regulations specific to construction of Cell 2 and the remediation activities in the WAGs are covered in the respective technical specifications and SOW. Construction-specific ARARs can be found in TFR-71, "WAG 3 INEEL CERCLA Disposal Facility and Evaporation Pond," Table 3.1.4-2, "Other design standards."

Identifier: SOW-698 Revision: 0 Page: 19 of 61	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
--	---	---

2.5 INEEL Site-Specific Documents

This section lists the INEEL documents to be used as the basis for the execution of this contract. Specific requirements associated with construction of Cell 2 and the remediation activities are covered in the respective technical specifications and SOW. In the event of conflict between the ARARs and these documents, the CONTRACTOR shall be notified for resolution.

- DOE/ID-10881, *ICDF Complex Waste Acceptance Criteria*
- DOE/ID-10865, *Waste Acceptance Criteria for ICDF Landfill*
- DOE/ID-10866, *Waste Acceptance Criteria for ICDF Evaporation Pond*
- DOE/ID-10886, *ICDF Complex Operations Waste Management Plan*
- DOE/ID-10903, *Treatability Study Test Plan for Soil Stabilization*
- DOE/ID-10924, *Sampling and Analysis Plan for SSSTF Waste Stabilization Operations*
- DOE/ID-10984, *INEEL CERCLA Disposal Facility Complex Remedial Action Work Plan*
- DOE/ID-10985, *ICDF Complex Waste Verification Sampling and Analysis Plan*
- DOE/ID-11000, *ICDF Complex Operations and Maintenance Plan*
- DOE/ID-11005, *ICDF Complex Operational Monitoring, Sampling and Analysis Plan*
- EDF-2236, "NESHAP Compliance Demonstration for the ICDF Complex"
- EDF-2237, "IDAPA Air Compliance Demonstration for the ICDF Complex"
- EDF-ER-286, "Waste Placement Plan"
- PLN-260, "INEEL Radiation Protection Program"
- PLN-914, "Waste Tracking Plan for the INEEL CERCLA Disposal Facility"

Identifier: SOW-698 Revision: 0 Page: 20 of 61	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
--	---	---

- SUBCONTRACTOR Requirements Manual (SRM).

2.6 Documents Provided for Information Only

- DOE/ID-10812, *Geotechnical Report for the Conceptual Design of the INEEL CERCLA Disposal Facility at Waste Area Group 3, Operable Unit 3-13*
- DOE/ID-10851, *INEEL CERCLA Disposal Facility Quality Assurance Plan*
- DOE/ID-10958, *INEEL CERCLA Disposal Facility Construction Waste Management Plan*
- EC-00018R1, "Environmental Checklist for the ICDF Complex"
- EDF-1730, "Staging, Storage, Sizing, and Treatment Facility (SSSTF) Debris Treatment Process Selection and Design."
- INEEL/EXT-01-0318, "Hazard and Safety Plan"
- PLN-962, "Storm Water Pollution Prevention Plan for the ICDF Landfill and Evaporation Pond"
- TFR-2520, "Technical and Functional Requirements for the ICDF Complex Control System"
- TFR-2540, "Modification to Integrated Waste Tracking System (IWTS) to Support ICDF Complex"
- Technical Specification for Cell 2 Construction
- Vector Report – *Final Construction Report for Test Pad #3 and #4 Construction at the INEEL CERCLA Disposal Facility.*

3. TECHNICAL AND FUNCTIONAL REQUIREMENTS

The following sections outline the technical and functional requirements for the operation of the ICDF complex. Requirements associated with the remediation of contaminated soils and transportation of that waste to the ICDF are covered in SOW-691. Requirements associated with the construction of Cell 2 of the landfill are covered in the technical specifications and the documentation associated with the Remedial Design/Construction Work Plan for the ICDF. Requirements associated with the interface with these other two

Identifier: SOW-698 Revision: 0 Page: 21 of 61	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
--	---	---

activities will be addressed below when not covered in the respective requirements documents.

The SUBCONTRACTOR shall comply with ARARs and to-be-considered (TBC) documents. Additionally, should any post-ROD changes in regulatory requirements be proposed (as defined by an explanation of significant difference [ESD]) or ROD amendment, the SUBCONTRACTOR shall be required to evaluate the implications of such changes to the design, construction, and operation as applicable and provide such information to the CONTRACTOR.

3.1 Process Flow

Process flow for the remediation of the contaminated soils includes excavation of the soils within the area of contamination, transportation of the soils from the remedial action site to the disposal facility, and disposal of the soils at the specified disposal facility. In some cases, stabilization or treatment of the waste may also be required. The process flow is presented as four distinct functions because separate equipment may be used for each function with the exception of the containers into which the contaminated soils will be placed for transport. A fifth process flow involves the placement of backfill, compaction of remaining soils, and revegetation of the affected sites. The activities that make up the fifth-process flow are adequately discussed elsewhere and presented in the project specifications in Appendixes B, D, and F SOW-691. The process flow presented in Sections 3.1.1 through 3.1.4 is the CONTRACTOR's perception of activities (see Figure 3). Should the SUBCONTRACTOR develop an improved or different flow that satisfies the requirements of the contract, documentation of the respective work plan shall be submitted for CONTRACTOR approval before initiation of work.

Specific requirements associated with activities in this process-flow can be found in DOE/ID-10984, DOE/ID-11000, DOE/ID-11005, DOE/ID-10865, DOE/ID-10866, DOE/ID-10881, PLN-914, and SOW-691 for the remediation dig site activities.

3.1.1 Excavation of Soils

See SOW 691

3.1.2 Transportation of Contaminated Soils to the ICDF

See SOW 691



Statement of Work for the INEEL
CERCLA Disposal Facility Complex
Implementation Project

Identifier: SOW-698
Revision: 0
Page: 22 of 61

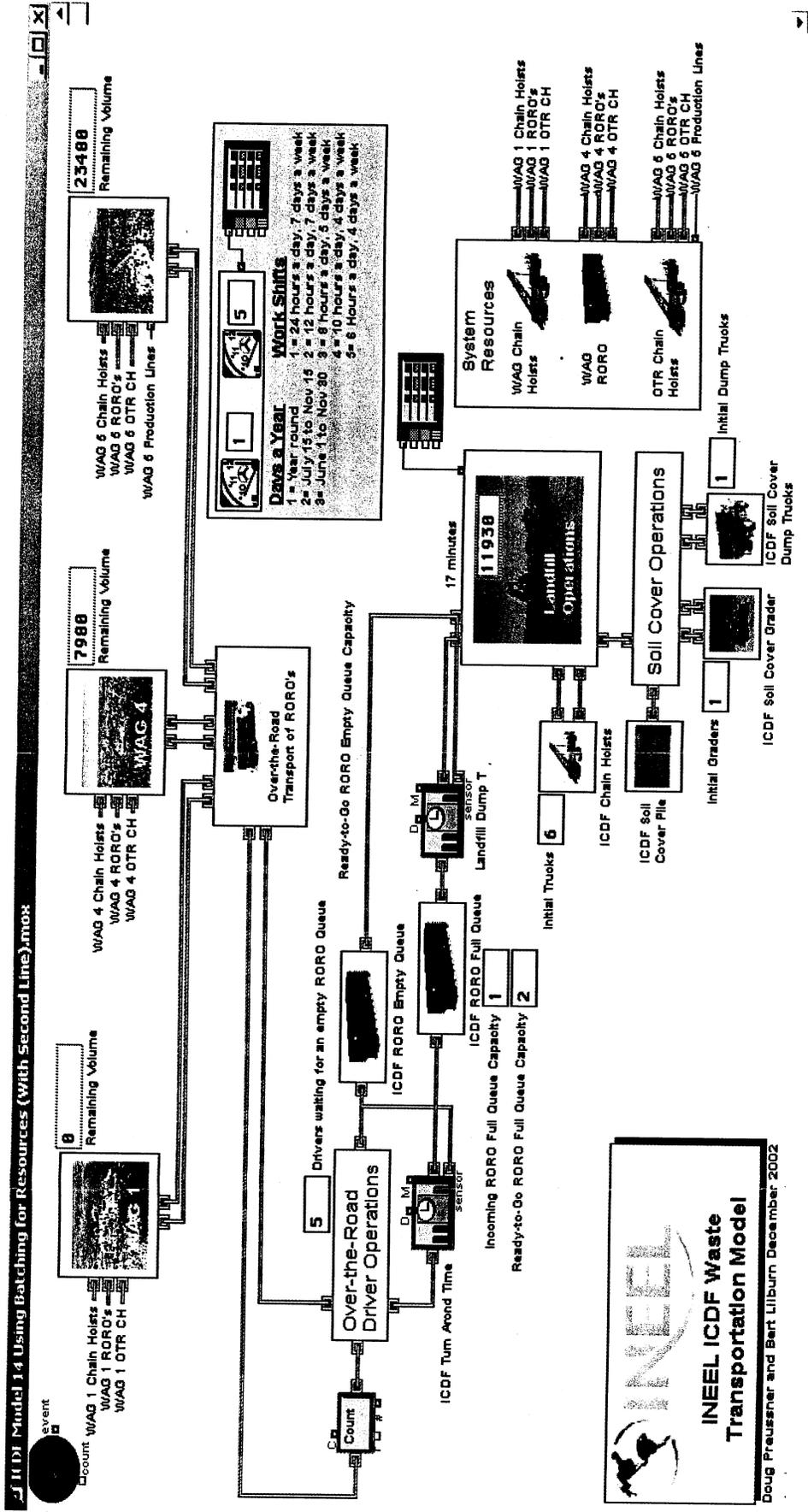


Figure 3. Excavation, transportation, and disposal model.

Identifier: SOW-698 Revision: 0 Page: 23 of 61	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
--	---	---

3.1.3 Disposal of Soils at the ICDF

Once the SUBCONTRACTOR off-loads the roll-off container at the full container staging area at the ICDF, the SUBCONTRACTOR and the ICDF personnel will inspect the container to ensure its integrity and to review the associated paperwork. Using a dedicated cable-hoist truck, the SUBCONTRACTOR and the ICDF personnel will pick up the full container from the staging area and transport it to the landfill. The tarp will be rolled back or removed from the container, the rear gate will be opened, and the load (including the liner) will be dumped into the landfill at a specified location. The rear gate then will be closed, the tarp affixed, and the container surveyed for contamination. If the external contamination is detected, the container will be decontaminated. Once released from the survey and any related decontamination efforts, the container will be transported to the empty-container staging area at the ICDF for a final inspection (where it will remain until the remediation site transport picks it up for the return trip to the remediation site.)

3.1.4 Treatment and Stabilization of Waste at the ICDF

Some waste, based on the characterization profile, will require treatment or stabilization. The SUBCONTRACTOR and the ICDF personnel will perform this in the Decontamination Building in the ICDF complex. The design and construction of the specific decontamination and stabilization equipment has not been completed at this time. An overview of the operations, associated with this equipment, is provided in the ICDF RAWP and the *ICDF Operation and Maintenance Manual*. Treated waste will be sampled to ensure compliance with the WAC and deposited in the ICDF landfill, or stored at the ICDF, and transported off-Site for disposal via the CONTRACTOR.

The SUBCONTRACTOR will develop and validate the requisite treatment recipe. Each site (i.e., the dig site where the waste is being generated that requires treatment) will provide a sample to the SUBCONTRACTOR. A Site is the WAG generating the waste. The original intention is that there be one robust recipe that would treat a range of wastes. However, if the treatability study shows that the waste will not pass based on the general recipe, then another recipe will have to be developed. There will be as many recipes as necessary to treat the wastes sent for treatment. There are currently five different waste streams identified that will require treatment. TCLP will be used to determine treatment success; this test takes a minimum of 72 hours to conduct.

Identifier: SOW-698 Revision: 0 Page: 24 of 61	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
--	---	---

3.2 Specific Requirements

The technical and functional requirements for the remedial activities and transportation of waste are provided SOW-691. Specific requirements for the construction of Cell 2 of the landfill are provided in the technical specifications and the documentation associated with the *Remedial Design/Construction Work Plan for the ICDF*, DOE/ID-10848.

In general, the requirements for all the activities below are found in the Remedial Action Work Plan, DOE/ID-10984. These documents will also refer to various other references with specific requirements. The following sections provide a high level roadmap to the various documents that provide the specific requirements in each section. The provided list is not exhaustive because those listed will generally provide reference to the other applicable documentation containing the requirements.

3.2.1 Roll-Off Containers

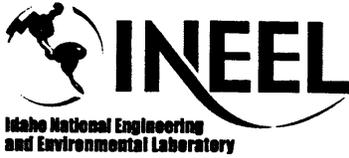
The roll-off containers shall be capable of holding a minimum of 9.9 m³ (13 yd³) with a maximum volume of 15.3 m³ (20 yd³). The containers shall have fully gasketed, side hinge rear doors to ensure that contaminated soils are not lost during the transport, and shall be leak-tight to ensure liquid that leaches from the soil does not drain to the ground when sitting on the ground pending placement into the landfill. The containers shall be outfitted with a tight-fitting tarp to enable the container to meet the DOE requirements of a strong, tight container for transport (see DOE/ID-10984 and DOE/ID-11000).

3.2.2 Liners

Each container will have a new liner emplaced prior to loading contaminated soils at the remedial action site. The liners shall be 6-mil thick black polyethylene and comply with the specification requirements for 100 lot rolls as delineated in ASTM D2103-97. The liners shall have formed corners, an auto ignition temperature of no less than 650°F, and flash point no less than 600°F. The liners shall be thermally sealed to fully contain the waste prior to exit from the remediation site (see DOE/ID-10984 and DOE/ID-11000).

3.2.3 Cable Hoist Trucks

The SUBCONTRACTOR shall provide cable hoist trucks capable of hauling the selected roll-off containers. Cable hoist trucks will be required for transport of containers within the remediation site, over the

Identifier: SOW-698 Revision: 0 Page: 25 of 61	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
--	---	---

road to the ICDF and within the ICDF. It is recommended that trucks used in the ICDF landfill be dedicated to the landfill to minimize contamination spread. Trucks shall have a rated capacity to carry at least 30 tons (soil and roll-off container) over the road; the rated capacity of the truck shall never be exceeded while in use at the INEEL.

3.2.4 Excavation of Contaminated Soil and Transport of Waste

Requirements are found in SOW-691.

3.2.5 Transportation of Waste

All waste shall be transported in accordance with DOE Order 460.2 requirements. The "On-site Waste Tracking Form" (OWTF) is used in lieu of a manifest or bill of lading. If the shipment is below DOT limits, then the OWTF does not require a signature from the CONTRACTOR'S Packaging and Transportation (P&T) organization before shipment. If the shipment is greater than DOT limits, then the CONTRACTOR P&T signature is required before shipment. All shipment OWTFs will be reviewed by the CONTRACTOR P&T, onsite, before shipment. The SUBCONTRACTOR shall notify P&T at least 1 week (preferably 2 weeks) before shipment of any DOT regulated material.

Note that site roads between the remediation dig sites and the ICDF complex are periodically closed because of other shipments. This can occur 15 to 20 times per year from 4 to 8 hours during the working day.

3.2.6 Treatment and Stabilization of Waste

A subcontract is on-going under management of the CONTRACTOR to complete the design and construction of a decontamination building, which shall contain systems for treatment of debris and treatment/stabilization of soil waste. The 90% design package for the soil-treatment system will be provided to support the Request for Proposal (RFP) package. (A description of the process can be found in EDF-ER-296.) The final design of the debris treatment system has not been performed. (This process is described briefly in EDF-ER-1730.) SUBCONTRACTOR input will be solicited as part of the design process for this system and its installation in the decontamination building.

DOE/ID-10984 and appendices, and DOE/ID-10881 contain requirements associated with the treatment systems and the decon facility in the ICDF complex. It is anticipated this facility and the



contained systems will be available for turnover for operation late in the spring of 2004.

3.2.7 Landfill – Waste Placement

A D-9 bulldozer for use in the landfill shall be provided as GFE. All other equipment required to place waste into and maintain the landfill shall be provided by the SUBCONTRACTOR. Maintenance and associated reliability management of all equipment used by the SUBCONTRACTOR, including GFE, shall be the responsibility of the SUBCONTRACTOR.

DOE/ID-10984, DOE/ID-11000, and EDF-286 contain specific requirements for placement of waste into the landfill.

3.2.7.1 Receipt of Waste

The SUBCONTRACTOR shall adopt the minimum physical waste acceptance criteria and the analytical (radiological and chemical) waste acceptance criteria presented in the Waste Acceptance Criteria (WAC) document, DOE/ID-10865, DOE/ID-10881, and DOE/ID-10866. All waste shall be screened to ensure compliance with these criteria and ensure that maximum limits for the respective storage, treatment, or disposal area are not exceeded at any time.

Waste shall be accepted from various sources: waste excavated by the SUBCONTRACTOR, containerized (drum or boxed) soil and debris provided by the CONTRACTOR, liquid waste provided by the contractor, and miscellaneous waste (PCB, debris, etc.) provided by the CONTRACTOR.

Specific requirements associated with receipt of waste can be found in DOE/ID-10984 and appendices.

3.2.7.2 Tracking and Control of Waste

A running total of all constituents listed in the WACs are required to be maintained on an electronic database. This shall be monitored against the limits in the WAC and controls maintained to ensure that limits are not exceeded. General requirements for tracking and control of the waste can be found in DOE/ID-10865, DOE/ID-10866, DOE/ID-10881, DOE/ID-10985, and PLN-914.

Identifier: SOW-698
Revision: 0
Page: 27 of 61

Statement of Work for the INEEL
CERCLA Disposal Facility Complex
Implementation Project



The waste tracking form in PLN-914 shall be used for tracking all waste from the remediation dig sites through the ICDF to storage, staging, or disposal.

3.2.7.3 Staging and Storage of Waste

Requirements for staging and storage within the ICDF and the remediation dig sites are provided in the respective RAWP documents and SOW-691. A storage shed designed for storage of PCB waste is not on-Site at this time; it is available and will be placed adjacent to the decontamination pad of the decontamination building in conjunction with completion and turnover of the building early in the calendar year (CY) 2004.

Specific requirements for placement of and controlling waste in the ICDF can be found in DOE/ID-10984, DOE/ID-11000, EDF-286, and PLN-914.

3.2.7.4 Placement of Waste into Landfill

DOE/ID-11000, DOE/ID-10984, and EDF-286 contain specific requirements for the placement of waste and maintenance of cover-fill for the waste after placement. Also addressed are specific requirements for application of fugitive dust suppression material when the landfill is not in use.

Prior to operation of the landfill, the SUBCONTRACTOR must supply a Landfill Loading Plan. This plan will address issues raised in EDF-286 based on revised volumes of waste placement in contract years 1 and 2 and the construction of Cell 2.

3.2.8 Management of Leachate and Liquid Waste

Leachate is pumped from the landfill leachate collection system into the ponds, and waste from the decon facility also is transferred into the evaporation ponds. Additionally, waste is shipped in to the ICDF by WAG-3 generators for disposal of well purge and demonstration water. This waste is accepted and unloaded by the SUBCONTRACTOR.

DOE/ID-10984, DOE/ID-11000, DOE/ID-10881, DOE/ID-11005, and DOE/ID-10866 provide specific criteria for the management and operation of the leachate and the evaporation ponds.

Identifier: SOW-698 Revision: 0 Page: 28 of 61	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
--	---	---

3.2.9 Complex and Equipment Maintenance

All equipment and instrumentation within the fence of the ICDF and all operating equipment used by the SUBCONTRACTOR for excavation/remediation of the dig sites and transport of waste to the ICDF complex are to be maintained in a safe operable condition and in accordance with the equipment manufacturers recommendations by the SUBCONTRACTOR. At a minimum, the maintenance and surveillance/inspections described in the ICDF RAWP and *O&M Plan* and SOW-691 shall be performed. Additionally, the equipment and instrumentation shall be maintained and adequate spares kept readily available, to prevent exceeding any of the control limits of these guidance documents and to achieve production goals and guidelines.

3.2.10 Expansion of Landfill into Cell 2

Refer to the Technical Specifications, drawings, and CQA plan for Cell 2 and DOE/ID-10848.

3.2.11 Sampling

3.2.11.1 CONTRACTOR Sampling Responsibilities

3.2.11.1.1 **CONTRACTOR Waste Area Groups (WAGs)** are responsible for the characterization sampling and previously existing data for each site. They will provide that data to the SUBCONTRACTOR. The WAGs will provide the waste profile data. If the data on the waste profile are incomplete to allow for approval of the waste profile, then further characterization sampling will be required.

3.2.11.1.2 **CONTRACTOR WAGs** are responsible for both the in-process and post-remedial action confirmation sampling for each site. Confirmation sampling is the responsibility of the WAGs. It is anticipated that the in-process sampling will be real-time or near real-time analyses using either in situ instrumentation or on-INEEL screening instrumentation with same day results. The post-remedial action sampling will require analyses by an off-Site laboratory

Identifier: SOW-698
Revision: 0
Page: 29 of 61

Statement of Work for the INEEL
CERCLA Disposal Facility Complex
Implementation Project



with longer turnarounds; however, it is anticipated that the in-process sampling will have proven that the remedial action objectives have been met with the post-remedial action sampling being a formality to provide legally defensible data. Rather than wait for the post-remedial action sampling results, the SUBCONTRACTOR shall proceed to the next remediation site to continue work.

3.2.11.1.3 **CONTRACTOR ICDF personnel** are responsible for oversight and performance of the verification sampling. If the verification sampling is not performed during characterization, or if there is insufficient existing data to use for the final profile, then CONTRACTOR ICDF personnel will direct the collection of verification samples.

3.2.11.1.4 **CONTRACTOR Sample Analysis Management (SAM)** organization will supply a list of approved laboratories. The SUBCONTRACTOR shall use these labs. For samples that are to be collected by the SUBCONTRACTOR, the SAM will be responsible for the data validation. The laboratory will send a data package directly to the SAM, as well as the SUBCONTRACTOR. The SUBCONTRACTOR shall use the raw data to determine if actions need to be taken and then indicate the need for expedition of the QA.

The SUBCONTRACTOR shall review and approve the initial waste profile and determine if the existing data fully characterizes the waste for acceptance into the ICDF. The SUBCONTRACTOR shall also evaluate any provided verification sample data and/or determine the number of verification samples required per DOE/ID-10985. These verification samples may be collected by BBWI at the same time as the characterization data, if previously

Identifier: SOW-698 Revision: 0 Page: 30 of 61	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
--	---	---

existing data are used to develop the initial waste profile.

3.2.11.2 Subcontractor Sampling Responsibilities

3.2.11.2.1 Treatability Study Sampling

The WAGs will provide toxicity characteristic leaching procedure (TCLP) analysis results to the SUBCONTRACTOR if the results have already been obtained. The WAGs will provide an approximate 2-kg sample to the testing laboratory. This sample needs to be biased toward the high contaminants of concern and in the most difficult waste form to treat (e.g., sludge). For treatability study sampling, a simple grab sample is collected from the resulting treated waste. The samples will be collected at the dig site and transported to the laboratory (unidentified at this time) for water content, stabilization, paint filter test, and TCLP testing. If the waste is staged at the ICDF pending treatability studies and treatment, this sampling will be performed by the SUBCONTRACTOR. The TCLP analyses will be performed on a portion of the untreated samples. The waste samples will be stabilized with the Portland cement-based CFS systems and the TCLP performed on the stabilized sample batch. The sulfide required will be based on double the TCLP and augmented by the sulfide demand as required. The resulting recipe will be used for treatment of the respective waste stream. Following treatment of the waste or treatability study sample, a sample is obtained for analysis and tested for TCLP.

Laboratory subsampling quality is required to ensure minimization of bias. For the analytical process to produce reliable data for decision-making purposes, the errors associated with laboratory subsampling must be understood and addressed (Ramsey and Suggs 2001).

Identifier: SOW-698 Revision: 0 Page: 31 of 61	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
--	---	---

3.2.11.2.2 Treated Waste Sampling

For full-scale treatment sampling, a grab subsample is collected from each treatment batch that is to be combined in the larger containers. Once all subsamples have been collected from the combined batches, the subsamples will be composited through thorough mixing in a stainless steel bowl using only stainless steel mixing tools.

The composite stabilized waste sample material or grab sample from treatability studies is placed into bottles that are labeled with the corresponding sample identification numbers. Sample material will meet the size requirements for TCLP analysis per SW-846 Method 1311 (capable of passing through a 9.5-mm standard sieve).

Depending on the radiological activity, material must be shipped to the appropriate laboratory.

Stabilized waste samples will be shipped as soon as possible to the analytical laboratory accompanied by a chain of custody (COC) and appropriate shipping paperwork. The requester will coordinate the procurement of required packaging, if a cooler will not suffice for the levels of radioactivity anticipated (if activity exceeds that for limited quantity shipments). The laboratory shall be contacted for notification of delivery. Upon receipt of the sample, the laboratory will check for damage to the sample container and check for discrepancies between the COC and the sample label information. The laboratory sample receiving person will then sign the COC indicating receipt and transfer of custody of the samples.

The collection of representative composite samples from the containers shall proceed in the following progression for the treatment



campaign associated with each different source of waste:

NOTE: *In the full-scale treatment process by which each batch of waste material is stabilized, the treated waste is thoroughly mixed. Therefore, pulling the sample from the surface material is anticipated to be representative of the batch of treated waste overall.*

1. For containers 1 through 10, five composite samples shall be collected from containers 1-2, 3-4, 5-6, 7-8, and 9-10.
2. For containers 11 through 42, a composite sample shall be collected from two randomly chosen containers out of every four containers (either the first two or the last two containers).
3. For containers 3 through completion of the treatment campaign, a composite sample shall be collected from two consecutive containers randomly chosen from every 10 containers.
4. Finally, the two containers or 20 yd³, whichever is less, from each treatment campaign shall also be composited into one sample.

3.2.11.2.3 Operations and Maintenance Sampling

All sampling performed within the ICDF complex is covered by this subcontract. This sampling is detailed in DOE-ID 11005 (Appendix M) of the RAWP). Characterization of individual roll-off containers will not be required. Completion of the waste profile will be dependent on the entire waste stream, not individual containers. An overview of the required operations and maintenance sampling

Identifier: SOW-698 Revision: 0 Page: 33 of 61	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
--	---	---

is provided in Table 2, "Sample locations, frequency, and analysis."

The SUBCONTRACTOR is responsible for laboratory procurement, using a Sample Analysis Management/Sample Management Office-approved laboratory. Procurement of containers also is the SUBCONTRACTOR's responsibility. The QA/QC requirements for the samples must be established in the Field Sampling Plan, Sampling and Analysis Plan, or operating procedure. DOE-ID-10587 establishes minimum QA/QC requirements for sampling.

Table 2. Sample locations, frequency, and analysis.

Sampling Location	Sampling Media and Frequency	Analytes ^a
LCRS sump	Leachate Monthly	¹²⁹ I Field parameters (pH, specific conductance, and temperature)
LCRS sump	Leachate Twice each year ^b	Appendix IX volatile and semivolatile organic compounds Appendix IX metals plus Ca, K, Mg, Na (filtered) Appendix IX OC pesticides and PCBs ^c Appendix IX OC herbicides ^c Appendix IX OP pesticides ^c Appendix IX PCDDs/PCDFs ^c Radionuclides (³ H, ¹²⁹ I, ⁹⁹ Tc, ⁹⁰ Sr, ^{239/240} Pu, ²³⁸ Pu, ²³⁴ U, ²³⁵ U, ²³⁸ U, gamma spectroscopy) Major anions (nitrate, sulfate, bicarbonate, chloride) Field parameters (pH, specific conductance, and temperature)
PLDRS and SLDRS	Leak detection liquid Annual	Field parameters (pH, specific conductance, and temperature)

Table 2. (continued).

Sampling Location	Sampling Media and Frequency	Analytes ^a
Evaporation pond cells	Water and sediments Annual	Metals includes As, Hg, Se, V, and Zn (unfiltered for liquid samples, Hg is not analyzed in sediments) Radiological for ¹²⁹ I, ¹³⁷ Cs, ⁹⁰ Sr, ²³⁸ Pu, ⁶⁰ Co, ²³⁴ U (water samples only) Gamma spectrometry (water samples only) Appendix IX semivolatile organic compounds (water samples only)
Evaporation pond cells	Water and sediments Every 5 years	Same as for the LCRS sump (except unfiltered metals samples will also be collected; Ca, K, Mg, Na, nitrate, sulfate, bicarbonate, and chloride for water samples only)
Pump station	Water and sediments Annual	Total suspended solids Oil and grease

a. Appendix IX refers to Appendix IX of 40 CFR 264.

b. Sampling frequency increased to four times each year when action limit from Table 2 is exceeded for any constituent.

c. Analyses will be performed for only those analytes known to have been disposed to the landfill or evaporation pond.

PCDD = polychlorinated dibenzo-p-dioxin

PCDF = polychlorinated dibenzofuran

OC = organochlorine

OP = organophosphorus

3.2.12 Work Applicable to All Areas of Scope

3.2.12.1 Operating Procedures

Operating procedures shall be developed and maintained for all operations, surveillance, and maintenance activities. A partial set of draft operating and maintenance procedures will be provided at time of contract award for the operation of the ICDF landfill and evaporation pond and access control to the ICDF facility. Prior to operation all procedures must be completed and submitted for approval to the CONTRACTOR. These procedures will require integration of the requisite surveillance activities, provided comments, and applicable references and controls associated with the "Subcontractor Quality Program Plan," and HASP. The SUBCONTRACTOR shall have issued the requisite operating procedures and placed them under configuration control before acceptance of waste into the ICDF Complex. The procedures shall ensure implementation of the operating

Identifier: SOW-698 Revision: 0 Page: 35 of 61	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
--	---	---

requirements of DOE-D10984, DOE-ID-1000, DOE-ID-10985, and the three WAC documents.

The CONTRACTOR'S radiological control organization shall have approval authority over procedures, agreements, and documents involving activities governed by the Radiological Protection Program.

Procedures for operation, maintenance, and surveillance of the remediation sites and for transportation of waste will also need to be developed and placed under configuration control before initiation of the respective activities (see SOW-691).

Procedures shall be prepared in accordance with the SRM and DOE Order 5480.19

3.2.12.2 Training

- The SUBCONTRACTOR shall maintain records of all required training and qualifications.
- Records shall be maintained in accordance with the requirements of the SRM and the SUBCONTRACTOR'S QA Plan. All records shall be available for periodic oversight review by the CONTRACTOR, DOE, State Department of Environmental Quality, and the EPA.
- A training and qualification plan shall be prepared and submitted for approval.
- A training matrix of all personnel performing work is required. The training matrix shall be maintained current as required by 10 CFR 264.16, 29 CFR 1910.120 and 29 CFR 1926.65.
- Training requirements in CERCLA documentation can be found in DOE/ID-10984, DOE/ID-11000, and INEEL/EXT-01-01318, Table 6-1.
- The CONTRACTOR will provide all required radiological control training.

Identifier: SOW-698
Revision: 0
Page: 36 of 61

Statement of Work for the INEEL
CERCLA Disposal Facility Complex
Implementation Project



- All personnel working at the INEEL site are required to have General Employee Radiological Training (GERT) or Rad worker training.
- Individuals entering any radiological buffer area (ICDF complex and the remediation dig sites) has to be at least Rad-Worker-I qualified.
- Individuals performing work within a Radiological Control Boundary must be Rad-Worker-II qualified.
- Personnel must have a premedical review, training and fit test for any work requiring respirator use. The CONTRACTOR will provide the needed training and qualifications. A minimum of two weeks notification is required to the CONTRACTOR to provide the training.

The minimum training requirements for the proposed work shall include the following:

- 40 hours of Hazardous Waste Operations (HAZWOPER) (available at no cost to the SUBCONTRACTOR) and 3-day site specific OJT by a qualified supervisor
- One qualified 8-hour HAZWOPER supervisor
- Site Access Training (Orange Card) (available at no cost to the SUBCONTRACTOR)
- Training identified in the HASP (Table 6-1 of the Example HASP)
- Training identified in the SRM
- GERT (available at no cost to the SUBCONTRACTOR)
- Radiological Worker Training—if performing work in a radiological area, contamination area or soil contamination area (available at no cost to the SUBCONTRACTOR)

Identifier: SOW-698 Revision: 0 Page: 37 of 61	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
--	---	---

- Respirator training—if respirator use is required as a result of by the working conditions (available at no cost to the SUBCONTRACTOR)

Facility/site-specific access—It is the responsibility of the SUBCONTRACTOR to develop and administer the required site access specific training program for the access to sites under their control areas (ICDF, remediation dig sites, Cell 2 construction area). Personnel shall be trained to the minimum access requirements for INEEL site areas such as Test Area North and Idaho Nuclear Technology Engineering Center.

3.2.12.3 Inspections/Surveillance

The RAWP and Operating and Maintenance inspection plans for the respective units are required daily, weekly, monthly, and annually. Procedures and training plans prepared for operation of the respective units shall address all required surveillance activities. Any additional surveillance activities identified in the “Radiological Control Manual” and the SUBCONTRACTOR’s QA program shall also be included in the operation procedures. Records shall be maintained in accordance with the requirements of the SRM and the SUBCONTRACTOR’s QA plan. All records shall be kept available for periodic oversight review by the CONTRACTOR, DOE-ID, State Department of Environmental Quality, and the EPA.

Specific CERCLA inspection requirements can be found in DOE/ID-10984, DOE/ID-11000, EDF-2236, and EDF-2237.

3.2.12.4 Reporting

Specific CERCLA reporting requirements can be found in DOE/ID-10984, DOE/ID-10857, EDF-2236, and EDF-2237. Table 3-8 of the O&M Plan provides a list of CERCLA reporting requirements.

Safety reporting shall be provided as required by the general provisions of the subcontract and the SRM.

Identifier: SOW-698
Revision: 0
Page: 38 of 61

Statement of Work for the INEEL
CERCLA Disposal Facility Complex
Implementation Project



Occurrence-report requirements are provided in DOE Order 232.1. Reporting of all occurrences will be made to the CONTRACTOR in accordance with the direction in the O&M Plan (DOE/ID-11000) and DOE Order 232.1. All incidents shall be reported within an hour of identification to accommodate performance of a fact-finding critique, classification and formal reporting to DOE. The CONTRACTOR shall be responsible for classification of the occurrence and reporting to DOE and the Agencies. The SUBCONTRACTOR shall provide all technical and logistical details associated with the occurrence as requested by the CONTRACTOR in support of preparing formal reports or may be requested to prepare all the report input for the CONTRACTOR. Additionally, the SUBCONTRACTOR shall perform root cause analysis and develop corrective action plans to correct the specific issue and provide preventive measures by addressing the associated root cause(s). This analysis and the corrective-action plans are required inputs for the CONTRACTOR's formal report submittals to DOE; the CONTRACTOR shall be invited to participate in all discussions associated with these activities.

Performance Metrics:

- Quantities processed daily—excavated, transported to ICDF complex, placed in the landfill, treated, leachate pumped, maintained pond levels, liquid waste received
- Inventory of radiological and chemical constituents in landfill, Decon Building, and, staging and storage areas
- Compaction Test Records
- Training and qualification plans and records
- Compliance inspection records
- Safety statistics as identified in general provisions and SRM

Identifier: SOW-698 Revision: 0 Page: 39 of 61	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
--	---	---

- Area controlled for radiological contamination or radiation control
- Radiological dose, exposure and controls to meet ALARA standards.

3.2.12.5 Software Configuration Management

All CONTRACTOR installed software, particularly that associated with the monitoring and control of waste, and limits established in the RAWP (PLCs, human machine interface in the administrative office trailer, and waste tracking) shall be maintained and controlled by the CONTRACTOR.

All SUBCONTRACTOR developed software that is used for waste tracking or waste constituent records shall have two copies of the source code maintained in separate and independent storage locations with controlled access in accordance with the records management criteria of IEEE Standard 730. A software configuration management plan that satisfies the criteria of IEEE Standard 828 shall be developed and submitted for approval prior to the development and utilization of the software.

3.2.12.6 Emergency Planning/Response

Emergency planning is a required section of the Health and Safety Plan (HASP). An example HASP has been provided for the SUBCONTRACTOR to use. This HASP covers all the aspects of Emergency Planning and Response, except it is oriented around an interface with the INTEC facility. The ICDF will be associated with the Central Facilities Area (CFA) emergency-response process while the individual remediation dig sites will have emergency response requirements associated with the specific facility the site falls within. HASP documents have been prepared for each of these sites and are available for use by the SUBCONTRACTOR, upon request. OSHA and DOE drivers include 29 CFR 1910.120; 29 CFR 1926.65; DOE Order 151.1A, Comprehensive Emergency Management System; and DOE 232.1, Occurrence Reporting and Processing of Operations Information.



The SRM covers emergency response interface requirements for coordination with INEEL Emergency Management Services.

3.2.12.7 Security and Facility Access

ICDF facility access shall be controlled as required by the RAWP and 40 CFR 264.15. Access to construction work areas (remedial action dig sites and the Cell 2 construction) shall be controlled in accordance with the SRM and Special Conditions. A site access badge shall be requested for all personnel, a security clearance is not required for work within the ICDF complex, or for access to some of the remediation dig sites. The Special Conditions delineate specific security clearance access requirements to all applicable areas.

An ICDF Security Plan (PLN-940) was developed with facility access controls delineated. The SUBCONTRACTOR will be briefed on this plan upon subcontract award.

3.2.12.8 Radiological Controls

The SUBCONTRACTOR shall comply with the INEEL Radiological Protection Program (RPP), PLN-260, as approved by DOE. Compliance with these requirements is generally applied by compliance with the requirements and procedures in the CONTRACTOR's companywide "INEEL Radiological Control Manual" (RCM). Should any conflicts arise between the INEEL RCM and the documented RPP, the requirements of the documented RPP take precedence. The CONTRACTOR will resolve any such conflicts expeditiously.

The planning and scheduling of radiological monitoring is the responsibility of the SUBCONTRACTOR; the actual maintenance activities and calibrations will be performed by CONTRACTOR personnel and organizations. The CONTRACTOR's calibration services shall be utilized as required by the Radiological Protection Plan (RPP). Replacement of equipment as needed will be performed by the CONTRACTOR.

Identifier: SOW-698
Revision: 0
Page: 41 of 61

Statement of Work for the INEEL
CERCLA Disposal Facility Complex
Implementation Project



The SUBCONTRACTOR shall submit a radiological exposure plan with clearly stated goals and measures to be taken to maintain personnel exposure in accordance with ALARA standards. This shall be updated when the planned Scope of Work changes, as directed in the RCM, at least annually.

The CONTRACTOR's Radiological Control Organization shall have approval authority over procedures, agreements, and documents involving activities governed by the Radiological Protection Program.

3.2.12.9 Waste Tracking Records

All records of waste stored, staged, treated (evaporation pond or treatment/stabilization) or disposed of in the landfill shall be maintained by the SUBCONTRACTOR in accordance with the requirements of the FFA/CO and DOE/ID-10848. Tracking records for individual constituents of the waste shall be maintained electronically on two independent storage devices. The SUBCONTRACTOR shall be provided unrestricted access (read only is acceptable) to the data on at least one of the storage locations. All software and requisite licensing for a minimum of four people from four separate NT-based personal computers (PCs) to gain access to this data shall be provided to the CONTRACTOR.

3.3 Operations

SUBCONTRACTOR shall complete a Self-Assessment for Operations and transmit results (with a recommendation of readiness to start operations) to the CONTRACTOR, along with an evidence file to substantiate each criterion on an assessment checklist (checklist to be supplied by the CONTRACTOR). CONTRACTOR will perform a management assessment of readiness for operation seven to 14 days after acceptance of notification of readiness. The SUBCONTRACTOR may be assigned action items to achieve readiness based on the CONTRACTOR's assessment, as a condition of achieving CONTRACTOR approval to start operations. The SUBCONTRACTOR shall also demonstrate the readiness for operations by conducting a dry-run waste delivery and placement exercise (including taking delivery, receipt, acceptance, mock decontamination, a release survey, and mock-inventory update) for the CONTRACTOR and DOE-ID. The SUBCONTRACTOR may not receive waste at the facility nor



remediate a site until the CONTRACTOR Project Manager has provided a release to begin operations.

3.3.1 Mobilization Prior to Operations

The SUBCONTRACTOR shall mobilize to the site all the labor, material, equipment, and tools required for the performance of the operations. This includes, but shall not be limited to the following:

1. Minimum available infrastructure is identified in Section 1.4. If a greater amount of onsite space is required for efficient operations, the SUBCONTRACTOR may install additional office space; all plans and connections for any additional space or structures shall be submitted to and approved by the CONTRACTOR before initiating procurement. The CONTRACTOR will provide telephone interface, computer network interface, and fire alarm interfaces to the INEEL systems. The CONTRACTOR requires use of two permanently assigned offices in the Admin trailer of at least 100 ft² each (e.g., 10 × 10 ft), and will provide all furniture and office equipment for the CONTRACTOR's office space.
2. Establishing a QA plan and configuration management system.
3. Preparing or modifying SUBCONTRACTOR internal procedures or plans as well as modifying Project Implementation Plan (PIP), as necessary.
4. Preparing or providing documentation for modification of existing permits, or demonstrating compliance with substantive existing permit requirements.
5. Employee training.
6. Installing any additional equipment or facilities required to prepare for the delivery and disposal of primary waste.
7. Submitting acceptable submittals related to mobilization for operations.
8. Completing required testing related to additional equipment or facilities and receiving acceptable results.

Identifier: SOW-698 Revision: 0 Page: 43 of 61	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
--	---	---

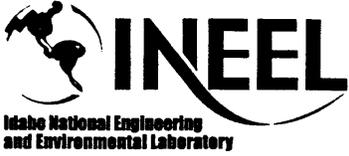
3.3.2 Operations

The SUBCONTRACTOR shall operate the facility in accordance with the approved ICDF RAWP (DOE/ID-10984), *O&M Plan* and other relevant documents. Operations, as specified in the *O&M Plan* (DOE/ID-11000) and DOE Order 5480.19; shall include, but are not limited to, all facilities, utilities, labor, material, equipment, and tools required for operation of the ICDF complex and the following requirements:

1. Maintain Site security and access control per "ICDF Physical Security Plan" (PLN 940).
2. Provide required quality control and quality assurance, per the SUBCONTRACTOR's QA program and the QAPjPs.
3. Control and maintenance of facility operational procedures.
4. Support public hearings scheduled and performed by the CONTRACTOR. (The only currently scheduled public hearing is planned for May 2003 to cover the completed construction work and the initiation of operations.)
5. Document the net weight of all waste delivered for disposal with a certified scale. Accuracy of the scale shall be certified at least annually.
6. Ensure radiological control support to monitor and assist with ALARA practices and to survey personnel and equipment exiting the controlled areas at the ICDF complex in accordance with PLN-260, "Radiological Protection Program."
7. Take delivery and disposition of waste per applicable documents, including the *Waste Acceptance Criteria for the ICDF Landfill* (DOE/ID-10865), *Waste Acceptance Criteria for the ICDF Evaporation Pond* (DOE/ID-10866), and *Waste Acceptance Criteria for the ICDF Complex* (DOE/ID-10881), RAWP, Waste Placement Plan (EDF-ER-286), PLN-014, the Subcontractor's *Landfill Loading Plan*, and the individual WAG RD/RA Work Plan. Waste will be disposed of according to the approved "Waste Placement Plan." Primary waste shall be disposed of within 30 days of the date of acceptance, unless otherwise authorized in writing by the CONTRACTOR.



8. Determine the minimum required characterization and verification samples for waste at the remediation sites based on the respective waste profile form to meet the criteria of the *Sampling and Analysis Plan* (DOE/ID-10985). Provide the CONTRACTOR with the requisite information for completion of sampling.
9. Moisture-condition the primary waste as required to achieve the design compaction performance.
10. Inspect, fuel, decontaminate, and maintain all the SUBCONTRACTOR's vehicles and equipment, including GFE. Fueling and oiling within the contamination areas will be coordinated with RadCon.
11. Decontaminate primary waste containers or delivery vehicles in accordance with normal operations as defined in the *O&M Plan* and HASP. The SUBCONTRACTOR also is responsible for final decontamination of primary waste delivery vehicles or containers, in preparation for their demobilization from the remedial-action project.
12. Maintain all improvements, installations, equipment, and facilities within the ICDF boundary and the individual dig site boundaries.
13. Keep records and documentation for transportation of secondary waste (if the SUBCONTRACTOR transports secondary waste or other regulated waster requiring documentation).
14. Maintain an on-line inventory with an accurate total of the volume and weight of primary waste and secondary waste disposed in the ICDF complex, including total radioactivity (in curies) by isotope, mass-weighted average radioactivity (in picocuries/gram), by isotope, total quantity of each chemical contaminant, mass-weighted average of each chemical contaminant, cumulative sum-of-fractions number from WAC for both hazard quotient and cancer risk, date of receipt of waste, and date of disposal in accordance with the "Waste Tracking Plan" (PLN-914). The inventory shall be available for the CONTRACTOR's use to assess the impact of proposed primary or secondary waste streams on the cumulative WAC fractions.

Identifier: SOW-698 Revision: 0 Page: 45 of 61	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
--	---	---

15. Track the location (x, y, and z coordinates) and dates of placement of the various waste streams within the ICDF complex. This information is part of the content of the disposal report. Coordinate system for waste location tracking shall be the CONTRACTOR-developed grid system and shall be capable of being readily converted to the state plane coordinate system.
16. Promote waste minimization.
17. Stabilize, grout, or use other means necessary to fill voids and achieve physical characteristics of the disposed waste commensurate with the RAWP.
18. Test the compacted waste to confirm that it meets the required physical characteristics to achieve design compaction performance.
19. Maintain disposal records as required by the RAWP and appendices, and the Waste Tracking Plan (PLN-914).
20. Maintain the staging areas and open face of the ICDF complex in compliance with the design standards (namely *RAWP*, *O&M Plan*, and *Auditable Safety Analysis*).
21. Place daily cover in accordance with the Operations Implementation Plan.
22. Disposition all secondary and industrial waste in accordance with the appropriate plan. The SUBCONTRACTOR may place secondary waste meeting the WAC into the ICDF complex. Secondary waste placed in the ICDF complex is subject to all the requirements and conditions that apply to primary waste, with the exception of payment provisions. Industrial waste must go to the CFA landfill unless it has been contaminated.
23. Install the interim cover in accordance with the Operations Implementation Plan.
24. Treat waste in the SSSTF in accordance with the *RAWP* and the *Treatability Study Test Plan for Soil Stabilization* (DOE/ID-10903) and *Sampling Analysis Plan for SSSTF Waste Stabilization Operations, WAG 3, OU 3-13* (DOE/ID-10924), "Process and Treatment Overview for the Minimum Treatment Process" (EDF-ER-296) and "SSSTF Debris Treatment Process Selection and Design" (EDF-1730).



25. Monitor ICDF complex performance (monitor operations) as specified in the RAWP (DOE/ID-10984), ICDF Complex Operational and Monitoring Sampling and Analysis Plan (DOE/ID-11005), the ICDF Waste Management Plan (DOE/ID-10886), and the ICDF Construction Waste Management Plan (DOE/ID-10958). Evidence of failure or potential failure of the ICDF Complex will be brought to the attention of the CONTRACTOR immediately. Similarly, any accidents, injuries, spills, releases or other like events shall be brought to the attention of the CONTRACTOR immediately. Inspections are required daily, including weekends and holidays. In the event of inclement weather or other event that prevents access to the site, the CONTRACTOR, upon notification (24 hours) and written justification from the SUBCONTRACTOR will notify the regulatory agencies of the missed inspections.
26. Operations-specific training for the SUBCONTRACTOR and sub-tier SUBCONTRACTOR employees including secured contractor union employees.
27. Provide access and/or support to the CONTRACTOR, DOE, or regulators for periodic surveillances, audits or inspections.
28. Handle spills of radioactive or hazardous materials as follows:
 - If within the boundary of the ICDF or digsite, and material is within the ICDF WAC, dispose of the material as secondary waste.*
 - If outside the boundary of the ICDF or the dig sites, notify the CONTRACTOR Spill Notification Team (208-526-4444, ext 6400) and follow instructions regarding cleanup and disposition.*
 - If within the boundary of the ICDF or dig sites and material is not within the ICDF WAC, notify the CONTRACTOR and follow instructions regarding disposal off-Site or at another approved facility.*

3.3.3 Off-Season Maintenance and Monitoring

As directed by the CONTRACTOR, the SUBCONTRACTOR will institute off-season maintenance and monitoring (M&M) of the ICDF Complex. This activity includes all labor, equipment, materials, and tools

Identifier: SOW-698 Revision: 0 Page: 47 of 61	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
--	---	---

required for the maintenance and operation of the leachate collection system, disposition of secondary and sanitary waste, maintenance of erosion and sediment control systems, staging of small quantities of CONTRACTOR waste (up to 1,000 tons/month; 4,000 tons total per off-season), required repairs to keep the facility in a secure condition, and surveillance activities specified in the RAWP and Operations Plan. Off-season M&M shall begin the day after the last day of off-season demobilization, per Section 2.4.6 of the O&M Plan (DOE/ID-11000).

3.3.4 Off-Season Demobilization/Remobilization

The SUBCONTRACTOR shall provide a minimum of 3 weeks notice before suspending remedial activities and waste delivery or before resuming waste delivery in association with an off-season shut down. Off-season demobilization shall commence the day after the designated last day of operations. During the operations demobilization period, the SUBCONTRACTOR shall dispose of all prior delivered primary waste, unless otherwise approved by the CONTRACTOR. The SUBCONTRACTOR may also perform any desired equipment decontamination and demobilization and adjust staffing levels to suit off-season M&M. Required surveillance shall continue to be performed by the SUBCONTRACTOR during the off-season. Soil and debris treatment/stabilization may continue to be performed or even concentrated during the off-season to allow efficient utilization of manpower.

During the re-mobilization period, the SUBCONTRACTOR shall mobilize all of the equipment, supplies, labor, and materials required to resume full operations. Once the SUBCONTRACTOR can substantiate and the CONTRACTOR agrees that full operational capability has been restored, operations period will resume. Allow 1 week for CONTRACTOR evaluation and approval—provide the request for evaluation at least 3 weeks before anticipated date of declaration of readiness.

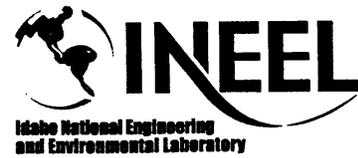
3.3.5 Demobilization for Transition

If the SUBCONTRACTOR is directed to demobilize from operations at the (i.e., the ICDF complex continues operations under a successor subcontract), the SUBCONTRACTOR shall

1. Complete interim cover over all primary waste that has been delivered to the ICDF Complex.

Identifier: SOW-698
Revision: 0
Page: 48 of 61

Statement of Work for the INEEL
CERCLA Disposal Facility Complex
Implementation Project



2. Complete update of the on-line waste inventory and project Web site and turn it over to the CONTRACTOR.
3. Perform a walk down with the CONTRACTOR to assess readiness for turnover and complete all resulting punch list items.
4. Disposition all secondary waste and sanitary waste in inventory, subject to CONTRACTOR approval.
5. Submit as-builts of drawings, specifications, plans, procedures, and reports. Any document that was issued for construction under the seal and signature of an Idaho registered professional engineer shall be likewise sealed and signed at the as-built revision.
6. Remove all SUBCONTRACTOR-owned equipment, supplies, material, and facilities. Any Government- or the CONTRACTOR-furnished equipment or materials shall be dispositioned as directed by the CONTRACTOR in a serviced and ready to use condition.
7. Clean up and dispose of all trash and debris.
8. Perform release surveys and dispose of or decontaminate, if necessary, any potentially contaminated items. Any Government or CONTRACTOR-furnished equipment or materials shall be dispositioned as directed by the CONTRACTOR.
9. Leave the site in a safe and secure condition.

3.3.6 Technical Submittals (Exclusive of Cell 2 Construction)

The following submittals are required:

- SUBCONTRACTOR Self-Assessment for Operations (before Contractor assessment and Agency Prefinal Inspections and prior to restart after remobilization from off-season)
- Training and Qualification Plan
- Performance metrics
- Calibration certification for scales used for calculating weight of waste

Identifier: SOW-698 Revision: 0 Page: 49 of 61	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
--	---	---

- Test reports
 - Density and moisture content of compacted waste
 - Acceptance of treated waste
 - Leachate/evaporation pond sampling
- Analyses for radiological and hazardous constituents of secondary waste
- Inspection/surveillance reports
- On-Site Waste Tracking Forms
- Operating and Maintenance Manual.

4. ENVIRONMENTAL, SAFETY, HEALTH, AND QUALITY ASSURANCE REQUIREMENTS

The SUBCONTRACTOR shall comply with the environmental, safety, health, and quality assurance requirements outlined in the following sections.

4.1 Environmental

The SUBCONTRACTOR shall comply with all applicable environmental requirements delineated in the *Subcontractor Requirements Manual* available on the INEEL external homepage at <http://www.inel.gov/procurement/formsdocuments.asp>. Additionally, all the requirements delineated in the FFA/CO, RAWP, (DOE/ID-10848) *ICDF Construction Work Plan* and (DOE/ID-10889), SSSTF Construction Work Plan. These documents contain all required ARARs and descriptions of how they are to be met. Each document has an ARAR compliance table that delineates the requirement and the corresponding action to ensure compliance.

4.2 Safety and Health

The SUBCONTRACTOR shall develop and comply with all requirements delineated in a health and safety plan (HASP) for each area of work delineated in Section 1 of this SOW and the separate Statement of Work for the Idaho Completion Plan contaminated soils remedial action (SOW 691). This can be accomplished with a separate HASP for selected areas of work or a combined HASP for all work activities. A separate HASP shall be developed for the construction of Cell 2. All Health and Safety Plans supporting this Statement of

Identifier: SOW-698 Revision: 0 Page: 50 of 61	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
--	---	---

Work shall be prepared in accordance with INEEL/INT-02-00275, *Environmental Restoration Program Model for preparation of Site –Specific Health and Safety Plans*. In addition, the SUBCONTRACTOR shall comply with all health and safety requirements delineated in the *Subcontractor Requirements Manual* available at the internet address listed above. A HASP for the ICDF has also been prepared by the CONTRACTOR and has been provided as a reference document. At a minimum each HASP shall address the following:

- Work scope
- Hazard identification and mitigation
- Exposure monitoring and sampling
- Accident and exposure prevention
- Personnel protective equipment
- Personnel training
- Site control and security
- Occupational medical surveillance
- Personnel roles and responsibilities
- Emergency Response Plan
- Decontamination procedures
- Record keeping
- Pre-emergency planning.

Other requirements applicable to this scope of work include 29 CFR 1926, “Construction;” 29 CFR 1910; DOE Order 440.1A, “Worker Protection Management for DOE Federal and Contractor Employees;” DOE Order 5480.4, “Environmental Protection, Safety, and Health Protection Standards;” DOE Order 420.1A, “Facility Safety;” 10 CFR 835, “Occupational Radiation Protection at DOE Facilities;” DOE Order 5400.5, “Radiation Protection of the Public and the Environment;” and DOE Order 435.1, “Radioactive Waste Management.”

4.3 Quality Assurance/Control

10 CFR 830, Subpart A and American Society of Mechanical Engineers (ASME) NQA-1-1997 are the governing quality requirements for all operating activities. The SUBCONTRACTOR shall prepare and submit for approval a quality program plan that establishes a compliant program. The provided ASME NQA-1-1997 applicability matrix identifies the portion of the standard that must be

Identifier: SOW-698 Revision: 0 Page: 51 of 61	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
--	---	---

addressed in the quality program document. All operations shall be managed in accordance with this program.

The SUBCONTRACTOR shall ensure compliance with the requirements of the Statement of Work for the Environmental Restoration contaminated soils remedial action, SOW-691, technical specifications for the construction of Cell 2 and the Special Conditions. Before construction starts, the SUBCONTRACTOR must provide a SUBCONTRACTOR's Quality Assurance Plan that complies with the 5000 series PRDs in the SRM. The established quality program for operations may be supplemented to incorporate the PRDs at the option of the SUBCONTRACTOR.

The *Quality Assurance Project Plan for Waste Area Groups 1, 2, 3, 4, 5, 6, 7, 10, and Inactive Sites*, DOE/ID-10587, has been prepared by the CONTRACTOR and approved by the Agencies. Initial operations for sampling will be performed using this QAPjP. If desired, the SUBCONTRACTOR may prepare a unique QAPjP for their operations and submit it for CONTRACTOR approval. The CONTRACTOR will submit it to the Agencies for approval; about 90 days are required for approval after submittal.

The CONTRACTOR, U.S. Department of Energy, State of Idaho Department of Environmental Quality, the Environmental Protection Agency, and agents representing these parties will perform periodic surveillance inspections of the SUBCONTRACTOR's activities to ensure compliance with this SOW and all associated documents.

5. RESPONSIBILITIES

The following sections discuss the roles and responsibilities for the CONTRACTOR and the SUBCONTRACTOR, as required to complete the work.

5.1 Premobilization

The SUBCONTRACTOR shall provide the CONTRACTOR with all required submittals, and work plans. The SUBCONTRACTOR shall verify that all remedial activity personnel working under contract for the SUBCONTRACTOR is familiar with the relevant provisions of the project HASPs (refer to Section 2.4). The SUBCONTRACTOR shall provide the CONTRACTOR with documentation confirming that all project personnel working for or through the SUBCONTRACTOR have received the necessary training and completed the medical examination requirements. The SUBCONTRACTOR shall fulfill this requirement before the SUBCONTRACTOR is allowed to mobilize. The submitted documentation shall demonstrate/certify that the SUBCONTRACTOR

Identifier: SOW-698 Revision: 0 Page: 52 of 61	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
--	---	---

can meet and satisfy the requirements of the applicable work plans and the project designs.

5.2 Mobilization

The SUBCONTRACTOR shall mobilize all equipment, materials, and field operations site offices to the task site before the start of fieldwork.

The SUBCONTRACTOR shall implement the required administrative, engineering, and health and safety controls including, but not limited to, assembly of the project work team, preparation and approval of procedures, training, and conducting prejob briefings specific to the remedial action tasks. Specific elements of the prejob briefing shall include identifying work to be performed, hazards associated with the tasks, and the steps taken to mitigate the hazards to enable safe completion of the work.

5.3 Contaminated Soil Handling

The SUBCONTRACTOR shall haul contaminated soil to the ICDF in covered or enclosed containers with a capacity of 9.9 m³ (13 yd³) or greater (roll-off containers are the CONTRACTOR'S concept), unless preboxed in approved boxes. It is anticipated that any soil generated, ranging from 0.5 to 50 milli-roentgen equivalent man per hour (mrem/hr), as surveyed within the soil mass, may be shipped as unpackaged (bulk), low-specific activity material to be transported in exclusive-use closed-transport vehicles. Soil with activities <0.002 µCi/g and <0.5 mrem/hr, as surveyed within the soil mass, are not considered to be regulated for transportation as a hazardous material (49 CFR 173.402[y]). It is the intent of the project to ship only soil meeting this requirement. However, if soil exceeding this requirement (either through field screening, process knowledge, or analytical data) is to be shipped, the SUBCONTRACTOR shall package the soils to maintain the external radiation levels within the limits of 49 CFR 173.441(b). The SUBCONTRACTOR shall place radioactive placards on the front, on the back and on each side, with no leakage of radioactive materials from the vehicle. The CONTRACTOR will provide shipping papers with exclusive-use instructions.

Each roll-off shall have a locking tailgate with a gasket and be covered and/or enclosed. The driver shall inspect the tailgate before and after loading to ensure it is properly latched. The roll-off shall have a new 6-mil plastic liner installed for each load to mitigate contamination and provide a means of dust control during transportation and disposal at the ICDF. The SUBCONTRACTOR shall cover each load with a tight-fitting tarp to prevent loss of material during transport. The CONTRACTOR will evaluate and approve the covers before initial use. Periodic inspections of the tarps will be made to ensure their continued integrity.

Identifier: SOW-698 Revision: 0 Page: 53 of 61	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
--	---	---

After loading and before leaving the area, the SUBCONTRACTOR shall visually inspect each roll-off to ensure the exterior is not contaminated and the container is adequately covered/enclosed. The CONTRACTOR'S RCT will perform a radiological survey as verification that the exterior is free from contamination. If soil radiation levels are high enough to preclude direct frisking, the RCT will be required to obtain swipe samples that will then be counted. In this case, the survey may take over an hour. Prior to leaving the area and under the direction of the CONTRACTOR, the SUBCONTRACTOR shall remove any discovered external contamination. When picking up an empty roll-off at the ICDF, the SUBCONTRACTOR shall ensure that it is properly covered with a tight-fitting tarp. Before leaving the ICDF, the CONTRACTOR will survey the roll-off for radiological contamination to ensure the exterior is not contaminated.

5.4 Queuing vs Staging of Waste Containers

Normal movement of waste containers into the out of the remediation dig sites and the ICDF Complex are envisioned to utilize temporary queue sites for empty and full containers. These queue sites are determined by the SUBCONTRACTOR to effectively manage the movement of waste safely. Designated storage or staging pads within the ICDF are for waste and containers on hold pending treatment, repackaging or off-site shipment. Waste that has been treated and is pending post treatment sample results is also staged in these areas.

5.5 Demobilization

After the remedial activities have been satisfactorily completed and all equipment has been properly decontaminated, the SUBCONTRACTOR shall demobilize and remove all equipment from the site. The SUBCONTRACTOR shall remove and package or dispose appropriately the decontamination pads and temporary fencing erected in support of the remediation activities.

For WAG 5, the SUBCONTRACTOR shall replace any fencing previously erected by the CONTRACTOR'S RadCon organization to delineate radiological contamination areas that were removed to allow for the remediation activities to take place. The SUBCONTRACTOR may use the fencing that was removed so long as it is in good condition as approved by the CONTRACTOR.

6. DELIVERABLE SCHEDULE

Refer to the General Provisions, *Subcontractor Requirements Manual*, and Vendor Data Schedules for general requirements. The deliverable schedule shall comply with the requirements delineated therein, as well as with the requirements stipulated in the Special Conditions. In addition, the SUBCONTRACTOR shall meet the schedule duration and milestones as outlined in Table 3.

Identifier: SOW-698 Revision: 0 Page: 54 of 61	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
--	---	---

Table 3. Schedule duration and milestones.

Duration	Milestones
July 2003	CONTRACTOR Assessment of SUBCONTRACTOR Readiness for Operation
July 29, 2003	▶ Submit revision to the ICDF RAWP for treatment unit operations – Input required from SUBCONTRACTOR for this CONTRACTOR prepared document
August 2003	▶ Regulators conduct ICDF Complex prefinal inspection – Requires SUBCONTRACTOR participation for preparation, conduct of the inspection/review and development of corrective action plans for operational related issues
August 2003	▶ Submit ICDF Complex Prefinal Inspection Report – Input (Corrective Action Plans) required from SUBCONTRACTOR for this CONTRACTOR prepared document
August 2003	▶ Obtain DOE approval to start operations – requires SUBCONTRACTOR support for preparation of presentation
August 22, 2003	▶ Begin ICDF Complex operations - SUBCONTRACTOR
February 25 to March 3, 2004	▶ Conduct ICDF treatment facilities prefinal inspection – Requires SUBCONTRACTOR participation for preparation, conduct of the inspection/review and development of corrective action plans for operational related issues
March 19, 2004	▶ Submit ICDF treatment facilities Prefinal Inspection Report – Input required from SUBCONTRACTOR for this CONTRACTOR prepared document
September 30, 2004 (Enforceable milestone)	▶ Submit Draft ICDF Complex RA Report (primary document) – Input required from SUBCONTRACTOR for this CONTRACTOR prepared document
Remediate WAG 1	FY 2004
Remediate WAG 3	TBD
Remediate WAG 4	FY 2003 and FY 2004
Remediate WAG 5	FY 2004
After last waste receipt	▶ Submit revisions to SSSTF RD/CWP, ICDF RD/CWP, and ICDF Complex RAWP as needed – Contractor with records provided from SUBCONTRACTOR

Identifier: SOW-698 Revision: 0 Page: 55 of 61	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
--	---	---

7. INTERFACES

Listed in Appendix A, Interface Descriptions, to this Statement of Work are the identified minimum interfaces necessary to perform the work. Additional interfaces with DOE, the CONTRACTOR, regulatory agencies, and other on-Site or off-Site parties may be necessary. The interfaces identified in Appendix A are not meant to be all-inclusive. The SUBCONTRACTOR shall be responsible for identification and implementation of all interfaces unless otherwise directed by the CONTRACTOR.

Interface agreements will be prepared and signed by affected parties for all interfaces requiring use of CONTRACTOR personnel to support SUBCONTRACTOR work activities (except for subcontract management; construction support services and routine surveillance activities performed by the CONTRACTOR).

8. SUBMITTALS

8.1 General

Refer to the General Provisions, *Subcontractor Requirements Manual*, special conditions and the Vendor Data Schedule for general requirements. Vendor data submittals shall comply with the requirements delineated therein, as well as with the requirements stipulated in the Special Conditions.

A complete set of subcontract submittals shall be developed, issued, and controlled by the SUBCONTRACTOR. These submittals shall completely identify and describe the SUBCONTRACTOR's plans and implementing procedures for performing, controlling, and properly documenting Work performed under the Subcontract, with all activities achieving acceptable quality levels of performance. The SUBCONTRACTOR shall keep a controlled copy of the latest revision of each of the submittals at the ICDF site administrative office for reference. The submittals shall be submitted to the CONTRACTOR in accordance with this Statement of Work and additional requirements as defined in other subcontract exhibits.

8.2 Contents of Submittals

The CONTRACTOR's expectations for the minimum acceptable content of each submittal are listed below. Best commercial practices shall apply where specific requirements are not provided.

8.2.1 Status Reports and Review Meetings

Status reports of the SUBCONTRACTOR's work shall be submitted in accordance with Special Conditions. In addition, progress review



meetings will be held at the CONTRACTOR's offices periodically. Meetings should occur weekly during construction and operations. The SUBCONTRACTOR shall record and issue minutes from review meetings with the weekly or monthly report following the meeting.

The SUBCONTRACTOR shall also support and attend working meetings with the regulators and stakeholders. Meetings with regulators may occur in various locations throughout the northwest region.

8.2.2 Project Implementation Plan

The Project Implementation Plan is a management tool to provide the policy, commitment, accountability, and resources to implement the SUBCONTRACTOR's work scope and ensure consistent and adequate management oversight. Management systems establish processes that are typically applicable to the entire organization. Work is to be performed according to established industry technical standards and the SUBCONTRACTOR's administrative controls, under controlled conditions and the requirements of this SOW, using approved plans, instructions, and procedures.

Each revision of the PIP should unify the collection of plans, procedures, and reports that comprise it and focus them on the project objectives. The PIP shall provide the purpose and content of each of its components as well as define the relationship among the components. The SUBCONTRACTOR shall develop and maintain the PIP. The PIP is required to be updated for each major deliverable, but shall be updated as often as appropriate based on decisions, changes, and other events that affect the design and implementation of the project. Changes/revisions must be CONTRACTOR-reviewed and accepted. Changes will be made at no cost to the CONTRACTOR unless warranted under "Equitable Adjustment." The PIP will be an event-based plan that contains, as a minimum, the items that follow in this section.

A separate PIP may be prepared that covers similar information focused on the construction of the expansion of the landfill into Cell 2. This PIP would also cover the plans for test pads, if required, and the quality controls associated with the construction activity.

8.2.3 Interface Plan

The Interface Plan shall take the interfaces in Appendix A to this Statement of Work and update and elaborate on them as appropriate to define the specifics of all anticipated interfaces during the

Identifier: SOW-698 Revision: 0 Page: 57 of 61	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
--	---	---

implementation of the project scope. These interfaces shall be cited, as appropriate, in other documents (e.g., schedules).

8.2.4 Quality Assurance Program

Refer to Section 4 of this SOW.

8.2.5 Hauling Plan

The Transportation Plan shall address all aspects of secondary waste handling and transportation for all waste materials to be transported off of the ICDF Complex for treatment or disposal. The plan shall address at least the following:

1. Packaging requirements for transport
2. Labeling, marking, and placarding requirements
3. Manifesting and shipping document requirements
4. Required permits or licenses specific to the route and/or the material being transported
5. Driver qualifications, training, and testing program and record keeping
6. Transportation spill emergency response plan.

The Transportation plan shall address all shipment of waste and transport of empty waste containers between the ICDF and the remediation dig sites. The transportation plan of containers within the ICDF Complex shall also be presented.

The Transportation Plan shall include a full description of the proposed fleet, its equipment, and its equipment capabilities. A complete description of the transportation team and its organization, relationships, functions, including dispatch, compliance assessment, and site interface logistics. The Plan will explicitly describe the SUBCONTRACTOR's approach to transportation and the equipment to be provided for transport of all anticipated waste. The Plan shall also address how the SUBCONTRACTOR's equipment meets Department of Transportation requirements for the full range of contamination levels and types of waste reasonably anticipated.



8.2.6 Environment, Safety, and Health Plan

Refer to Section 4 of this SOW.

8.2.7 Operations Implementation Plan

The Operations Implementation Plan shall state how the CONTRACTOR is operating the facility in accordance with the Operating and Maintenance Plan, DOE/ID-11000. The Plan shall provide the following information or address the following topics, at a minimum:

1. A detailed description of technical or operational performance. Categories include, but are not limited to:
 - Procedures and methods for scheduling, receiving, transferring, placing, and documenting all waste received. The SUBCONTRACTOR shall be able to accept waste delivered that satisfies the WAC and is delivered in an acceptable container.
 - Capacity and interface requirements for providing staging facilities to handle surges in waste delivery, stating maximum monthly capabilities in terms of disposal plus staging.
 - Procedures for monitoring, decontamination (if necessary), release, and record keeping for primary waste delivery equipment, containers, and personnel.
2. Procedures and requirements to ensure that waste placement and storage activities meet all regulatory requirements.
3. A workable operating schedule including days and hours of operation and times for starting and stopping delivery of waste daily.
4. Required tasks for off-season shutdown and tasks and duration for demobilization and remobilization.
5. A Landfill Loading Plan (LLP) to address the management of material within the Cell. The LLP shall address such aspects as handling practices, QA/QC interfaces, treatment or physical manipulation of waste required for disposal, and interaction with other components of the PIP. This will be an expansion or clarification of EDF-ER-286, Waste Placement Plan.

Identifier: SOW-698 Revision: 0 Page: 59 of 61	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
--	---	---

6. Spill response plan.
7. Facility equipment requirements.
8. Site security plan (expansion or clarification of plan provided by the CONTRACTOR)
9. Maintenance and inspection of the interim cap.
10. Monitoring required to assess/assure performance of ICDF and complies with ARARs.

8.2.8 Disposal Report

The disposal report shall contain a running average activity or quantity and total activity or quantity of each of the radionuclides and chemical contaminants in the ICDF. Shipments rejected at time of delivery, the reason, and subsequent actions shall also be recorded. Additional information may be required as regulatory or safety standards mandate.

8.2.9 Secondary Waste Handling Plan

The SUBCONTRACTOR shall prepare a secondary waste handling plan for all secondary waste (e.g., waste generated during operations of the ICDF complex and/or remediation dig sites except leachate and decontamination water). The Plan shall provide the following information:

1. Identification and description of each secondary waste. The description shall include chemical composition, physical properties, and anticipated quantities.
2. Planned method(s) to verify that all secondary waste meets Subcontract requirements for handling, storage, treatment, recycling and/or disposal, including analysis and testing of samples, process knowledge and control, and statistical uncertainty.
3. Proposed documentation that certifies that all secondary waste complies with Subcontract requirements.
4. Planned methods to provide collection, temporary storage, transfer, and transportation of all non-contaminated secondary waste to the CFA landfill, or justification for incorporation in the ICDF landfill or evaporation pond.

Identifier: SOW-698 Revision: 0 Page: 60 of 61	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
--	---	---

5. Methods for determination of classification of all secondary waste.

8.2.10 Storm Water Pollution Prevention Plan

The SUBCONTRACTOR shall describe the methods and controls for clean storm water runoff including segregation from contact water, erosion control, and sediment control. The Plan shall cover the ICDF Complex, remediation dig sites, and borrow sources.

8.2.11 Inspection/Monitoring Reports

The SUBCONTRACTOR shall prepare and submit a combined report annually to convey the results of all site inspection/monitoring. Evidence of potential or actual ICDF failure shall be brought to the attention of the CONTRACTOR immediately upon identification and shall be reported along with corrective action plans as required in this SOW.

8.3 Schedule Information

The SUBCONTRACTOR shall prepare and submit a detailed project schedule that supports the schedule durations and milestones specified in Section 6. The SUBCONTRACTOR shall also prepare a schedule of values that directly correlates with the SUBCONTRACTOR's schedule. A budgeted cost of work scheduled (BCWS) curve shall be submitted with the schedule and schedule of values.

The SUBCONTRACTOR shall measure cost and schedule performance using the earned value analysis method (BCWS, budgeted cost of work performed, and actual cost of work performed). Cost and schedule performance shall be reported to the CONTRACTOR on a monthly basis, for each item on the pricing schedule, as input for the CONTRACTOR's monthly performance measurement and reporting process. This report shall be delivered to the CONTRACTOR by the third Friday of each month.

9. ACCEPTANCE

None

10. APPENDIXES

Appendix A, Interface Definitions

Appendix B, References

Identifier: SOW-698 Revision: 0 Page: 61 of 61	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
--	---	---

11. ATTACHMENTS

None

Identifier: SOW-698
 Revision: 0
 Page: A1 of A4

Statement of Work for the INEEL
 CERCLA Disposal Facility Complex
 Implementation Project



Appendix A

Interface Definitions

MOU Number	Description	ICDF		Support Organization	
		POC	Tel #	POC	Tel #
1	<p>Facility Management Interface. Interface between Subcontractor and ICDF Facility Manager. ICDF Facility Manager is the primary Point of Contact between Subcontractor and BBW1. This interface deals with coordination of support resources such as IH, Safety, QA, Regulatory Affairs/CERCLA documentation, Records Management, Configuration Control, Conduct of Operations etc. Interface also includes requirements for site access by INEEL personnel such as groundwater monitoring, routine surveillance/inspection for compliance, data access for reporting and notification of off-normal conditions (accidents, incidents, abnormal occurrences, INEEL activities that may affect ICDF and ICDF activities that may affect INEEL).</p> <p>Facility Management Interface – CFA. Interface with INEEL CFA facility maintenance organization regarding maintenance of roads and grounds (snow removal, road grading, dust control, weed control around ICDF fences, storm water monitoring during ICDF off hours). Interface with CFA emergency response organization regarding site-wide evacuation/emergency response notifications and drills.</p>	Mike Edgett – ICDF Facility Manager and Project Engineer - TBD	526-3820		
2	<p>Facility Management Interface – INTEC. Interface with INTEC Facility Management regarding maintenance of utilities between INTEC and ICDF which include water (fire, raw, potable and sewer), sewer lift station, telecommunications, computer network. This interface will include notification of outages, limits on usage, etc. Interface for monitoring and response to ICDF alarms during off-hours. Emergency response to off-normal conditions at INTEC or ICDF.</p>	Mike Edgett – ICDF Facility Manager and Project Engineer - TBD	526-3820		
3	<p>Facility Management Interface – INTEC. Interface with INTEC Facility Management regarding maintenance of utilities between INTEC and ICDF which include water (fire, raw, potable and sewer), sewer lift station, telecommunications, computer network. This interface will include notification of outages, limits on usage, etc. Interface for monitoring and response to ICDF alarms during off-hours. Emergency response to off-normal conditions at INTEC or ICDF.</p>	Mike Edgett – ICDF Facility Manager and Project Engineer - TBD	526-3820		

Identifier: SOW-698
 Revision: 0
 Page: A2 of A4

Statement of Work for the INEEL
 CERCLA Disposal Facility Complex
 Implementation Project



Appendix A

MOU Number	Description	ICDF		Support Organization	
		POC	Tel #	POC	Tel #
4	<p>Facility Management – Digsite Facilities. Interface with the Facility Management responsible for each digsite for work control, emergency response, site access, off-normal condition notifications, labor issues regarding PACE employees, etc.</p> <p>Soil and Water Sampling Interface – Interface with WAG management regarding preparation, approval and dissemination of waste profiles, digsite characterization and ICDF verification sampling, digsite confirmation sampling.</p> <p>Interface with Waste Generator Services (WGS) for liquid waste and post-treatment sampling at ICDF and SSSTF.</p> <p>Interface with the INEEL Sample Management Office (SMO) and Radiation Measurement Laboratory (RML) regarding sample processing/approved laboratories and sample analysis/verification.</p>	Jody Landis – STR	526-6311		
5	<p>Soil and Water Sampling Interface – Interface with WAG management regarding preparation, approval and dissemination of waste profiles, digsite characterization and ICDF verification sampling, digsite confirmation sampling.</p> <p>Interface with Waste Generator Services (WGS) for liquid waste and post-treatment sampling at ICDF and SSSTF.</p> <p>Interface with the INEEL Sample Management Office (SMO) and Radiation Measurement Laboratory (RML) regarding sample processing/approved laboratories and sample analysis/verification.</p>	WGS			
6	<p>Subsurface Survey Team. Notification prior to digging for location of underground utilities or obstacles.</p>	Site Technical Representative			
7	<p>Spill Response Team. Interface with INEEL Spill Response Team for response to spills of hazardous or potentially hazardous materials outside the perimeter of ICDF or the digsites</p>	Project Engineer - TBD		Jim Graham – Spill Team Lead	526-7935
8	<p>Packaging and Transportation (P&T). Interface with P&T for approval of shipping manifest and verification that shipment meets DOT requirements of the initial shipment of each waste type/stream, road outages due to spent fuel shipments and other causes. Other unusual shipment issues.</p>	Project Engineer - TBD		Max Ruska – Manager Packaging and Transportation	526-2414

Identifier: SOW-698
 Revision: 0
 Page: A3 of A4

Statement of Work for the INEEL
 CERCLA Disposal Facility Complex
 Implementation Project



Appendix A

MOU Number	Description	ICDF		Support Organization	
		POC	Tel #	POC	Tel #
9	Life Safety Systems/Fire Department. Interface for response to fires, maintenance of life safety systems and monitoring/inspection/repair of fire alarm panels, fire water system, and post indicator valves (PIVs).	Project Engineer - TBD			
10	Network/telecommunications. Interface with INEEL telecommunications regarding maintenance and repair of INEEL-supplied communication lines, network services and equipment.	Project Engineer - TBD			
11	WAG Managers. Interface with each WAG manager regarding remediation activities, technical issues around remediation, coordination of support resources, scheduling of remediation activities, etc.	Jody Landis - STR	526-6311	WAG-1 WAG-3 WAG-4 WAG-5	
12	INEEL Power Management. Interface with Power Management regarding electrical power supply issues, outages, access to power lines within ICDF, etc.	Project Engineer - TBD			
13	Radiation Control. Interface for RadCon support at ICDF and the digsites. Includes personnel and equipment resources, scheduling of personnel, resolution of problems/issues. Includes interface with Health Physics Instrument Laboratory (HPIL) for calibration and maintenance of equipment and sources.	Project RadCon Representative - TBD		Robert French - Manager Radiological Controls Operations	526-1147
14	INEEL Calibration Laboratory. Interface for calibration of ICDF instruments and Subcontractors instrumentation and equipment where required.	Project Engineer - TBD		W. James Allred	526-2017
15	INEEL Materials Testing Laboratory. Interface for performance of required soil and concrete testing	Project Engineer - TBD		H. Craig Bean - MTL Supervisor	526-9941

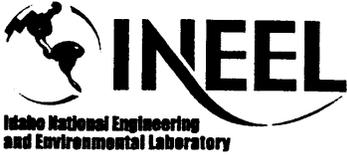
Identifier: SOW-698
 Revision: 0
 Page: A4 of A4

Statement of Work for the INEEL
 CERCLA Disposal Facility Complex
 Implementation Project



Appendix A

MOU Number	Description	ICDF		Support Organization	
		POC	Tel #	POC	Tel #
16	INEEL Security. Interface with INEEL Security regarding badging, area specific security requirements, off-hour surveillance of facility, response to intrusion alarms, notification of abnormal occurrences.	Mike Edgett – ICDF Facility Manager		Jamie Stuart – CFA Physical Security Officer	526-0577

Identifier: SOW-698 Revision: 0 Page: B1 of B5	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
--	---	---

Appendix B

References

- 10 CFR 20, 2003, Title 10, "Energy," Part 20, "Standards for Protection Against Radiation" *Code of Federal Regulations*, Office of the Federal Register, January 2003.
- 10 CFR 21, 2003, Title 10, "Energy," Part 21, "Reporting of Defects and Noncompliance," *Code of Federal Regulations*, Office of the Federal Register, January 2003.
- 10 CFR 30, 2003, Title 10, "Energy," Part 30, "Rules of General Applicability to Domestic Licensing of Byproduct Material," *Code of Federal Regulations*, Office of the Federal Register, January 2003.
- 10 CFR 31, 2003, Title 10, "Energy," Part 31, "General Domestic Licenses for Byproduct Material," *Code of Federal Regulations*, Office of the Federal Register, January 2003.
- 10 CFR 32, 2003, Title 10, "Energy," Part 32, "Specific Domestic Licenses to Manufacture or Transfer Certain Items Containing Byproduct Material," *Code of Federal Regulations*, Office of the Federal Register, January 2003.
- 10 CFR 61, 2003, Title 10, "Energy," Part 61, "Licensing Requirements for Land Disposal of Radioactive Waste," *Code of Federal Regulations*, Office of the Federal Register, January 2003.
- 10 CFR 71, 2003, Title 10, "Energy," Part 71, "Packaging and Transportation of Radioactive Material," *Code of Federal Regulations*, Office of the Federal Register, January 2003.
- 10 CFR 830.120, 2003, Title 10, "Energy," Part 830, "Nuclear Safety Management," Subpart 120, "Quality Assurance," *Code of Federal Regulations*, Office of the Federal Register, January 2003.
- 10 CFR 835, 2003, Title 10, "Energy," Part 835, "Occupational Radiation Protection," *Code of Federal Regulations*, Office of the Federal Register, January 2003.
- 29 CFR 1910.120, 2003, Title 29, "Labor," Part 1910, "Occupational Safety and Health Standards," Subpart 120, "Hazardous Waste Operations and Emergency Response," *Code of Federal Regulations*, Office of the Federal Register, April 2003.
- 29 CFR 1910.1200, 2003, Title 29, "Labor," Part 1910, "Occupational Safety and Health Standards," Subpart 1200, "Hazard Communication," *Code of Federal Regulations*, Office of the Federal Register, April 2003.

Identifier: SOW-698 Revision: 0 Page: B2 of B5	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
--	---	---

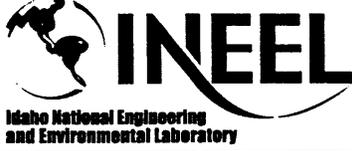
Appendix B

- 29 CFR 1910.1450, 2003, Title 29, "Labor," Part 1910, "Occupational Safety and Health Standards," Subpart 1450, "Occupational Exposure to Hazardous Chemicals In Laboratories," *Code of Federal Regulations*, Office of the Federal Register, April 2003.
- 29 CFR 1926.65, 2003, Title 29, "Labor," Subpart 65, "Hazardous Waste Operations and Emergency Response," *Code of Federal Regulations*, Office of the Federal Register, April 2003.
- 40 CFR 50, Title 40, 2003, "Protection of Environment," Part 50, "National Primary and Secondary Ambient Air Quality Standards," *Code of Federal Regulations*, Office of the Federal Register, February 2003.
- 40 CFR 60, Title 40, "Protection of Environment," Part 60, "Standards of Performance for New Stationary Sources," *Code of Federal Regulations*, Office of the Federal Register, February 2003.
- 40 CFR 61, Title 40, "Protection of Environment," Part 61, "National Emissions Standards for Hazardous Air Pollutants," *Code of Federal Regulations*, Office of the Federal Register, February 2003.
- 40 CFR 122, Title 40, "Protection of Environment," Part 122, "EPA Administered Permit Programs" The National Pollutant Discharge Elimination System," *Code of Federal Regulations*, Office of the Federal Register, February 2003.
- 40 CFR 125, Title 40, "Protection of Environment," Part 125, "Criteria and Standards for the National Pollutant Discharge Elimination System," *Code of Federal Regulations*, Office of the Federal Register, February 2003.
- 40 CFR 141, Title 40, "Protection of Environment," Part 141, "National Primary Drinking Water Regulations," *Code of Federal Regulations*, Office of the Federal Register, February 2003.
- 40 CFR 260, Title 40, "Protection of Environment," Part 260, "Hazardous Waste Management System: General," *Code of Federal Regulations*, Office of the Federal Register, February 2003.
- 40 CFR 261, Title 40, "Protection of Environment," Part 261, "Identification and Listing of Hazardous Waste," *Code of Federal Regulations*, Office of the Federal Register, February 2003.
- 40 CFR 262, Title 40, "Protection of Environment," Part 262, "Standards Applicable to Generators of Hazardous Waste," *Code of Federal Regulations*, Office of the Federal Register, February 2003.

Identifier: SOW-698 Revision: 0 Page: B3 of B5	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
--	---	---

Appendix B

- 40 CFR 263, Title 40, "Protection of Environment," Part 263, "Standards Applicable to Transporters of Hazardous Waste," *Code of Federal Regulations*, Office of the Federal Register, February 2003.
- 40 CFR 264, Title 40, "Protection of Environment," Part 264, "Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities," *Code of Federal Regulations*, Office of the Federal Register, February 2003.
- 40 CFR 265, Title 40, "Protection of Environment," Part 265, "Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities," *Code of Federal Regulations*, Office of the Federal Register, February 2003.
- 40 CFR 268, Title 40, "Protection of Environment," Part 268, "Land Disposal Restrictions," *Code of Federal Regulations*, Office of the Federal Register, February 2003.
- 40 CFR 268.40, Title 40, "Protection of Environment," Part 268, "Land Disposal Restrictions," Subpart 40, "Applicability of Treatment Standards," *Code of Federal Regulations*, Office of the Federal Register, February 2003.
- 40 CFR 268.45, Title 40, "Protection of Environment," Part 268, "Land Disposal Restrictions," Subpart 45, "Treatment Standards for Hazardous Debris," *Code of Federal Regulations*, Office of the Federal Register, February 2003.
- 40 CFR 268.48, Title 40, "Protection of Environment," Part 268, "Land Disposal Restrictions," Subpart 48, "Universal Treatment Standards," *Code of Federal Regulations*, Office of the Federal Register, February 2003.
- 40 CFR 302, Title 40, "Protection of Environment," Part 302, "Designation, Reportable Quantities, and Notification," *Code of Federal Regulations*, Office of the Federal Register, February 2003.
- 40 CFR 355, Title 40, "Protection of Environment," Part 355, "Emergency Planning and Notification," *Code of Federal Regulations*, Office of the Federal Register, February 2003.
- 40 CFR 370, Title 40, "Protection of Environment," Part 370, "Hazardous Chemical Reporting: Community Right-To-Know" *Code of Federal Regulations*, Office of the Federal Register, February 2003.
- 40 CFR 372, Title 40, "Protection of Environment," Part 372, "Toxic Chemical Release Reporting: Community Right-To-Know," *Code of Federal Regulations*, Office of the Federal Register, February 2003.

Identifier: SOW-698 Revision: 0 Page: B4 of B5	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
--	---	---

Appendix B

- 40 CFR 761, Title 40, "Protection of Environment," Part 761, "Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions," *Code of Federal Regulations*, Office of the Federal Register, February 2003.
- 40 CFR 761.60, Title 40, "Protection of Environment," Part 761, "Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions," Subpart 60, "Disposal Requirements," *Code of Federal Regulations*, Office of the Federal Register, February 2003.
- 40 CFR 761.70, Title 40, "Protection of Environment," Part 761, "Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions," Subpart 70, "Incineration," *Code of Federal Regulations*, Office of the Federal Register, February 2003.
- 49 CFR 171, Title 49, "Transportation," Part 171, "General Information, Regulations and Definitions," *Code of Federal Regulations*, Office of the Federal Register, April 2003.
- 49 CFR 172, Title 49, "Transportation," Part 172, "Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements," *Code of Federal Regulations*, Office of the Federal Register, April 2003.
- 49 CFR 173, Title 49, "Transportation," Part 173, "Shippers-General Requirements for Shipments and Packaging," *Code of Federal Regulations*, Office of the Federal Register, April 2003.
- 49 CFR 173.24, Title 49, "Transportation," Part 173, "Shippers-General Requirements for Shipments and Packaging," Subpart 24, "General Requirements for Packagings and Packages," *Code of Federal Regulations*, Office of the Federal Register, April 2003.
- 49 CFR 173.24a, Title 49, "Transportation," Part 173, "Shippers-General Requirements for Shipments and Packaging," Subpart 24a, "Additional General Requirements for Non-Bulk Packagings and Packages," *Code of Federal Regulations*, Office of the Federal Register, April 2003.
- 49 CFR 173.24b, Title 49, "Transportation," Part 173, "Shippers-General Requirements for Shipments and Packaging," Subpart 24b, "Additional General Requirements for Bulk Packagings," *Code of Federal Regulations*, Office of the Federal Register, April 2003.
- 49 CFR 173.410, Title 49, "Transportation," Part 173, "Shippers-General Requirements for Shipments and Packaging," Subpart 410, "General Design Requirements," *Code of Federal Regulations*, Office of the Federal Register, April 2003.

Identifier: SOW-698 Revision: 0 Page: B5 of B5	Statement of Work for the INEEL CERCLA Disposal Facility Complex Implementation Project	
--	---	---

Appendix B

- 49 CFR 173.427, Title 49, "Transportation," Part 173, "Shippers—General Requirements for Shipments and Packaging," Subpart 427, "Transport requirements for low specific activity (LSA) Class 7 (radioactive) materials and surface contaminated objects (SCO)," *Code of Federal Regulations*, Office of the Federal Register, April 2003.
- 49 CFR 177, Title 49, "Transportation," Part 177, "Carriage By Public Highway," *Code of Federal Regulations*, Office of the Federal Register, April 2003.
- 49 CFR 178, Title 49, "Transportation," Part 178, "Specifications for Packagings," *Code of Federal Regulations*, Office of the Federal Register, April 2003.
- DOE O 151.1A, 2000, "Comprehensive Emergency Management System," U.S. Department of Energy, October 2000,
- DOE O 414.1A, 1999, "Quality Assurance," U.S. Department of Energy, September 1999.
- DOE O 435.1, 1999, "Radioactive Waste Management," U.S. Department of Energy, July 9, 1999.
- DOE O 5400.5, 1993, "Radiation Protection of the Public and the Environment," Department of Energy, January 7, 1993.
- DOE, 1994, *Radiological Control Manual*, DOE/EH-0256, Revision 1, April 1994.
- DOE-ID, 2003, *Idaho National Engineering Laboratory Waste Acceptance Criteria [RRWAC]* U.S. Department of Energy Idaho Operations Office, DOE/ID-10381, current revision, April 2003.
- HAD-211, 2003, *Hazard Assessment Document for the CFA-04 Mercury Pond Remedial Action Hazard Classification*, Revision 0, February 2003.
- MCP-2669, 2002, "Hazardous Material Shipping," *Manual 17—Waste Management*, current revision, March 2002.
- TPR-713, 1999, "Radioactive Contamination Added Determination," *Manual 17—Waste Management*, current revision, August 1999.