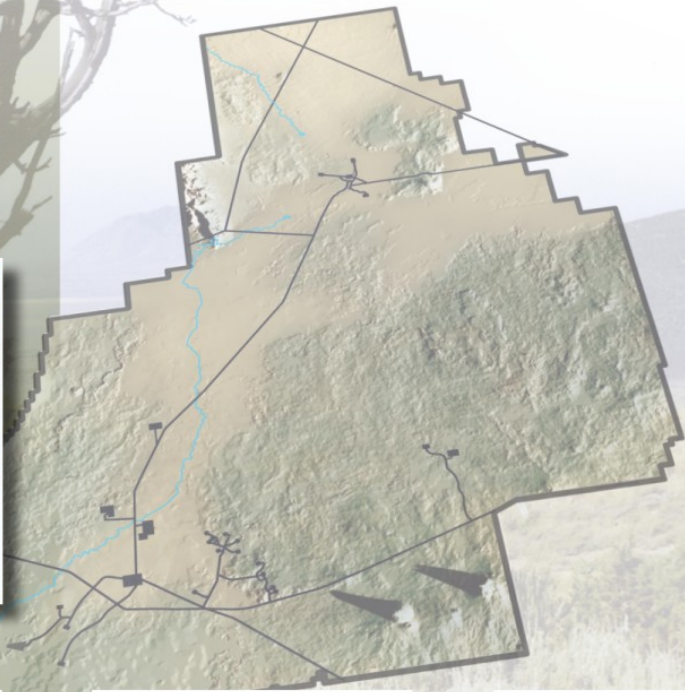


INL Sitewide Institutional Controls Plan



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INL Sitewide Institutional Controls Plan

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U.S. Department of Energy
DOE Idaho Operations Office**

ABSTRACT

On November 9, 2002, the U.S. Environmental Protection Agency (EPA), the U.S. Department of Energy (DOE), and the Idaho Department of Environmental Quality approved the *Record of Decision Experimental Breeder Reactor-I/Boiling Water Reactor Experiment Area and Miscellaneous Sites*, which requires a Sitewide Institutional Controls Plan for the then Idaho National Engineering and Environmental Laboratory (now known as the Idaho National Laboratory). This document, first issued in June 2004, fulfilled that requirement. This revision is needed to provide an update as remedial actions are completed and new areas of concern are found.

This Sitewide Institutional Controls Plan is based on guidance in the May 3, 1999, EPA *Region 10 Final Policy on the Use of Institutional Controls at Federal Facilities*; the September 29, 2000, EPA guidance *Institutional Controls: A Site Manager's Guide to Identifying, Evaluating, and Selecting Institutional Controls at Superfund and RCRA Corrective Action Cleanups*; and the April 9, 2003, DOE Policy 454.1, "Use of Institutional Controls." These policies establish measures that ensure short- and long-term effectiveness of institutional controls that protect human health and the environment at federal facility sites undergoing remedial action pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and/or corrective action pursuant to the Resource Conservation and Recovery Act (RCRA).

The site-specific institutional controls currently in place at the Idaho National Laboratory are documented in this Sitewide Institutional Controls Plan. This plan is being updated, along with the *Idaho National Engineering and Environmental Laboratory Comprehensive Facilities and Land Use Plan*, to reflect the progress of remedial activities and changes in CERCLA sites.

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ACRONYMS

ANL	Argonne National Laboratory
AOC	area of contamination
ARA	Auxiliary Reactor Area
BORAX	Boiling Water Reactor Experiment
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFA	Central Facilities Area
CFLUP	Comprehensive Facility and Land Use Plan
CFR	<i>Code of Federal Regulations</i>
CPP	Chemical Processing Plant
D&D	decontamination and decommissioning
DEQ	[Idaho] Department of Environmental Quality
DOE	U.S. Department of Energy
DOE-ID	U.S. Department of Energy Idaho Operations Office
EPA	U.S. Environmental Protection Agency
ESD	Explanation of Significant Differences
FFA/CO	Federal Facility Agreement and Consent Order
FR	<i>Federal Register</i>
GDE	guide
HDR	Hydrogeologic Data Repository
HWMA	Hazardous Waste Management Act
IC	institutional control
ICPP	Idaho Chemical Processing Plant
IET	Initial Engine Test
INEEL	Idaho National Engineering and Environmental Laboratory
INEL	Idaho National Engineering Laboratory

INL	Idaho National Laboratory
INTEC	Idaho Nuclear Technology and Engineering Center
LTS	long-term stewardship
MCL	maximum contaminant level
MCP	management control procedure
NA	not applicable
NFA	no further action
NOAA	National Oceanic and Atmospheric Administration
NPL	National Priorities List
NRF	Naval Reactors Facility
NSD	Notice of Soil Disturbance
OCVZ	organic contamination in the vadose zone
OMRE	Organic-Moderated Reactor Experiment
OU	operable unit
PBF	Power Burst Facility
PCB	polychlorinated biphenyl
RCRA	Resource Conservation and Recovery Act
RD/RA	remedial design/remedial action
ROD	Record of Decision
RWMC	Radioactive Waste Management Complex
SCA	soil contamination area
SDA	Subsurface Disposal Area
SPERT	Special Power Excursion Reactor Test
STF	Security Training Facility
TAN	Test Area North
TRA	Test Reactor Area

TRU	transuranic (waste)
TSF	Technical Support Facility
USC	<i>United States Code</i>
USGS	United States Geological Survey
UXO	unexploded ordnance
WAG	waste area group
WCF	Waste Calcining Facility
WMF	Waste Management Facility
WRRTF	Water Reactor Research Test Facility

TERMS/DEFINITIONS

Action memorandum. A primary decision document, equivalent to a Record of Decision (ROD), explaining the rationale for a selected removal action (time-critical or non-time-critical removal action).

CERCLA Explanation of Significant Differences (ESD). A document explaining a significant change to a remedial action selected in a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) ROD.

CERCLA Record of Decision (ROD). Official document presenting the selected decision for a remedial action. A ROD also documents a federal agency decision made on an environmental impact statement.

CERCLA ROD Amendment. Documents a fundamental change to a remedial action in a previously issued ROD.

Decision document. Refers to CERCLA Action Memorandums, RODs (both interim and final), ROD amendments, ESD orders, Consent Decrees, Resource Conservation and Recovery Act (RCRA) orders or consent agreements, and RCRA permits and permit modifications.

Disposal (of real property). The temporary or permanent transfer of ownership, possession, or control of real property from the U.S. Department of Energy to another party by lease, deed, or transfer between federal agencies.

Easement. A right to use property for a specific purpose, allowing an entity to use land owned by another.

Failed control. A condition inconsistent with a specific institutional control (IC) objective for a site, such as unauthorized well drilling, intrusion into engineered covers, or a change in land use from industrial to residential.

Institutional control (IC). The U.S. Environmental Protection Agency (EPA) defines ICs as nonengineered instruments, such as administrative and/or legal controls, that help to minimize the potential for human exposure to contamination and/or protect the integrity of a remedy. The ICs work by limiting land or resource use and/or by providing information that helps modify or guide human behavior at a site. Some common examples of ICs include zoning restrictions, building or excavation permits, well drilling prohibitions, and easements and covenants.

Major deficiency. An inconsistency between IC requirements and the actual conditions that could result in immediate danger to human health or the environment. (Major inconsistencies may include changes in land use from industrial to residential, unauthorized well drilling, etc.)

Minor deficiency. An inconsistency between IC requirements and the actual conditions that will not likely result in immediate danger to human health or the environment. (Minor inconsistencies may include missing or downed signs, broken or illegible markers, etc.)

National Priorities List (NPL). A list, maintained by the EPA, of uncontrolled hazardous waste sites that have releases of, or could release, hazardous substances to the environment and are subject to CERCLA.

Operable unit (OU). A waste area group (WAG) subset that is a potential source area to be investigated and/or remediated.

Waste area group (WAG). The INL NPL Site is divided into operational facility (geographic) areas (WAGs) to facilitate environmental remediation, with the exception of WAG 10; WAG 10 includes areas not in the other WAGs, plus the Snake River Plain Aquifer.

INL Sitewide Institutional Controls Plan

1. INTRODUCTION

Institutional controls (ICs) are measures undertaken to limit or prohibit activities that could interfere with the integrity of an interim action or cleanup action or result in human exposure to hazardous substances at a site. Such measures are required to ensure both the continued protection of human health and the environment and the integrity of an interim action or a cleanup action. The ICs are intended to supplement engineering controls and may be a necessary component of the completed remedy. The ICs may be used during the remedial investigation/feasibility study, during implementation of the remedial action, and, where necessary, as a component of the completed remedy. The ICs are generally required when residual concentrations of hazardous substances remain that preclude releasing an area for unrestricted land use or when the regulatory agencies determine such controls are needed to protect human health or the environment. However, ICs should not be used as a sole remedy unless active response measures are determined to be impracticable. Often, ICs are more effective if they are “layered” (use of different ICs at the same time) or applied in series (use of ICs at different points in the investigation/remediation process).

The ICs used at the Idaho National Laboratory (INL) are based on guidance in the May 3, 1999, U.S. Environmental Protection Agency (EPA) *Region 10 Final Policy on the Use of Institutional Controls at Federal Facilities* (EPA 1999); the September 29, 2000, EPA guidance *Institutional Controls: A Site Manager’s Guide to Identifying, Evaluating, and Selecting Institutional Controls at Superfund and RCRA Corrective Action Cleanups* (EPA 2000); and the April 9, 2003, U.S. Department of Energy (DOE) policy (DOE P 454.1) “Use of Institutional Controls.” Consistent with the IC policy, the U.S. Department of Energy Idaho Operations Office (DOE-ID) will (1) implement measures that ensure short- and long-term effectiveness of ICs that protect human health and the environment at federal facility sites undergoing remedial action pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (42 USC § 9601 et seq.) and/or corrective action pursuant to the Resource Conservation and Recovery Act (RCRA) (42 USC § 6901 et seq.); (2) file an initial IC status report on the status of ICs with the Idaho Department of Environmental Quality (DEQ) and EPA within 6 months after the signing of any decision documents such as a CERCLA Record of Decision (ROD) and/or a RCRA statement of basis; and (3) submit IC assessment reports at least annually thereafter. The EPA IC policy allows a federal facility (e.g., the INL) to submit one IC assessment report to cover all operable units (OUs) and all ICs at the federal facility. However, after a federal facility’s comprehensive facility-wide approach is well established and the facility has demonstrated its effectiveness, the frequency of future IC assessment reports may be modified by agreement with the EPA and DEQ.

The primary long-term objective of ICs at the INL is to protect human health by preventing exposure to contaminants or hazardous substances and to protect the environment by preventing migration of contaminants and hazardous substances that are left in place following remedial actions. The long-term responsibility for evaluating the effectiveness of IC measures at the INL Site resides with the Long-Term Stewardship (LTS) Program. In addition to ICs, the LTS Program holds the long-term responsibility for operation and maintenance as well as surveillance and monitoring at the INL Site. Although CERCLA ICs, operations and maintenance, and surveillance and monitoring activities are all closely related tasks, this plan focuses on ICs.

1.1 Background

The INL, established in 1949 as the National Reactor Testing Station, is a DOE-managed reservation devoted to nuclear energy research and environmental-related activities. The National

Reactor Testing Station is a DOE-managed reservation devoted to nuclear energy research and environmental-related research and was renamed the Idaho National Engineering Laboratory (INEL) in 1974 to emphasize the Site's engineering activities. In 1989, the EPA proposed listing the INEL on the National Priorities List (NPL) of the "National Oil and Hazardous Substances Pollution Contingency Plan" (40 CFR 300). The EPA issued a final ruling listing the INEL as an NPL site in November 1989 (54 FR 134). As a result, the Site became subject to the requirements of CERCLA § 120 (42 USC § 9601 et seq.), governing remedial actions on federal facilities. The *Federal Facility Agreement and Consent Order for the Idaho National Engineering Laboratory* (DOE-ID 1991) and associated action plan were developed to establish the procedural framework and schedule for developing, prioritizing, implementing, and monitoring response actions in accordance with CERCLA (42 USC § 9601 et seq.), RCRA (42 USC § 6901 et seq.), and the Idaho Hazardous Waste Management Act (HWMA) (HWMA 1983).

In 1997, the title of the INEL was changed to the Idaho National Engineering and Environmental Laboratory (INEEL) to reflect an emphasis on environmental research. Most recently, in 2005, the INEEL became the INL, signifying a focus on continued engineering and reactor research. In accordance with the Federal Facility Agreement and Consent Order (FFA/CO) (DOE-ID 1991), the INL Site was divided into 10 waste area groups (WAGs) to facilitate remedial design/remedial actions (RD/RAs) (Figure 1-1). The RD/RA process identified in Guide (GDE) -72, "Remedial Design and Remedial Action," includes developing the design of the selected remedy and implementing the remedy through construction, including implementing the ICs. The process also identifies that ICs should be formalized during the development of the RD/RA scoping statement. However, identification of new sites during remedial actions, or upon completion of remedial actions, may result in development of ICs at times other than during the RD/RA scoping phase only.

Reorganization of the INL in January 2005 resulted in renaming several of the WAGs. The 10 WAGs at the INL Site are now referred to as the following:

- Test Area North (TAN)—WAG 1
- Reactor Technology Complex, formerly the Test Reactor Area (TRA)—WAG 2
- Idaho Nuclear Technology and Engineering Center (INTEC)—WAG 3
- Central Facilities Area (CFA)—WAG 4
- Auxiliary Reactor Area (ARA)/Critical Infrastructure Test Range Complex, formerly the Power Burst Facility (PBF)—WAG 5
- Boiling-Water Reactor Experiment (BORAX) area—WAG 6
- Radioactive Waste Management Complex (RWMC)—WAG 7
- Naval Reactors Facility (NRF)—WAG 8
- Materials and Fuels Complex, formerly Argonne National Laboratory-West—WAG 9
- INL Sitewide area—WAG 10.

Several RCRA permits have been issued and will result in the closure of sites not identified under CERCLA (42 USC § 9601 et seq.). One of these sites (CPP-633—Old Waste Calcining Facility [WCF]) has completed closure actions under the landfill closure requirement of 40 CFR 264.310, "Closure and Post-Closure Care." This site and the required controls are identified in the WCF closure permit (PER-112). Additional sites requiring controls are anticipated for closure under RCRA permits. These sites will be included when the closures have been completed and the ICs are established.

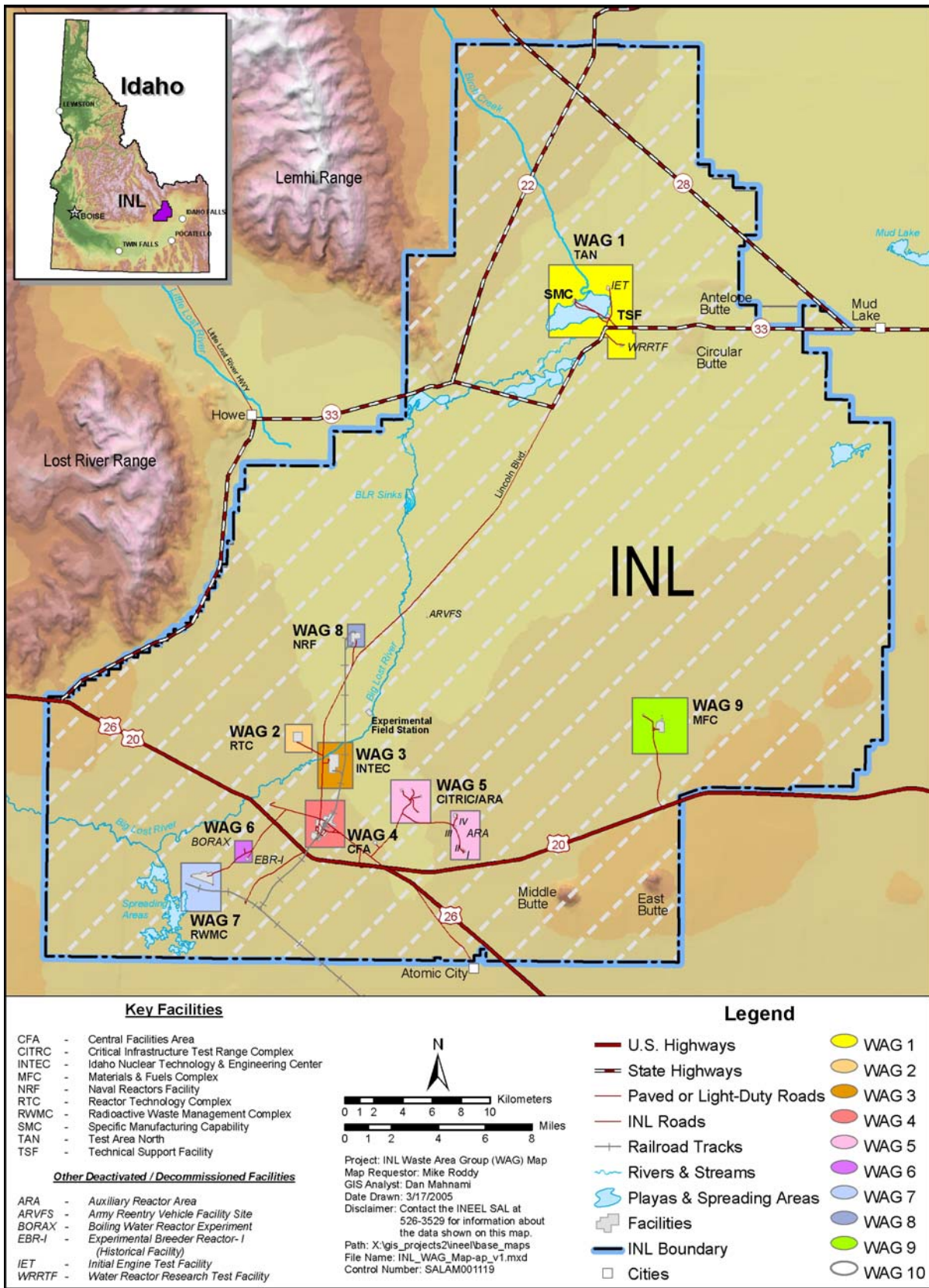


Figure 1-1. Idaho National Laboratory Site map showing waste area group locations.

The INL sites (excluding WAG 8, the NRF) where hazards to human health or the environment are known or suspected of being present are listed in Appendix A. Risk-based evaluations have been used to determine the hazard levels. Sites where risk precludes the free release of the site for unrestricted residential use have ICs. Several sites that were not included in previous listings have been added to Appendix A. For example, RWMC-01, RWMC-02, RWMC-03, Pad A (RWMC-04), OCVZ (organic contamination in the vadose zone), and Pit 9 at WAG 7 are listed in the table; ANL-01, ANL-04, and ANL-09 also are included. In addition, CPP-16, CPP-20, CPP-24, and CPP-25 are included as individual sites in the table; they are Group 1 sites previously summarized in CPP-96 and are now listed individually. All additions to the table in Appendix A are shaded in gray.

1.2 Purpose

This plan identifies common IC measures and describes methods used to inspect institutionally controlled sites at the INL and evaluate whether the IC requirements are being met. In addition, this plan provides a list of institutionally controlled sites INL-wide and identifies the IC objectives for each site. This plan was prepared in accordance with DOE and EPA guidance and by integrating portions of previous DOE-ID documents at the INL that relate to ICs. (Only the portions of those documents that pertain to ICs are integrated. No other materials in the documents are replaced, integrated, or altered.) Appendix B provides a list of the relevant documents from which IC information was gleaned and integrated into this plan. Future decision documents that institute, maintain, or evaluate ICs shall be consistent with this plan and shall be integrated into future revisions of this plan. This plan fulfills the requirement for a Site-wide Institutional Controls Plan set forth in the *Record of Decision Experimental Breeder Reactor-1/Boiling Water Reactor Experiment Area and Miscellaneous Sites Operable Units 6-05 and 10-04* (DOE-ID 2002) and consolidates IC requirements.

This plan addresses IC sites that are currently identified. Future revisions of this plan will reflect changes that have occurred to IC sites either through addition of new sites requiring ICs or deletion of sites that no longer require ICs. Future revisions of this plan also will incorporate changes in ICs that might arise as RODs for individual OUs are integrated into comprehensive RODs or as agreements are made with the Agencies that modify IC requirements. The *Idaho National Engineering and Environmental Laboratory Comprehensive Facility and Land Use Plan* (DOE-ID 1997) supports this plan by listing current and projected facility and land uses and by tracking the institutionally controlled areas.

Commitments made in decision documents to implement ICs through instruments controlling rights in real property (including deeds, restrictive covenants, and leases) remain subject to federal statutes, regulations, and other applicable laws governing the disposition of real property, including general policies on real property of the Department of Interior U.S. Bureau of Land Management, the General Services Administration, and the DOE. This plan is not a ROD or a decision document. The authority for IC activities derives from decision documents.

This document is being updated in conjunction with the 5-year review. Refer to the *Five-Year Review of CERCLA Response Actions at the Idaho National Laboratory* (DOE-ID 2006).

2. INSTITUTIONAL CONTROLS

The 1999 EPA *Region 10 Final Policy on the Use of Institutional Controls at Federal Facilities* (EPA 1999) states that ICs:

“... generally include all non-engineered restrictions on activities, access, or exposure to land, groundwater, surface water, waste and waste disposal areas, and other areas or media. Some common examples of tools to implement ICs include restrictions on use or access, zoning, governmental permitting, public advisories, or installation master plans. ICs may be temporary or permanent restrictions or requirements.”

The 2003, DOE policy “Use of Institutional Controls” (DOE P 454.1) adds that ICs:

“... may include administrative or legal controls, physical barriers or markers, and methods to preserve information and data, and inform current and future generations of hazards and risks.”

Based on previous CERCLA risk assessments and remedial action objectives for the INL, it is anticipated that land within the INL Site will not be released for residential use until after at least 100 years of government control. The earliest date that 100 years of government control will be achieved is 2095; however, it is anticipated that some facilities at the INL will remain under government control beyond that date. Consequently, controls on property lease or transfers and land owner limitations are not likely to be of concern until land is released from government control. However, any changes to these assumptions will be reflected in future revisions of the document.

The ICs at the INL are divided into two categories: (1) physical controls and (2) administrative/legal controls. Physical controls include warning signs, fences, and permanent markers (see Appendix C). Administrative/legal controls include deed restrictions, restrictive covenants, leases, zoning, government permitting, and public advisories.

Established IC requirements are specified in final CERCLA decision documents or RCRA permits and are based on a number of factors, including an evaluation of residual contamination, the spatial location of that material (e.g., at the surface or at depth), reasonably anticipated future human land uses, and environmental impacts. If, upon completion of a selected remedy, sites cannot be released for unrestricted human use, ICs are continued to protect human health and the environment.

3. RESPONSIBILITIES

3.1 U.S. Department of Energy Idaho Operations Office Responsibilities

The ICs at the INL Site are established through an agreement among the DOE, EPA, and DEQ and are documented in a ROD, ROD amendment, Explanation of Significant Differences (ESD), or other decision document. However, DOE is the primary agency responsible for implementation, oversight, integration, maintenance, and compliance with IC requirements at the INL Site as well as communication with state, local, tribal, and federal government agencies. While DOE-ID has ownership for the implementation and maintenance of ICs, the actions that provide for implementation and maintenance are performed under contracts issued by the DOE-ID.

The DOE-ID will adhere to the IC requirements specified in decision documents and this plan by utilizing internal procedures, *Federal Register* (FR) notices, informational announcements, and contracts, consistent with all applicable laws, regulations, agreements, and consent orders. Contractors are required to comply with applicable environmental laws, DOE orders, and administrative orders by way of contract requirements with the DOE-ID.

The DOE-ID is responsible for the following:

- Ensuring that the IC activities are performed in accordance with the approved IC plan, including implementation, performance, inspection, and reporting
- Ensuring that relevant DOE orders, directives, and policies are enforced
- Ensuring that National Environmental Policy Act (42 USC § 4321 et seq.) requirements are followed
- Ensuring that site ICs are maintained
- Notifying the EPA and DEQ of failed ICs
- Conducting assessments using personnel trained to the requirements of the approved IC plan
- Implementing corrective actions to address failure of ICs and providing updated IC site information to the Comprehensive Facility and Land Use Plan (CFLUP) coordinator, as required
- Developing and transmitting the annual IC assessment reports
- Ensuring document control of this plan (includes revisions) and annual IC monitoring reports, including their placement in the project file and in the information repository.

The DOE-ID executes work through the use of contractors. The DOE-ID is responsible for ensuring that the contractors adhere to all applicable requirements.

3.2 Contractor Responsibilities

Although responsibility for ICs ultimately resides with DOE-ID, the actions that provide for implementation and maintenance of ICs are performed under contracts issued by the DOE-ID. The contractor responsibilities for ICs are divided into two phases: (1) during remediation and (2) after remedy completion. As remedies reach completion, and as the Sitewide implementation of ICs has been developed, the LTS Program provides IC services. These services include assessing ICs, preparing the Sitewide IC report, record keeping for the ICs, communicating deficiencies or failed ICs, and consulting with the individual WAGs on appropriate responses to these deficiencies/failures, as applicable. The LTS Program interfaces with DOE-ID and implements corrective actions for failed ICs under the Operations and Maintenance Program. The primary operational functions within the stewardship organization at the INL Site consist of the following:

- **Operations and Maintenance**—Operations and maintenance consist of operations and maintenance of systems and components of long-term remedial actions, maintenance and repair of engineered remedies, maintenance and repair of failed physical institutional controls, and preparation of status reports summarizing the results of operations and maintenance activities.
- **Surveillance and Monitoring**—Surveillance and monitoring consist of groundwater sampling, environmental monitoring, and preparation of status reports summarizing the analytical results of the monitoring activities.
- **Institutional Controls**—Institutional controls consist of implementation and evaluation of IC measures and preparation of status reports summarizing the results of the IC evaluation. The ICs also include implementation of ICs at newly identified sites and interfacing with DOE-ID to negotiate corrective actions for failed controls.

3.3 Regulatory Agencies' Responsibilities

The EPA and DEQ are the primary regulatory agencies that oversee INL Site cleanup activities in accordance with CERCLA § 120 (42 USC § 9601 et seq.) and the FFA/CO (DOE-ID 1991). The DOE-ID is required by the FFA/CO to obtain agency approval and concurrence on the selected remedial actions in accordance with the requirements of CERCLA § 120 and the “National Oil and Hazardous Substances Pollution Contingency Plan” (40 CFR 300). In addition, the regulatory agencies review and comment on the IC assessment reports and the CERCLA-required, 5-year reviews and can propose additional work or modifications to primary documents in accordance with Paragraphs 8.21 to 8.24, 15.1 to 15.4, and 22.1 of the FFA/CO (DOE-ID 1991).

4. SITEWIDE INSTITUTIONAL CONTROL REQUIREMENTS

The IC requirements with Sitewide applicability are established in Section 11.2 of the *Record of Decision Experimental Breeder Reactor-I/Boiling Water Reactor Experiment Area and Miscellaneous Sites Operable Units 6-05 and 10-04* (WAG 6 OU 6-05 and WAG 10 OU 10-04) (DOE-ID 2002). Those requirements specify that this plan must address the following:

- “A comprehensive listing of all areas or locations on the INEEL that have ICs for protection of human health or the environment. The information on the list will include, at a minimum, the location of the area, the objectives of the restriction or control, the timeframe during which the restrictions apply, and the tools and procedures that will be applied to implement the restrictions or controls and to evaluate the effectiveness of these restrictions or controls.” (Appendix A)

NOTE: *Language quoted from the ROD includes “INEEL,” which would now be referred to as the INL.*

- “Identification, made legally binding where appropriate, of all entities and persons, including but not limited to, employees, contractors, lessees, agents, licensees, and invitees relevant to INEEL and WAGs 6 and 10 institutional controls.” (Section 3)
- “Identification of all activities, and reasonably anticipated future activities, including, but not limited to, soil disturbance, routine and non-routine utility work, well placement and drilling, grazing activities, groundwater withdrawals, paving, construction, renovation work on structures, or other activities that could occur on INEEL CERCLA sites with ICs.” (Section 6)
- “A tracking mechanism that identifies all land areas under restriction or control.” (Section 4.3)
- “A process to promptly notify both EPA and the State of Idaho before any anticipated change in land-use designation, restriction, land users, or activity for any IC required by a decision document.” (Section 4.3)
- “... incorporate by reference the INEEL Land-Use Plan, DOE/ID-10514, installation maps, a comprehensive permitting system, and other installation policies and orders. (Section 6).

In addition, the ROD commits DOE-ID to notify the EPA and DEQ upon discovery of any deficiencies or activities that are inconsistent with IC objectives or upon discovery of a change in land use or land-use designation. For the purposes of this plan, timely notification of minor deficiencies will be considered adequate if DOE-ID makes the notification during the first routine (e.g., weekly) remediation conference call following the discovery of an inconsistency. The DOE-ID shall report major deficiencies to the EPA and DEQ by telephone, fax, or e-mail within 2 working days of the discovery. Major deficiencies may result in changes to Site ICs that would require preparation of an ESD or other decision document. These parameters should allow DOE-ID enough time to obtain additional information about the inconsistency and prepare the pertinent information for discussion with the Agencies.

The ROD also specifies that the IC assessment report must contain, at a minimum, the following:

- “A description of the means employed to meet IC requirements”
- “A description of the means employed to meet waste site-specific objectives, including results of visual field inspections of all areas subject to operable waste-specific restrictions”
- “An evaluation of the effectiveness of the approach at meeting all WAG-wide IC requirements and waste site-specific objectives”
- “A description of any deficiencies and the approach and efforts or measures that have been or will be taken to correct problems.”

This plan addresses the requirements stated above and demonstrates how DOE-ID will implement and maintain the IC requirements at the INL Site. This plan will be reviewed after each 5-year review period at a minimum and will be revised, as necessary, to address new IC requirements and/or changes in the IC requirements. Minor or insignificant changes will be agreed upon with the Agencies and implemented only after agreement with the Agencies. The discussions and agreement for minor changes will be documented in the minutes of the routine (e.g., weekly) remediation conference call. In accordance with the OU 10-04 ROD requirement (DOE-ID 2002) to develop an INL-wide IC plan, this plan will integrate previously issued CERCLA IC plans and the portions of CERCLA operation and maintenance plans that include ICs. Refer to Appendix B for a listing of these documents.

4.1 Institutional Control Assessment

Following implementation of ICs, it is critical to ensure the effectiveness of an IC through an annual assessment process. The purpose of the assessment is to determine whether IC mechanisms remain in place and if ICs are providing the protection required by the remedy. The assessment process may include (1) site visits to determine if physical controls are in place and functioning as intended, (2) review of documentation to determine whether inappropriate land or resource use is occurring, and (3) review of legal and administrative documentation to determine whether proprietary controls have been modified or terminated. The assessment is documented on assessment checklists. See Appendix E for an example of an assessment checklist.

The EPA guidance provides that after a facility’s comprehensive facility-wide approach to ICs is established and the facility has demonstrated its effectiveness at implementing, evaluating, and maintaining ICs, the frequency of future monitoring reports may be modified subject to approval by the EPA and DEQ. Therefore, as remedial actions are completed, and evaluation and maintenance of ICs become routine, the frequency of the annual review cycle may be modified as agreed upon by the DOE, EPA, and DEQ.

4.2 Response to Failed Controls/Corrective Action

Failed controls most likely will be found during the annual assessments; however, failed controls may be discovered at any time. Personnel identifying a failed control will notify DOE-ID as the point of contact. The DOE-ID will notify the EPA and DEQ within 2 business days after discovery of any major activity (e.g., unauthorized well drilling, intrusion into engineered covers, change in land use from industrial to residential) that is inconsistent with the specific ICs for a site or of any change in the land use or land-use designation of a site addressed in the applicable ROD and listed in the CFLUP (DOE-ID 1997). Minor inconsistencies (e.g., signs down or missing) will be resolved as necessary. If minor inconsistencies are identified during the annual assessment, they will be noted, and resolution will be identified in the annual IC report.

If the DOE-ID believes that an emergency exists, DOE-ID can respond to the emergency immediately, before notification to the EPA and DEQ, and need not wait for any EPA or DEQ input to determine a plan of action. The DOE-ID will identify the root cause of the IC process failure, evaluate how to correct the process to avoid future problems, and implement these changes after consulting with the EPA and DEQ.

4.3 Changing/Terminating Institutional Controls

The ICs are required as long as land use or access restrictions are necessary to maintain protection of human health and the environment. The ICs and new sites will be established through an agreement among DOE, EPA, and DEQ. New sites that are determined to require ICs will be included in this plan and in the CFLUP (DOE-ID 1997). Such sites will be included in the annual IC assessments and will be reported in the annual IC summary report.

The adequacy of the continued use of ICs for each site will be evaluated during the annual IC assessments and the 5-year review process. Based on the results of the annual inspections and 5-year reviews, sites may be determined to no longer require ICs. Therefore, the 5-year review process provides a mechanism for terminating ICs and documenting that the parties of the FFA/CO (DOE-ID 1991) approve of terminated ICs. Since this document was last revised, completed remedial actions, annual inspections, and the 5-year review conducted in 2005 have identified several sites that no longer require ICs. The following sites are acceptable for unrestricted residential use and have been removed from the listing of IC sites and from the CFLUP (DOE-ID 1997) database:

- ARA-01 (evaporation pond)
- ARA-02 (ARA sanitary waste system)
- ARA-12 (ARA-III leach pond)
- ARA-16 (ARA tank)
- CPP-84 (buried gas cylinder site at INTEC)
- CPP-94 (buried gas cylinder site at INTEC)
- CPP-67 (INTEC percolation ponds)
- TSF-03 burn pit at TAN.

4.4 New Institutionally Controlled Sites

Institutionally controlled sites at the INL that are currently identified within a decision document are addressed in this plan and are listed in Appendix A. However, it is likely that additional sites that require ICs will be identified in the future. These sites and the applicable ICs will be established in a decision document. Future decision documents that institute, maintain, or evaluate ICs shall be consistent with this plan and shall be integrated into future versions of this plan. As new sites requiring ICs are identified, they will be documented in the CFLUP (DOE-ID 1997) and updated in this plan during the routine revisions to the plan. New sites and deleted sites accumulated in the electronic database will be listed in the report following the annual review of the ICs. Since this document was last revised, the following new sites at the INL have been identified for further investigation or remediation and may require ICs:

- CFA-54, buried waste pipe near CFA-674
- TRA-62, abandoned discharge lines

- TRA-63 TRA-605 warm waste line
- TSF-52, soil west of the TAN-607 decontamination shop
- TSF-54, soil beneath the TAN-607 decontamination shop sump
- TSF-55, soil in the pipe trench west of TAN-666.

The following sites have been identified for RD/RA as delineated in the *Final Record of Decision for Test Area North Operable Unit 1-10* (DOE-ID 1999):

- TSF-46, soils beneath TSF-616
- TSF-47, TAN contaminated soil
- TSF-48, TAN-615 sump soils.

New sites that have visual access restrictions will be assessed as part of the routine IC inspections.

4.5 Soil Disturbance Process

In order to properly manage and document any minor soil disturbance activity at the INL Site, consistent with the FFA/CO response actions, a Notice of Soil Disturbance (NSD) package will be prepared and coordinated as set out in Appendix D to describe the activity and identify the CERCLA activity that authorizes it. Because of the complexity of subsurface structures and soils within the INTEC area, an NSD package is required for planned disturbance, excavation, placement, and management of soils, structures, and debris within the CERCLA OU 3-13 area of contamination (AOC).

Soil disturbances at CERCLA “no action” or “no further action” locations within the INL Site also will be managed through the NSD process as minor modifications to the applicable RODs when additional information is identified that demonstrates there are potential unacceptable risks to human health and the environment associated with the site. As minor modifications to the applicable RODs, these soil disturbances that will be reviewed as an NSD are not significant enough to require an ESD to a ROD or a ROD amendment.

In addition, the NSD process will be used to manage soil disturbances at newly identified CERCLA sites that are undergoing investigation in accordance with the CERCLA new site identification process or those sites being investigated under the OU 10-08 CERCLA process. As minor components of on-Site CERCLA response actions, these soil disturbances are performed in accordance with and under authority of CERCLA (42 USC § 9601 et seq.), the “National Oil and Hazardous Substances Pollution Contingency Plan” (40 CFR 300), and the FFA/CO (DOE-ID 1991), including CERCLA Section 121(e)(1).

When contamination is discovered during soil disturbances at non-CERCLA sites and is determined to pose a possible risk to human health and the environment, the new site identification process will be implemented. The Agencies are included in the new site identification process. When unexpected conditions or unexpected contamination is identified at NSD sites, the Agencies will be notified.

The process for implementing NSDs at the INL and an example NSD form is presented in Appendix D.

5. REPORTING

5.1 Institutional Control Reports

The IC assessment results have been used to develop a routine annual IC assessment report. The reports follow EPA Region 10 institutional control guidance, including *Institutional Controls: A Site Manager's Guide to Identifying, Evaluating, and Selecting Institutional Controls at Superfund and RCRA Corrective Action Cleanups* (EPA 2000). The reports are prepared on an exception basis. That is, the reports summarize the assessment activities and report the deficiencies. The deficiencies are identified along with corrective actions, forecasted completion dates, and a status of each corrective action. The site photographs and assessment checklists are maintained in the project file and are not routinely included in the assessment report. The project file is available at the INL Site for review by the Agencies as necessary to allow Agency verification of the assessment process.

If, at some time in the future, the frequency of the IC inspections is changed from annual inspections to another identified frequency, then the frequency of the IC reports will be modified to match.

5.2 Five-Year Reviews

Section 121(c) of CERCLA (42 USC § 9601 et seq.), as amended by the “Superfund Amendments and Reauthorization Act of 1986 (SARA)” (Public Law 99-499), requires a review of every 5 years at sites that have remaining hazardous substances, pollutants, or contaminants after remedial actions. “Remedial Investigation/Feasibility Study and Selection of Remedy” (40 CFR 300.430 [f][4][ii]) further provides that sites that have remaining hazardous substances, pollutants, or contaminants above levels that allow for unlimited use and unrestricted exposure after remedial actions must be reviewed every 5 years to ensure protection of human health and the environment. The 5-year review requirement applies to all remedial actions selected under CERCLA § 121. The DOE-ID will conduct a Sitewide 5-year review of ICs in accordance with any regulations, policies, and guidance applicable at the time. New sites that have been identified since the previous 5-year review will be reported in the current 5-year review, and sites for which IC requirements have been discontinued since the previous 5-year review will be documented in the current report. A Sitewide 5-year review was performed in 2005 at the INL. The next Sitewide review is scheduled for 2010. Refer to the *Five-Year Review of CERCLA Response Actions at the Idaho National Laboratory* (DOE-ID 2006) for the recent report.

6. RECORD KEEPING

A set of the records specific to this plan is maintained in the LTS project files. The documentation will include, but will not be limited to, the following:

- This and subsequent revisions to this plan
- Initial IC assessment reports
- Routine periodic assessment checklists and photographs (project file only)
- Routine periodic IC assessment reports
- Five-year remedy review reports.

The CFLUP (DOE-ID 1997) complements and supports this plan by providing current and projected facility and land uses. The CFLUP provides guidance on facility and land use at the INL through the 100-year (year 2095) scenario and beyond, and it is used as a mechanism for tracking changes to land use and controls. The portion of the CFLUP for institutionally controlled areas is reviewed and updated as necessary to reflect changes in land uses and ICs that deal with land use. Information included in the IC portion of the CFLUP includes the following:

- CERCLA site name
- WAG under which ICs were developed
- Location of the site
- Description of the site
- Contaminants of concern
- ROD-selected remedy
- Controls
- Objective of controls.

The CFLUP is reviewed annually during IC assessments to determine whether the site and requirements data are current. The CFLUP is available at <http://cflup.inel.gov>. Agency-approved methods for public dissemination of information (such as fact sheets) will be used to notify the public of any change in land-use designation, restriction, land users, or activities.

7. REFERENCES

- 40 CFR 264.310, 2006, "Closure and Post-Closure Care," *Code of Federal Regulations*, Office of the Federal Register, May 2006.
- 40 CFR 300, 2006, "National Oil and Hazardous Substances Pollution Contingency Plan," *Code of Federal Regulations*, Office of the Federal Register, June 2006.
- 40 CFR 300.430, 2006, "Remedial Investigation/Feasibility Study and Selection of Remedy," *Code of Federal Regulations*, Office of the Federal Register, June 2006.
- 54 FR 134, 1989, "National Priorities List," *Federal Register*, U.S. Environmental Protection Agency, p. 29,820, July 14, 1989.
- 42 USC § 4321 et seq., 1970, "National Environmental Policy Act of 1969," *United States Code*, January 1, 1970.
- 42 USC § 6901 et seq., 1976, "Resource Conservation and Recovery Act of 1976," *United States Code*, October 21, 1976.
- 42 USC § 9601 et seq., 1980, "Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA/Superfund)," *United States Code*, December 11, 1980.
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- DOE-ID, 1991, *Federal Facility Agreement and Consent Order for the Idaho National Engineering Laboratory*, Administrative Docket No. 1088-06-29-120, U.S. Department of Energy Idaho Operations Office; U.S. Environmental Protection Agency, Region 10; Idaho Department of Health and Welfare, December 4, 1991.
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- EPA, 2000, *Institutional Controls: A Site Manager's Guide to Identifying, Evaluating, and Selecting Institutional Controls at Superfund and RCRA Corrective Action Cleanups*, U.S. Environmental Protection Agency, September 2000.

GDE-72, 2006, "Remedial Design and Remedial Action," Rev. 2, *Manual 8–Environmental Protection and Compliance*, Idaho National Laboratory, Idaho Cleanup Project, June 2006.

HWMA, 1983, "Hazardous Waste Management Act of 1983," Idaho Code § 39-4401 et seq., State of Idaho, Boise, Idaho.

MCP-3562, 2004, "Hazard Identification, Analysis, and Control of Operational Activities," Rev. 9, *Manual 9–Operations*, Idaho National Engineering and Environmental Laboratory, December 2004.

PER-112, 2006, "Volume 21 – HWMA/RCRA Post-Closure Permit for the INTEC WCF at the INL," *Volume 21 HWMA/RCRA Post-Closure Permit for the INTEC WCF at the INEEL*, Rev. 8, Idaho National Laboratory, Idaho Cleanup Project, January 2006.

Public Law 99-499, 1986, "Superfund Amendments and Reauthorization Act of 1986 (SARA)," 100 Statutes 1728, *Public Law*, October 17, 1986.

Appendix A

Institutional Controls Summary Table and List of Wells Requiring Inspections

Institutional Controls Summary

Site Code	Description	Contaminants of Concern/Exposure Threat	Controls	Objective	Source Reference
WAG 1					
TSF-05	TAN injection well	Radionuclides	Visible access restrictions, control activities, prevent well drilling, property transfer requirements	Prevent consumption and use of groundwater >MCL and/or 1E-04 risk.	OU 1-10 ROD (DOE/ID-10682) p. vii and Table 12-2, OU 1-10 ESD (DOE/ID-11050)
TSF-06 Area 1	Area northeast of turntable	Radionuclides	Visible access restrictions, control activities, property lease requirements, property transfer requirements	Limit exposure to contaminated soil and ensure that land use is appropriate.	OU 1-10 ROD (DOE/ID-10682) p. vii and Table 12-2, OU 1-10 ESD (DOE/ID-11050)
TSF-06 Area 5	Radioactive soil berm	Radionuclides	Visible access restrictions, control activities, property transfer requirements	Limit direct exposure to radiologically contaminated soil and ensure that land use is appropriate.	OU 1-10 ROD (DOE/ID-10682) p. vii and Table 12-2, OU 1-10 ESD (DOE/ID-11050)
TSF-06 Area 10	Reactor vessel burial site	Radionuclides	Visible access restrictions, control activities, property transfer requirements	Limit direct exposure to radiologically contaminated soil and ensure that land use is appropriate.	OU 1-10 ROD (DOE/ID-10682) p. vii; Table 12-2, OU 1-10 ESD (DOE/ID-11050); and OU 1-10 ROD Amendment (DOE/ID-10139) Table 11-4
TSF-06 Area 11	Contaminated ditch	Radionuclides	Visible access restrictions, control activities, property lease requirements, property transfer requirements	Limit exposure to contaminated soil and ensure that land use is appropriate.	OU 1-10 ROD (DOE/ID-10682) p. vii; Table 12-2, OU 1-10 ESD (DOE/ID-11050); and OU 1-10 ROD Amendment (DOE/ID-10139) Table 11-4
TSF-06 Area B	Area south of turntable	Radionuclides	Visible access restrictions, control activities, property transfer requirements	Limit direct exposure to radiologically contaminated soil and ensure that land use is appropriate.	OU 1-10 ROD (DOE/ID-10682) p. vii and Table 12-2, OU 1-10 ESD (DOE/ID-11050)
TSF-07	Disposal pond	Radionuclides	Visible access restrictions, control activities, property transfer requirements	Limit direct exposure to radiologically contaminated soil and ensure that land use is appropriate.	OU 1-10 ROD (DOE/ID-10682) p. vii and Table 12-2, OU 1-10 ESD (DOE/ID-11050)
TSF-08 (OU 10-08)	Mercury spill	Radionuclides	Visible access restrictions, control activities, property transfer requirements	Limit direct exposure to radiologically contaminated soil and ensure that land use is appropriate.	OU 1-10 ROD (DOE/ID-10682) p. vii and Table 12-2, OU 1-10 ESD (DOE/ID-11050)

Site Code	Description	Contaminants of Concern/Exposure Threat	Controls	Objective	Source Reference
TSF-09	V-Tanks V-1, V-2, and V-3	Radionuclides	Visible access restrictions, control activities, property transfer requirements	Limit direct exposure to radiologically contaminated soil and ensure that land use is appropriate.	OU 1-10 ROD (DOE/ID-10682) p. vii and Table 12-2, OU 1-10 ESD (DOE/ID-11050)
TSF-10	Drainage pond	Radionuclides	Visible access restrictions, control activities, property lease requirements	Limit exposure to contaminated soil and ensure that land use is appropriate.	OU 1-10 ROD (DOE/ID-10682) p. vii and Table 12-2, OU 1-10 ESD (DOE/ID-11050)
TSF-18	V-Tank V-9	Radionuclides	Visible access restrictions, control activities, property transfer requirements	Limit direct exposure to radiologically contaminated soil and ensure that land use is appropriate.	OU 1-10 ROD (DOE/ID-10682) p. vii and Table 12-2, OU 1-10 ESD (DOE/ID-11050)
TSF-23	Groundwater contamination	Radionuclides	Visible access restrictions, control activities, prevent well drilling, and property transfer requirements	Prevent consumption and use of groundwater >MCL and/or 1E-04 risk.	OU 1-10 ROD (DOE/ID-10682) p. vii and Table 12-2, OU 1-10 ESD (DOE/ID-11050)
TSF-26	PM-2A area	Radionuclides	Visible access restrictions, control activities, property transfer requirements	Limit direct exposure to radiologically contaminated soil and ensure that land use is appropriate.	OU 1-10 ROD (DOE/ID-10682) p. vii and Table 12-2, OU 1-10 ESD (DOE/ID-11050)
TSF-28	Sewage treatment plant	Radionuclides	Visible access restrictions, control activities, property transfer requirements	Limit exposure to contaminated soil and ensure that land use is appropriate.	OU 1-10 ROD (DOE/ID-10682) p. vii and Table 12-2, OU 1-10 ESD (DOE/ID-11050)
TSF-29	Acid pond	Radionuclides	Visible access restrictions, control activities, property transfer requirements	Limit exposure to contaminated soil and ensure that land use is appropriate.	OU 1-10 ROD (DOE/ID-10682) p. vii and Table 12-2, OU 1-10 ESD (DOE/ID-11050)
TSF-39	Asbestos in gravel pit	Radionuclides	Visible access restrictions, control activities, property transfer requirements	Limit exposure to contaminated soil and ensure that land use is appropriate.	OU 1-10 ROD (DOE/ID-10682) p. vii and Table 12-2, OU 1-10 ESD (DOE/ID-11050)
TSF-42	Contaminated pipe	Radionuclides	Visible access restrictions and control of activities	Limit exposure to contaminated pipe until D&D is complete.	OU 1-10 ROD (DOE/ID-10682) p. vii and Table 12-2, OU 1-10 ESD (DOE/ID-11050)
TSF-43	Radioactive Parts Security Storage Area building and pad	Radionuclides	Visible access restrictions, control activities, property transfer requirements	Limit exposure to contaminated soil and ensure that land use is appropriate.	OU 1-10 ROD (DOE/ID-10682) p. vii and Table 12-2, OU 1-10 ESD (DOE/ID-11050)

Site Code	Description	Contaminants of Concern/Exposure Threat	Controls	Objective	Source Reference
TSF-46	Soils beneath TSF-616	Radionuclides	Pending	Visible access restrictions are implemented in accordance with EA-TI-021.	—
TSF-47	TSF-615 sewer line soils	Radionuclides	Pending	Visible access restrictions are implemented in accordance with EA-TI-021.	—
TSF-48	TAN-615 sump soils	Radionuclides	Pending	Visible access restrictions are implemented in accordance with EA-TI-021.	—
TSF-52	Soil around TAN-607 decontamination shop door	Radionuclides	Pending	Visible access restrictions are implemented in accordance with EA-TI-021.	—
TSF-54	Soil beneath TAN-607 decontamination shop sump	Radionuclides	Pending	Visible access restrictions are implemented in accordance with EA-TI-021.	—
TSF-55	Soil in pipe trench west of TAN-666	Radionuclides	Pending	Visible access restrictions are implemented in accordance with EA-TI-021.	—
IET-04	IET stack rubble site	Radionuclides	Visible access restrictions, control activities, property transfer requirements	Limit exposure to contaminated soil and ensure that land use is appropriate.	OU 1-10 ROD (DOE/ID-10682) p. vii and Table 12-2, OU 1-10 ESD (DOE/ID-11050)
WRRTF-01	Burn pits	Lead	Visible access restrictions, control activities, property transfer requirements	Limit exposure to contaminated soil and maintain the integrity of the native cover.	OU 1-10 ROD (DOE/ID-10682) p. vii and Table 12-2, OU 1-10 ESD (DOE/ID-11050)
WAG 2					
TRA-03	Warm waste pond	Radionuclides	Visible access restrictions, control drilling and excavating activities, property transfer restrictions, notice to stakeholders	Maintain the integrity of the contaminant barrier.	Section 8 of the OU 2-13 ROD (DOE/ID-10586) and Appendix B of the ESD (DOE/ID-10744) to the ROD for TRA OU 2-13
TRA-04	Warm waste retention area	Radionuclides	Visible access restrictions, control drilling and excavating activities, property transfer restrictions, notice to stakeholders	Limit exposure to contaminated soil.	Section 8 of the OU 2-13 ROD (DOE/ID-10586) and Appendix B of the ESD (DOE/ID-10744) to the ROD for TRA OU 2-13

Site Code	Description	Contaminants of Concern/Exposure Threat	Controls	Objective	Source Reference
TRA-06	Chemical waste pond	Mercury	Visible access restrictions and property transfer requirements	Limit residential land use and maintain the integrity of the cap.	Section 8 of the OU 2-13 ROD (DOE/ID-10586) and Appendix B of the ESD (DOE/ID-10744) to the ROD for TRA OU 2-13
TRA-08	Cold waste pond	Radionuclides	Property lease requirements (Warning signs are not required.)	Control land use as industrial until residential risk is less than 1E-04.	Section 8 of the OU 2-13 ROD (DOE/ID-10586) and Appendix B of the ESD (DOE/ID-10744) to the ROD for TRA OU 2-13
TRA-13	Sewage leach pond	Radionuclides	Visible access restrictions, control drilling and excavating activities, property transfer restrictions	Maintain the integrity of the cap.	Section 8 of the OU 2-13 ROD (DOE/ID-10586) and Appendix B of the ESD (DOE/ID-10744) to the ROD for TRA OU 2-13
TRA-13 SCA	Sewage leach ponds' berm and soil contamination area	Radionuclides	Visible access restrictions and control drilling and excavating activities	Limit exposure to contaminated soil and maintain the integrity of the cap.	Section 8 of the OU 2-13 ROD (DOE/ID-10586) and Appendix B of the ESD (DOE/ID-10744) to the ROD for TRA OU 2-13
TRA-15	Soil at hot waste tanks at TRA-613	Radionuclides	Visible access restrictions, control drilling and excavating activities, property transfer requirements	Limit exposure to contaminated soil.	Section 8 of the OU 2-13 ROD (DOE/ID-10586) and Appendix B of the ESD (DOE/ID-10744) to the ROD for TRA OU 2-13
TRA-19	Soil at Tanks 1 and 2 at TRA-630	Radionuclides	Visible access restrictions, control drilling and excavating activities, property transfer requirements	Limit exposure to contaminated soil.	Section 8 of the OU 2-13 ROD (DOE/ID-10586) and Appendix B of the ESD (DOE/ID-10744) to the ROD for TRA OU 2-13
TRA-34	North storage area	Radionuclides	Property lease requirements (Warning signs are not required.)	Control land use as industrial until residential risk is less than 1E-04.	Section 8 of the OU 2-13 ROD (DOE/ID-10586) and Appendix B of the ESD (DOE/ID-10744) to the ROD for TRA OU 2-13
TRA-62	Abandoned discharge pipe between TRA-608 and TRA-701	Metals	Pending	Visible access restrictions are implemented in accordance with EA-TI-021.	—
TRA-63	TRA-605 Warm Waste Line	Radionuclides	Pending	Visible access restrictions are implemented in accordance with EA-TI-021.	—

Site Code	Description	Contaminants of Concern/Exposure Threat	Controls	Objective	Source Reference
TRA-619	PCB spill	PCBs	Property lease requirements (Warning signs are not required.)	Control land use as industrial and ensure that land use is appropriate.	Section 8 of the OU 2-13 ROD (DOE/ID-10586) and Appendix B of the ESD (DOE/ID-10744) to the ROD for TRA OU 2-13
TRA-626	PCB spill	PCBs	Property lease requirements (Warning signs are not required.)	Control land use as industrial and ensure that land use is appropriate.	Section 8 of the OU 2-13 ROD (DOE/ID-10586) and Appendix B of the ESD (DOE/ID-10744) to the ROD for TRA OU 2-13
TRA-653	PCB spill	PCBs	Property lease requirements (Warning signs are not required.)	Control land use as industrial and ensure that land use is appropriate.	Section 8 of the OU 2-13 ROD (DOE/ID-10586) and Appendix B of the ESD (DOE/ID-10744) to the ROD for TRA OU 2-13
TRA-GW	TRA perched water and Snake River Plain Aquifer	Tritium and chromium	Control activities and document in CFLUP (DOE/ID-10154)—property transfer requirements. (Warning signs are not required.)	Prevent consumption of groundwater that is greater than the MCLs.	Section 8 of the OU 2-13 ROD (DOE/ID-10586) and Appendix B of the ESD (DOE/ID-10744) to the ROD for TRA OU 2-13
TRA-X	Hot Tree Site	Radionuclides	Property lease requirements (Warning signs are not required.)	Control land use as industrial until residential risk is less than 1E-04.	Section 8 of the OU 2-13 ROD (DOE/ID-10586) and Appendix B of the ESD (DOE/ID-10744) to the ROD for TRA OU 2-13
TRA-Y	Brass cap area	Radionuclides	Visible access restrictions, control drilling and excavating activities, property transfer requirements	Limit exposure to contaminated soil.	Section 8 of the OU 2-13 ROD (DOE/ID-10586) and Appendix B of the ESD (DOE/ID-10744) to the ROD for TRA OU 2-13
WAG 3					
Group 1	Tank Farm Soils				
CPP-15	Contaminated soil in the Tank Farm	Radionuclides and metals	Visible access restrictions, control activities	Prevent intrusion into the underlying contaminated soils.	OU 3-13 ROD (DOE/ID-10660) pp. iv, 4-3, and Table 11-1
CPP-16	Contaminated soil from leak in line from CPP-WM-181 to the process equipment waste evaporator	Radionuclides and metals	Visible access restrictions, control activities	Prevent intrusion into the underlying contaminated soils.	OU 3-13 ROD (DOE/ID-10660) pp. iv, 4-3, and Table 11-1

Site Code	Description	Contaminants of Concern/Exposure Threat	Controls	Objective	Source Reference
CPP-20	CPP-604 radioactive waste unloading area	Radionuclides and metals	Visible access restrictions, control activities	Prevent intrusion into the underlying contaminated soils.	OU 3-13 ROD (DOE/ID-10660) pp. iv, 4-3, and Table 11-1
CPP-24	CPP Tank Farm area bucket spill	Radionuclides and metals	Visible access restrictions, control activities	Prevent intrusion into the underlying contaminated soils.	OU 3-13 ROD (DOE/ID-10660) pp. iv, 4-3, and Table 11-1
CPP-25 (same as CPP-20)	Contaminated soil in the Tank Farm area north of CPP-604	Radionuclides and metals	Visible access restrictions, control activities	Prevent intrusion into the underlying contaminated soils.	OU 3-13 ROD (DOE/ID-10660) pp. iv, 4-3, and Table 11-1
CPP-26	Contaminated soil in the Tank Farm	Radionuclides and metals	Visible access restrictions, control activities	Prevent intrusion into the underlying contaminated soils.	OU 3-13 ROD (DOE/ID-10660) pp. iv, 4-3, and Table 11-1
CPP-27	Contaminated soil in the Tank Farm	Radionuclides and metals	Visible access restrictions, control activities	Prevent intrusion into the underlying contaminated soils.	OU 3-13 ROD (DOE/ID-10660) pp. iv, 4-3, and Table 11-1
CPP-28	Contaminated soil in the Tank Farm	Radionuclides and metals	Visible access restrictions, control activities	Prevent intrusion into the underlying contaminated soils.	OU 3-13 ROD (DOE/ID-10660) pp. iv, 4-3, and Table 11-1
CPP-30	Contaminated soil in the Tank Farm	Radionuclides and metals	Visible access restrictions, control activities	Prevent intrusion into the underlying contaminated soils.	OU 3-13 ROD (DOE/ID-10660) pp. iv, 4-3, and Table 11-1
CPP-31	Contaminated soil in the Tank Farm	Radionuclides and metals	Visible access restrictions, control activities	Prevent intrusion into the underlying contaminated soils.	OU 3-13 ROD (DOE/ID-10660) pp. iv, 4-3, and Table 11-1
CPP-32	Contaminated soil in the Tank Farm	Radionuclides and metals	Visible access restrictions, control activities	Prevent intrusion into the underlying contaminated soils.	OU 3-13 ROD (DOE/ID-10660) pp. iv, 4-3, and Table 11-1
CPP-33	Contaminated soil in the Tank Farm	Radionuclides and metals	Visible access restrictions, control activities	Prevent intrusion into the underlying contaminated soils.	OU 3-13 ROD (DOE/ID-10660) pp. iv, 4-3, and Table 11-1
CPP-58	Contaminated soil in the Tank Farm	Radionuclides and metals	Visible access restrictions, control activities	Prevent intrusion into the underlying contaminated soils.	OU 3-13 ROD (DOE/ID-10660) pp. iv, 4-3, and Table 11-1
CPP-79	Contaminated soil in the Tank Farm	Radionuclides and metals	Visible access restrictions, control activities	Prevent intrusion into the underlying contaminated soils.	OU 3-13 ROD (DOE/ID-10660) pp. iv, 4-3, and Table 11-1
CPP-96	Contaminated soil in the Tank Farm	Radionuclides and metals	Visible access restrictions, control activities	Prevent intrusion into the underlying contaminated soils.	OU 3-13 ROD (DOE/ID-10660) pp. iv, 4-3, and Table 11-1

Site Code	Description	Contaminants of Concern/Exposure Threat	Controls	Objective	Source Reference
Group 2	Soil under Buildings				
CPP-02	French drain	Radionuclides and metals	Visible access restrictions and control of drilling and excavation activities	Limit direct exposure to underlying radiologically contaminated soil areas.	OU 3-13 ROD (DOE/ID-10660) pp. iv, 4-3, and Table 11-1
CPP-41a	Fire training pits	Radionuclides and metals	Visible access restrictions and control of drilling and excavation activities	Limit direct exposure to underlying radiologically contaminated soil areas.	OU 3-13 ROD (DOE/ID-10660) pp. iv, 4-3, and Table 11-1
CPP-60	Paint shop	Radionuclides and metals	Visible access restrictions and control of drilling and excavation activities	Limit direct exposure to underlying radiologically contaminated soil areas.	OU 3-13 ROD (DOE/ID-10660) pp. iv, 4-3, and Table 11-1
CPP-68	Abandoned gasoline tank	Radionuclides and metals	Visible access restrictions and control of drilling and excavation activities	Limit direct exposure to underlying radiologically contaminated soil areas.	OU 3-13 ROD (DOE/ID-10660) pp. iv, 4-3, and Table 11-1
CPP-80	Vent tunnel drain leak	Radionuclides and metals	Visible access restrictions and control of drilling and excavation activities	Limit direct exposure to underlying radiologically contaminated soil areas.	OU 3-13 ROD (DOE/ID-10660) pp. iv, 4-3, and Table 11-1
CPP-85	WCF blower corridor	Radionuclides and metals	Visible access restrictions and control of drilling and excavation activities	Limit direct exposure to underlying radiologically contaminated soil areas.	OU 3-13 ROD (DOE/ID-10660) pp. iv, 4-3, and Table 11-1
CPP-86	Waste trench sump	Radionuclides and metals	Visible access restrictions and control of drilling and excavation activities	Limit direct exposure to underlying radiologically contaminated soil areas.	OU 3-13 ROD (DOE/ID-10660) pp. iv, 4-3, and Table 11-1
CPP-87	Cell sump and floor drain	Radionuclides and metals	Visible access restrictions and control of drilling and excavation activities	Limit direct exposure to underlying radiologically contaminated soil areas.	OU 3-13 ROD (DOE/ID-10660) pp. iv, 4-3, and Table 11-1
CPP-89	Tunnel excavation	Radionuclides and metals	Visible access restrictions and control of drilling and excavation activities	Limit direct exposure to underlying radiologically contaminated soil areas.	OU 3-13 ROD (DOE/ID-10660) pp. iv, 4-3, and Table 11-1
Group 3	Miscellaneous soil at INTEC				
CPP-01	East of CPP-603	Radionuclides	Property transfer requirements	Ensure that land use is appropriate if contamination left in place is >10 ft.	OU-3-13 ROD (DOE/ID-10660) pp. vi, 4-2, 4-8, and Table 11-1

Site Code	Description	Contaminants of Concern/Exposure Threat	Controls	Objective	Source Reference
CPP-03	Southeast of CPP-603	Radionuclides	Property transfer requirements	Ensure that land use is appropriate if contamination left in place is >10 ft.	OU-3-13 ROD (DOE/ID-10660) pp. vi, 4-2, 4-8, and Table 11-1
CPP-04	Soil around CPP-603 setting tank	Radionuclides	Property transfer requirements	Ensure that land use is appropriate if contamination left in place is >10 ft.	OU-3-13 ROD (DOE/ID-10660) pp. vi, 4-2, 4-8, and Table 11-1
CPP-05	CPP-603 filter line failure	Radionuclides	Property transfer requirements	Ensure that land use is appropriate if contamination left in place is >10 ft.	OU-3-13 ROD (DOE/ID-10660) pp. vi, 4-2, 4-8, and Table 11-1
CPP-08	Northeast corner of CPP-603	Radionuclides	Property transfer requirements	Ensure that land use is appropriate if contamination left in place is >10 ft.	OU-3-13 ROD (DOE/ID-10660) pp. vi, 4-2, 4-8, and Table 11-1
CPP-09	Contaminated soils around CPP-603	Radionuclides	Property transfer requirements	Ensure that land use is appropriate if contamination left in place is >10 ft.	OU-3-13 ROD (DOE/ID-10660) pp. vi, 4-2, 4-8, and Table 11-1
CPP-10	CPP-603 plastic pipeline break	Radionuclides	Property transfer requirements	Ensure that land use is appropriate if contamination left in place is >10 ft.	OU-3-13 ROD (DOE/ID-10660) pp. vi, 4-2, 4-8, and Table 11-1
CPP-11	CPP-603 sludge release	Radionuclides	Property lease requirements	Ensure that land use is appropriate if contamination left in place is >10 ft.	OU-3-13 ROD (DOE/ID-10660) pp. vi, 4-2, 4-8, and Table 11-1
CPP-13	Northeast corner of CPP-633	Radionuclides	Property lease requirements	Ensure that land use is appropriate if contamination left in place is >10 ft.	OU-3-13 ROD (DOE/ID-10660) pp. vi, 4-2, 4-8, and Table 11-1
CPP-14	Sewage Treatment Plant	Radionuclides	Property lease requirements	Ensure that land use is appropriate if contamination left in place is >10 ft.	OU-3-13 ROD (DOE/ID-10660) pp. vi, 4-2, 4-8, and Table 11-1
CPP-19	Line leak	Radionuclides	Property lease requirements	Ensure that land use is appropriate if contamination left in place is >10 ft.	OU-3-13 ROD (DOE/ID-10660) pp. vi, 4-2, 4-8, and Table 11-1
CPP-34	Disposal trenches	Radionuclides	Property lease requirements	Ensure that land use is appropriate if contamination left in place is >10 ft.	OU-3-13 ROD (DOE/ID-10660) pp. vi, 4-2, 4-8, and Table 11-1
CPP-35	Decontamination spill	Radionuclides	Property lease requirements	Ensure that land use is appropriate if contamination left in place is >10 ft.	OU-3-13 ROD (DOE/ID-10660) pp. vi, 4-2, 4-8, and Table 11-1
CPP-36	Transfer line leak	Radionuclides	Property lease requirements	Ensure that land use is appropriate if contamination left in place is >10 ft.	OU-3-13 ROD (DOE/ID-10660) pp. vi, 4-2, 4-8, and Table 11-1
CPP-37a	Gravel pit	Radionuclides	Property lease requirements	Ensure that land use is appropriate if contamination left in place is >10 ft.	OU-3-13 ROD (DOE/ID-10660) pp. vi, 4-2, 4-8, and Table 11-1
CPP-37b and CPP-37c	Landfill	Radionuclides	Property lease requirements	Ensure that land use is appropriate if contamination left in place is >10 ft.	OU-3-13 ROD (DOE/ID-10660) pp. vi, 4-2, 4-8, and Table 11-1

Site Code	Description	Contaminants of Concern/Exposure Threat	Controls	Objective	Source Reference
CPP-44	Grease pit	Radionuclides	Property lease requirements	Ensure that land use is appropriate if contamination left in place is >10 ft.	OU-3-13 ROD (DOE/ID-10660) pp. vi, 4-2, 4-8, and Table 11-1
CPP-48	French drain	Radionuclides	Property lease requirements	Ensure that land use is appropriate if contamination left in place is >10 ft.	OU-3-13 ROD (DOE/ID-10660) pp. vi, 4-2, 4-8, and Table 11-1
CPP-55	Mercury contamination	Metals	Property lease requirements	Ensure that land use is appropriate if contamination left in place is >10 ft.	OU-3-13 ROD (DOE/ID-10660) pp. vi, 4-2, 4-8, and Table 11-1
CPP-91	Blower pit drain	Radionuclides	Property lease requirements	Ensure that land use is appropriate if contamination left in place is >10 ft.	OU-3-13 ROD (DOE/ID-10660) pp. vi, 4-2, 4-8, and Table 11-1
CPP-92	Soil boxes	Radionuclides	Property lease requirements	Ensure that land use is appropriate if contamination left in place is >10 ft.	OU-3-13 ROD (DOE/ID-10660) pp. vi, 4-2, 4-8, and Table 11-1
CPP-93	Simulated calcine storage	Radionuclides	Property lease requirements	Ensure that land use is appropriate if contamination left in place is >10 ft.	OU-3-13 ROD (DOE/ID-10660) pp. vi, 4-2, 4-8, and Table 11-1
CPP-98	Shoring boxes	Radionuclides	Property transfer requirements	Ensure that land use is appropriate if contamination left in place is >10 ft.	OU-3-13 ROD (DOE/ID-10660) pp. vi, 4-2, 4-8, and Table 11-1
CPP-99	Boxed soils	Radionuclides	Property transfer requirements	Ensure that land use is appropriate if contamination left in place is >10 ft.	OU-3-13 ROD (DOE/ID-10660) pp. vi, 4-2, 4-8, and Table 11-1
Group 4	Perched Water				
CPP-83	Strontium-contaminated perched water	Radionuclides	Control of activities (drilling of wells for drinking) and property lease requirements	Prevent consumption and use of >MCL and/or >1E-04 risk drinking water. Prevent drilling through contaminated interbeds and dragging contamination downhole to the aquifer.	OU-3-13 ROD (DOE/ID-10660) pp. viii, 4-5, 4-9, and Table 11-1
Group 5	Snake River Plain Aquifer				
CPP-23	Injection well	Radionuclides	Control of activities (drilling of wells for drinking) and property transfer requirements	Prevent consumption and use of >MCL and/or >1E-04 risk drinking water (not applicable after 100 years).	OU-3-13 ROD (DOE/ID-10660) pp. ix, 4-2, 4-9, and Table 11-1

Site Code	Description	Contaminants of Concern/Exposure Threat	Controls	Objective	Source Reference
Group 6		All group 6 sites are remedy complete and no longer require ICs.			
Group 7	SFE-20 Hot Waste Tank				
CPP-69	SFE-20 Hot Waste Tank System	Radionuclides and metals	Visible assess restrictions and control activities (drilling or excavating)	Prevent intrusion into underlying contaminated soils.	OU-3-13 ROD (DOE/ID-10660) pp. x, 4-5, 4-10, and Table 11-1
WAG 3 No Further Action Sites					
CPP-06	Trench east of CPP-603	Radionuclides	Property lease requirements and land use controls (Warning signs are not required.)	Control land use as protective and consistent with NFA determination.	OU-3-13 ROD (DOE/ID-10660) pp. xi, 4-6, 4-10, and Table 11-1
CPP-17	Soil storage south of Peach Bottom Fuel Storage area CPP-749	Radionuclides	Property lease requirements and land use controls (Warning signs are not required.)	Control land use as protective and consistent with NFA determination.	OU-3-13 ROD (DOE/ID-10660) pp. xi, 4-6, 4-10, and Table 11-1
CPP-22	Particulate air release south of CPP-603	Radionuclides	Property lease requirements and land use controls (Warning signs are not required.)	Control land use as protective and consistent with NFA determination.	OU-3-13 ROD (DOE/ID-10660) pp. xi, 4-6, 4-10, and Table 11-1
CPP-61	PCB spill at CPP-718 transformer yard	PCBs	Property lease requirements and land use controls (Warning signs are not required.)	Provide non-engineered restrictions on activities, access, or exposure to soil contaminants.	OU-3-13 ROD (DOE/ID-10660) pp. xi, 4-6, 4-10, and Table 11-1 and ESD to OU-3-13 ROD (DOE/ID-11109) p. 11
CPP-88	Radiologically contaminated soil	Radionuclides	Property lease requirements and land use controls (Warning signs are not required.)	Control land use as protective and consistent with NFA determination.	OU-3-13 ROD (DOE/ID-10660) pp. xi, 4-6, 4-10, and Table 11-1
CPP-90	Ruthenium detection	Radionuclides	Property lease requirements and land use controls (Warning signs are not required.)	Control land use as protective and consistent with NFA determination.	OU-3-13 ROD (DOE/ID-10660) pp. xi, 4-6, 4-10, and Table 11-1
CPP-95	Airborne plume	Radionuclides	Property lease requirements and land use controls (Warning signs are not required.)	Control land use as protective and consistent with NFA determination.	OU-3-13 ROD (DOE/ID-10660) pp. xi, 4-6, 4-10, and Table 11-1

Site Code	Description	Contaminants of Concern/Exposure Threat	Controls	Objective	Source Reference
WAG 4					
CFA-01	Landfill I	Asbestos and chemicals	Visible access restrictions, control drilling and excavation activities, property transfer requirements	Maintain integrity of soil cover.	OU-4-13 ROD (DOE/ID-10719, Rev. 2) pp. iv, vi, and Table 12-2
CFA-02	Landfill II	Asbestos and chemicals	Visible access restrictions, control drilling and excavation activities, property transfer requirements	Maintain integrity of soil cover.	OU-4-13 ROD (DOE/ID-10719, Rev. 2) pp. iv, vi, and Table 12-2
CFA-03	Landfill III	Asbestos and chemicals	Visible access restrictions, control drilling and excavation activities, property transfer requirements	Maintain integrity of soil cover.	OU-4-13 ROD (DOE/ID-10719, Rev. 2) pp. iv, vi, and Table 12-2
CFA-07	French drains	Radionuclides	Visible access restrictions, control drilling and excavation activities, property lease requirements	Limit residential land use for depths greater than 10 ft.	OU-4-13 ROD (DOE/ID-10719, Rev. 2) pp. iv, vi, and Table 12-2
CFA-08	Sewage Treatment Plant drainfield	Radionuclides	Visible access restrictions, control drilling and excavation activities, property lease requirements	Maintain integrity of soil cover.	OU-4-13 ROD (DOE/ID-10719, Rev. 2) pp. iv, vi, and Table 12-2
CFA-54	Buried pipe near CFA-674	—	Visible access restrictions are implemented in accordance with EA-TI-021	—	—
WAG 5					
ARA-03	ARA-I sheeting pad	Radionuclides	Property lease requirements	Prevent exposure to contaminated soil. Control land use as industrial.	OU-5-12 ROD (DOE/ID-10700) pp. vii and Table 33
ARA-06	ARA-II burial ground	Radionuclides	Visible access restrictions, control drilling and excavation activities, property lease requirements	Prevent exposure to contaminated soil. Control land use as industrial.	OU-5-12 ROD (DOE/ID-10700) pp. vii and Table 33

Site Code	Description	Contaminants of Concern/Exposure Threat	Controls	Objective	Source Reference
ARA-07	ARA-II seepage pit to east	Radionuclides	Visible access restrictions, control drilling and excavation activities, property lease requirements	Prevent exposure to contaminated soil. Control land use as industrial.	OU-5-12 ROD (DOE/ID-10700) pp. vii and Table 33
ARA-08	ARA-II seepage pit to west	Radionuclides	Visible access restrictions, control drilling and excavation activities, property lease requirements	Prevent exposure to contaminated soil. Control land use as industrial.	OU-5-12 ROD (DOE/ID-10700) pp. vii and Table 33
ARA-23	Contaminated soils around CPP-603	Radionuclides	Visible access restrictions, control drilling and excavation activities, property lease requirements	Prevent exposure to contaminated soil. Control land use as industrial.	OU-5-12 ROD (DOE/ID-10700) pp. vii and Table 33
ARA-24	ARA-III windblown soil	Asbestos	Visible access restrictions, control drilling and excavation activities, property lease requirements	Prevent exposure to contaminated soil. Control land use as industrial..	OU-5-12 ROD (DOE/ID-10700) pp. vii and Table 33
ARA-25	Contaminated soils beneath ARA-I hot cells	Radionuclides	Visible access restrictions, control drilling and excavation activities, property transfer requirements	Prevent exposure to contaminated soil. Control land use as industrial.	OU-5-12 ROD (DOE/ID-10700) pp. vii and Table 33
PBF-10	PBF evaporation pond	Radionuclides	Visible access restrictions, control drilling and excavation activities, property lease requirements	Prevent exposure to contaminated soil. Control land use as industrial.	OU-5-12 ROD (DOE/ID-10700) pp. vii and Table 33
PBF-12	SPERT-IV leach pond	Radionuclides	Visible access restrictions, control drilling and excavation activities, property lease requirements	Prevent exposure to contaminated soil. Control land use as industrial.	OU-5-12 ROD (DOE/ID-10700) pp. vii and Table 33
PBF-13	PBF rubble pit	Asbestos	Visible access restrictions, control drilling and excavation activities, maintain data in CFLUP (DOE/ID-10154)—property transfer requirements	Prevent exposure to contaminated soil. Control land use as industrial.	OU-5-12 ROD (DOE/ID-10700) pp. vii and Table 33

Site Code	Description	Contaminants of Concern/Exposure Threat	Controls	Objective	Source Reference
PBF-21	SPERT-IV large leach pond	Radionuclides	Visible access restrictions, control drilling and excavation activities, maintain data in CFLUP (DOE/ID-10154)—property transfer requirements	Prevent exposure to contaminated soil. Control land use as industrial.	OU-5-12 ROD (DOE/ID-10700) pp. vii and Table 33
PBF-22	SPERT-IV leach pond	Radionuclides	Visible access restrictions, control drilling and excavation activities, maintain data in CFLUP (DOE/ID-10154)—property transfer requirements	Prevent exposure to contaminated soil. Control land use as industrial.	OU-5-12 ROD (DOE/ID-10700) pp. vii and Table 33
PBF-26	SPERT-IV lake	Radionuclides	Visible access restrictions, control drilling and excavation activities, maintain data in CFLUP (DOE/ID-10154)—property transfer requirements	Prevent exposure to contaminated soil. Control land use as industrial.	OU-5-12 ROD (DOE/ID-10700) pp. vii and Table 33
WAG 6					
BORAX-01	BORAX-II through V leach pond	Radionuclides	Visible access restrictions and control drilling and excavation activities	Restrict exposure to contaminated soil. Control land use as industrial.	OU 6-05 and 10-08 ROD (DOE/ID-10980) Table 34
BORAX-02	BORAX-I burial site	Radionuclides	Visible access restrictions and control drilling and excavation activities	Maintain integrity of the containment barrier. Control land use as industrial.	OU 6-05 and 10-08 ROD (DOE/ID-10980) Table 34
BORAX-08	BORAX ditch	Radionuclides	Visible access restrictions and control drilling and excavation activities	Restrict exposure to contaminated soil. Control land use as industrial.	OU 6-05 and 10-08 ROD (DOE/ID-10980) Table 34
BORAX-09	BORAX-II through V	Radionuclides	Visible access restrictions, control drilling and excavating activities, property transfer requirements	Maintain integrity of the contaminant barrier. Control land use as industrial.	OU 6-05 and 10-08 ROD (DOE/ID-10980) Table 34
EBR-08	EBR-01 (WMO-703) fuel oil tank	Diesel fuel	Visible access restrictions, control drilling and excavation activities, property transfer requirements	Control land use as industrial.	OU 6-05 and 10-08 ROD (DOE/ID-10980) Table 34

Site Code	Description	Contaminants of Concern/Exposure Threat	Controls	Objective	Source Reference
WAG 7					
SDA site	SDA	Pre-ROD	Visible access restrictions on SDA perimeter fence	Warn of hazards pending OU 7-13/14 ROD.	
Pad A	Pad A cap	Radionuclides	Visible access restrictions, control drilling and excavation activities, property transfer requirements	Control land use as industrial.	OU 7-12 ROD (Document ID: 5632)
OCVZ	OCVZ treatment units	Hazardous chemicals	Visible access restrictions, control drilling and excavation activities, property transfer requirements	Control land use as industrial.	OU 7-08 ROD (Document ID: 5761)
Pit 9	Pit 9	TRU	Property transfer requirements	Control land use as industrial.	OU 7-10 ROD (Document ID: 5569)
WAG 9					
ANL-01	Industrial waste pond	Radionuclides	Visible access restrictions	Restrict exposure to contaminated soil. Control land use as industrial.	—
ANL-04	Sanitary sewage lagoon	Metals	Visible access restrictions	Restrict exposure to contaminated soil. Control land use as industrial.	—
ANL-09	Interceptor canal	Radionuclides	Visible access restrictions	Restrict exposure to contaminated soil. Control land use as industrial.	—
WAG 10					
OMRE-01	OMRE leach pond	Radionuclides	Visible access restrictions, control drilling and excavation activities, property transfer requirements	Restrict exposure to contaminated soil. Control land use as industrial.	OU 6-05 and 10-08 ROD (DOE/ID-10980) Table 34
STF-02	Gun range	Lead	Visible access restrictions, control drilling and excavation activities, property transfer requirements	Restrict exposure to UXO. Control land use as industrial.	OU 6-05 and 10-08 ROD (DOE/ID-10980) Table 34

Site Code	Description	Contaminants of Concern/Exposure Threat	Controls	Objective	Source Reference
ORD-01	Arco high-altitude bombing range	UXO	Visible access restrictions, control drilling and excavation activities, property transfer requirements	Restrict exposure to UXO. Control land use as industrial.	OU 6-05 and 10-08 ROD (DOE/ID-10980) Table 34
ORD-03	CFA-633 Naval Firing Site and downrange area	UXO	Visible access restrictions, control drilling and excavation activities, property transfer requirements	Restrict exposure to UXO. Control land use as industrial.	OU 6-05 and 10-08 ROD (DOE/ID-10980) Table 34
ORD-04	CFA gravel pit	UXO	Visible access restrictions, control drilling and excavation activities, property transfer requirements	Restrict exposure to UXO. Control land use as industrial.	OU 6-05 and 10-08 ROD (DOE/ID-10980) Table 34
ORD-05	CFA sanitary landfill area	UXO	Visible access restrictions, control drilling and excavation activities, property transfer requirements	Restrict exposure to UXO. Control land use as industrial.	OU 6-05 and 10-08 ROD (DOE/ID-10980) Table 34
ORD-06	Naval Ordnance Disposal Area	Toxic energetic materials	Visible access restrictions, control drilling and excavation activities, property transfer requirements	Restrict exposure to UXO. Control land use as industrial.	OU 6-05 and 10-08 ROD (DOE/ID-10980) Table 34
ORD-07	Explosive storage bunker north of INTEC	UXO	Visible access restrictions, control drilling and excavation activities, property transfer requirements	Restrict exposure to UXO. Control land use as industrial.	OU 6-05 and 10-08 ROD (DOE/ID-10980) Table 34
ORD-08	NOAA	Explosive materials	Visible access restrictions, control drilling and excavation activities, property transfer requirements	Restrict exposure to UXO. Control land use as industrial.	OU 6-05 and 10-08 ROD (DOE/ID-10980) Table 34
ORD-09	Twin Buttes bombing range	UXO	Visible access restrictions, control drilling and excavation activities, property transfer requirements	Restrict exposure to UXO. Control land use as industrial.	OU 6-05 and 10-08 ROD (DOE/ID-10980) Table 34

Site Code	Description	Contaminants of Concern/Exposure Threat	Controls	Objective	Source Reference
ORD-10	Fire Station II zone and range fire burn area	Toxic energetic materials	Visible access restrictions, control drilling and excavation activities, property transfer requirements	Restrict exposure to UXO. Control land use as industrial.	OU 6-05 and 10-08 ROD (DOE/ID-10980) Table 34
ORD-11	Anaconda power line	UXO	Visible access restrictions, control drilling and excavation activities, property transfer requirements	Restrict exposure to UXO. Control land use as industrial.	OU 6-05 and 10-08 ROD (DOE/ID-10980) Table 34
ORD-12	Old military structures	UXO	Visible access restrictions, control drilling and excavation activities, property transfer requirements	Restrict exposure to UXO. Control land use as industrial.	OU 6-05 and 10-08 ROD (DOE/ID-10980) Table 34
ORD-13	Mass Detonation Area	UXO	Visible access restrictions, control drilling and excavation activities, property transfer requirements	Restrict exposure to UXO. Control land use as industrial.	OU 6-05 and 10-08 ROD (DOE/ID-10980) Table 34
ORD-14	Dairy farm revetments	UXO	Visible access restrictions, control drilling and excavation activities, property transfer requirements	Restrict exposure to UXO. Control land use as industrial.	OU 6-05 and 10-08 ROD (DOE/ID-10980) Table 34
ORD-15	Experimental Field Station	Toxic energetic materials	Visible access restrictions, control drilling and excavation activities, property transfer requirements	Restrict exposure to UXO. Control land use as industrial.	OU 6-05 and 10-08 ROD (DOE/ID-10980) Table 34
ORD-16	UXO east of TRA	UXO	Visible access restrictions, control drilling and excavation activities, property transfer requirements	Restrict exposure to UXO. Control land use as industrial.	OU 6-05 and 10-08 ROD (DOE/ID-10980) Table 34
ORD-17	Burn ring south of the Experimental Field Station	UXO	Visible access restrictions, control drilling and excavation activities, property lease requirements	Restrict exposure to UXO. Control land use as industrial.	OU 6-05 and 10-08 ROD (DOE/ID-10980) Table 34

Site Code	Description	Contaminants of Concern/Exposure Threat	Controls	Objective	Source Reference
ORD-18	Igloo-type structures northwest of the Experimental Field Station	UXO	Visible access restrictions, control drilling and excavation activities, property transfer requirements	Restrict exposure to UXO. Control land use as industrial.	OU 6-05 and 10-08 ROD (DOE/ID-10980) Table 34
ORD-19	Rail Car Explosion Area	UXO	Visible access restrictions, control drilling and excavation activities, property transfer requirements	Restrict exposure to UXO. Control land use as industrial.	OU 6-05 and 10-08 ROD (DOE/ID-10980) Table 34
ORD-20	UXO east of the Army Reentry Vehicle Facility Site	UXO	Visible access restrictions, control drilling and excavation activities, property transfer requirements	Restrict exposure to UXO. Control land use as industrial.	OU 6-05 and 10-08 ROD (DOE/ID-10980) Table 34
ORD-21	Juniper mine	UXO	Visible access restrictions, control drilling and excavation activities, property transfer requirements	Restrict exposure to UXO. Control land use as industrial.	OU 6-05 and 10-08 ROD (DOE/ID-10980) Table 34
ORD-22	Projectiles found near Mile Markers 17 and 19	UXO	Visible access restrictions, control drilling and excavation activities, property transfer requirements	Restrict exposure to UXO. Control land use as industrial.	OU 6-05 and 10-08 ROD (DOE/ID-10980) Table 34
ORD-24	Land Mine Fuze Burn Area	Explosive materials	Visible access restrictions, control drilling and excavation activities, property transfer requirements	Restrict exposure to UXO. Control land use as industrial.	OU 6-05 and 10-08 ROD (DOE/ID-10980) Table 34
ORD-25	Ordnance and dry explosives east of the Big Lost River	UXO	Visible access restrictions, control drilling and excavation activities, property transfer requirements	Restrict exposure to UXO. Control land use as industrial.	OU 6-05 and 10-08 ROD (DOE/ID-10980) Table 34
ORD-26	Zone east of the Big Lost River	UXO	Visible access restrictions, control drilling and excavation activities, property transfer requirements	Restrict exposure to UXO. Control land use as industrial.	OU 6-05 and 10-08 ROD (DOE/ID-10980) Table 34

Site Code	Description	Contaminants of Concern/Exposure Threat	Controls	Objective	Source Reference
ORD-27	Dirt mounds near the Experimental Field Station, NOAA, and NRF	UXO	Visible access restrictions, control drilling and excavation activities, property transfer requirements	Restrict exposure to UXO. Control land use as industrial.	OU 6-05 and 10-08 ROD (DOE/ID-10980) Table 34
ORD-28	Craters east of INTEC	UXO	Visible access restrictions, control drilling and excavation activities, property transfer requirements	Restrict exposure to UXO. Control land use as industrial.	OU 6-05 and 10-08 ROD (DOE/ID-10980) Table 34
Sites No Longer Requiring Institutional Controls Following the 2005 Five-Year Review					
TSF-03	Burn pit	None	Hazards were removed; no further controls.	Site was released from ICs.	RD/RA Work Plan (DOE/NE-ID-11202) and <i>Five-Year Review of CERCLA Response Actions at the Idaho National Laboratory</i> (DOE/NE-ID-11201)
CPP-84	Gas cylinders	Chemicals and explosives	Hazards were removed; no further controls.	Site was released from ICs.	RD/RA Work Plan (DOE/NE-ID-11202) and <i>Five-Year Review of CERCLA Response Actions at the Idaho National Laboratory</i> (DOE/NE-ID-11201)
CPP-94	Gas cylinders	Chemicals and explosives	Hazards were removed; no further controls.	Site was released from ICs.	RD/RA Work Plan (DOE/NE-ID-11202) and <i>Five-Year Review of CERCLA Response Actions at the Idaho National Laboratory</i> (DOE/NE-ID-11201)
			Hazards were removed; no further controls.	Site was released from ICs.	
ARA-01	Evaporation pond	Radionuclides	Hazards were removed; no further controls.	Site was released from ICs.	RD/RA Work Plan (DOE/NE-ID-11202) and <i>Five-Year Review of CERCLA Response Actions at the Idaho National Laboratory</i> (DOE/NE-ID-11201)
ARA-02	ARA Sanitary Waste System	Radionuclides	Hazards were removed; no further controls.	Site was released from ICs.	RD/RA Work Plan (DOE/NE-ID-11202) and <i>Five-Year Review of CERCLA Response Actions at the Idaho National Laboratory</i> (DOE/NE-ID-11201)

Site Code	Description	Contaminants of Concern/Exposure Threat	Controls	Objective	Source Reference
ARA-12	ARA-III leach pond	Radionuclides	Hazards were removed; no further controls.	Site was released from ICs.	RD/RA Work Plan (DOE/NE-ID-11202) and <i>Five-Year Review of CERCLA Response Actions at the Idaho National Laboratory</i> (DOE/NE-ID-11201)
ARA-16	ARA tank	Radionuclides	Hazards were removed; no further controls.	Site was released from ICs.	RD/RA Work Plan (DOE/NE-ID-11202) and <i>Five-Year Review of CERCLA Response Actions at the Idaho National Laboratory</i> (DOE/NE-ID-11201)
CPP-67	Percolation ponds	Radionuclides	Property lease requirements	Ensure that land use is appropriate if contamination left in place is >10 ft.	RD/RA Work Plan (DOE/NE-ID-11202) and <i>Five-Year Review of CERCLA Response Actions at the Idaho National Laboratory</i> (DOE/NE-ID-11201)

Sites with grey shading indicate sites where institutional controls are pending.

Sites with yellow shading indicate sites where institutional controls have been discontinued since the last revision to this plan.

ANL = Argonne National Laboratory
ARA = Auxiliary Reactor Area
BORAX = Boiling Water Reactor Experiment
CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act
CFA = Central Facilities Area
CFLUP = Comprehensive Facility and Land Use Plan
CPP = Chemical Processing Plant
D&D = decontamination and decommissioning
EBR = Experimental Breeder Reactor
ESD = Explanation of Significant Differences
IC = institutional control
IET = Initial Engine Test
INTEC = Idaho Nuclear Technology and Engineering Center
MCL = maximum contaminant level
NFA = no further action
NOAA = National Oceanic and Atmospheric Administration
NRF = Naval Reactors Facility
OCVZ = organic contamination in the vadose zone
OMRE = Organic-Moderated Reactor Experiment
OU = operable unit
PBF = Power Burst Facility
PCB = polychlorinated biphenyl
RCRA = Resource Conservation and Recovery Act
RD/RA = remedial design/remedial action
ROD = Record of Decision
RWMC = Radioactive Waste Management Complex
SCA = soil contamination area
SDA = Subsurface Disposal Area
SPERT = Special Power Excursion Reactor Test
STF = Security Training Facility

Site Code	Description	Contaminants of Concern/Exposure Threat	Controls	Objective	Source Reference
TAN = Test Area North TRA = Test Reactor Area (now the Reactor Technology Complex) TRU = transuranic (waste) TSF = Technical Support Facility UXO = unexploded ordnance WAG = waste area group WCF = Waste Calcining Facility WMF = Waste Management Facility WRRTF = Water Reactor Research Test Facility					

The following list represents Waste Area Group (WAG) 1 and WAG 3 wells requiring institutional control inspections.

Wells by WAG. WAG 1			
HDR Well Number	Formal HDR Well Name	Project Name/Alias	Notes
76	ANP-08	ANP-8	
159	GIN-01	GIN-1	
160	GIN-02	GIN-2	
161	GIN-03	GIN-3	
162	GIN-04	GIN-4	
163	GIN-05	GIN-5	
69	ANP-01	TAN-01	
70	ANP-02	TAN-02	
342	TAN-03	TAN-03	
343	TAN-04	TAN-04	
344	TAN-05	TAN-05	
746	TAN-06	TAN-06	
747	TAN-07	TAN-07	
345	TAN-08	TAN-08	
346	TAN-09	TAN-09	
347	TAN-10	TAN-10	
348	TAN-10A	TAN-10A	
349	TAN-11	TAN-11	
748	TAN-12	TAN-12	
749	TAN-13A	TAN-13A	
750	TAN-14	TAN-14	
751	TAN-15	TAN-15	
752	TAN-16	TAN-16	
728	TAN-17	TAN-17	
790	TAN-18	TAN-18	
791	TAN-19	TAN-19	
792	TAN-20	TAN-20	
793	TAN-21	TAN-21	
1013	TANT-MON-A-MW-2	MW-2	
795	TAN-22A	TAN-22A	
797	TAN-23A	TAN-23A	
799	TAN-24A	TAN-24A	
1117	TANT-MON-A-024	TAN-25	
1118	TANT-MON-A-025	TAN-26	
1009	TANT-MON-A-027	TAN-27	
1008	TANT-MON-A-028	TAN-28	
1010	TANT-MON-A-029	TAN-29	

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Wells by WAG. WAG 1			
HDR Well Number	Formal HDR Well Name	Project Name/Alias	Notes
1012	TANT-MON-A-030A	TAN-30A	
1219	TANT-INJ-A-0030	TAN-31	
1134	TANT-MON-A-006	TAN-32	
1135	TANT-MON-A-007	TAN-33	
1136	TANT-MON-A-008	TAN-34	
1137	TANT-MON-A-009	TAN-35	
1138	TANT-MON-A-010	TAN-36	
1163	TANT-MON-A-011	TAN-37	
1164	TANT-MON-A-012	TAN-38	
1165	TANT-MON-A-013	TAN-39	
1166	TANT-MON-A-014	TAN-40	
1167	TANT-MON-A-015	TAN-41	
1168	TANT-MON-A-016	TAN-42	
1169	TANT-MON-A-017	TAN-43	
1170	TANT-MON-A-018	TAN-44	
1171	TANT-MON-A-019	TAN-45	
1172	TANT-MON-A-020	TAN-46	
1314	TANT-MON-A-047	TAN-47	
1211	TANT-MON-A-048	TAN-48	
1450	TANT-INJ-A-049	TAN-49	
1315	TANT-MON-A-050	TAN-50	
1316	TANT-MON-A-051	TAN-51	
1317	TANT-MON-A-052	TAN-52	
1339	TANT-MON-A-053A	TAN-53A	
1340	TANT-MON-A-054	TAN-54	
1341	TANT-MON-A-055	TAN-55	
1342	TANT-MON-A-056	TAN-56	
1343	TANT-MON-A-057	TAN-57	
1344	TANT-MON-A-058	TAN-58	
337	TAN-CH1	TAN-CH1	
729	TAN-CH2	TAN-CH2	
71	ANP-03	TSF-05	
473	USGS-024	USGS-24	
338	TAN DRAINAGE DISP. 01	TAN-D1 (Drainage Disposal)	
339	TAN DRAINAGE DISP. 02	TAN-D2 (Drainage Disposal)	
1859	TAN-1859	TAN-1859	
1860	TAN-1860	TAN-1860	
1861	TAN-1861	TAN-1861	

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Wells by WAG. WAG 3			
HDR Well Number	Formal HDR Well Name	Project Name/Alias	Notes
1388	ICPP-SCI-P-219	ICPP-SCI-P-219	
1389	ICPP-SCI-P-220	ICPP-SCI-P-220	
1390	ICPP-SCI-P-221	ICPP-SCI-P-221	
1391	ICPP-SCI-P-222	ICPP-SCI-P-222	
1392	ICPP-SCI-P-223	ICPP-SCI-P-223	
1393	ICPP-SCI-P-224	ICPP-SCI-P-224	
1394	ICPP-SCI-P-225	ICPP-SCI-P-225	
1395	ICPP-SCI-P-226	ICPP-SCI-P-226	
1396	ICPP-SCI-P-227	ICPP-SCI-P-227	
1397	ICPP-SCI-P-228	ICPP-SCI-P-228	
1398	ICPP-SCI-P-229	ICPP-SCI-P-229	
1399	ICPP-MON-A-230	ICPP-MON-A-230	
1400	ICPP-SCI-P-247	ICPP-SCI-P-247	
1401	ICPP-SCI-P-248	ICPP-SCI-P-248	
1402	ICPP-SCI-P-249	ICPP-SCI-P-249	
1403	ICPP-SCI-P-250	ICPP-SCI-P-250	
1404	ICPP-SCI-P-251	ICPP-SCI-P-251	
1405	ICPP-SCI-P-252	ICPP-SCI-P-252	
483	USGS-034	USGS-34	
484	USGS-035	USGS-35	
485	USGS-036	USGS-36	
486	USGS-037	USGS-37	
487	USGS-038	USGS-38	
488	USGS-039	USGS-39	
489	USGS-040	USGS-40	
490	USGS-041	USGS-41	
491	USGS-042	USGS-42	
492	USGS-043	USGS-43	
493	USGS-044	USGS-44	
494	USGS-045	USGS-45	
495	USGS-046	USGS-46	
496	USGS-047	USGS-47	
497	USGS-048	USGS-48	
498	USGS-049	USGS-49	
500	USGS-051	USGS-51	
501	USGS-052	USGS-52	
506	USGS-057	USGS-57	

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Wells by WAG. WAG 3			
HDR Well Number	Formal HDR Well Name	Project Name/Alias	Notes
508	USGS-059	USGS-59	
516	USGS-067	USGS-67	
526	USGS-077	USGS-77	
531	USGS-082	USGS-82	
533	USGS-084	USGS-84	
534	USGS-085	USGS-85	
560	USGS-111	USGS-111	
561	USGS-112	USGS-112	
562	USGS-113	USGS-113	
563	USGS-114	USGS-114	
564	USGS-115	USGS-115	
565	USGS-116	USGS-116	
570	USGS-121	USGS-121	
571	USGS-122	USGS-122	
572	USGS-123	USGS-123	
196	LF2-08	LF2-08	
197	LF2-09	LF2-09	
198	LF2-10	LF2-10	
199	LF2-11	LF2-11	
724	LF2-12	LF2-12	
207	LF3-08	LF3-08	
726	LF3-09	LF3-09	
727	LF3-10	LF3-10	
721	LF3-11A	LF3-11A	

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Well Number	Well Number	Well Number	Well Number
ANP-8	TAN-11	TAN-29	TAN-46 inaccessible
GIN-1	TAN-12	TAN-30A	TAN-47 inaccessible
GIN-2	TAN-13A inaccessible	TAN-31	TAN-48
GIN-3	TAN-14 inaccessible	TAN-32	TAN-49
GIN-4	TAN-15	TAN-33	TAN-50
GIN-5	TAN-16	TAN-34	TAN-51 inaccessible
TAN-1	TAN-17 inaccessible	TAN-35	TAN-52
TAN-2	TAN-18	TAN-36 inaccessible	TAN-53A
TAN-3	TAN-19	TAN-37	TAN-54 inaccessible
TAN-4	TAN-20 inaccessible	TAN-38	TAN-55
TAN-5	TAN-21	TAN-39	TAN-56
TAN-6	TAN-MW-2	TAN-40	TAN-57

Well Number	Well Number	Well Number	Well Number
TAN-7	TAN-22A	TAN-41	TAN-58
TAN-8 inaccessible	TAN-23A	TAN-42	TAN-CH1
TAN-9	TAN-24A	TAN-43	TAN-CH2 inaccessible
TAN-10	TAN-25	TAN-44	TSF-05
TAN-10A	TAN-26	TAN-45	USGS-24
TAN-27	TAN-1859	TAN-D1	TAN-1861
TAN-28	TAN-1860	TAN-D2	—

TAN = Test Area North
TSF = Technical Support Facility
USGS = United States Geological Survey

Well Number	Label	Locked	Well Number	Label	Locked
CPP-33-1	Yes	Yes	MW-8	Inaccessible	
CPP-33-2	Yes	Yes	MW-9	Inaccessible	
CPP-33-3	Yes	Yes	MW-10	Yes	Yes
CPP-37-4	Yes	Yes	MW-11	Yes	Yes
CPP-55-06	Yes	Yes	MW-12	Yes	Yes
PW-1	Yes	Yes	MW-13	Yes	Yes
PW-2	Yes	Yes	MW-14	Yes	Yes
PW-3	Yes	Yes	MW-15	Inaccessible	
PW-4	Inaccessible		MW-16	Yes	Yes
PW-5	Inaccessible		MW-17	Yes	Yes
PW-6	Inaccessible		MW-18	Yes	Yes
MW-1	Yes	Yes	MW-20	Yes	Yes
MW-2	Yes	Yes	USGS-50	Yes	Yes
MW-3	Inaccessible		CPP-33-4-1	Yes	Yes
MW-4	Yes	Yes	CPP-33-4-2	Yes	Yes
MW-5	Yes	Yes	1236-ICPP-S-132	Yes	Yes
MW-6	Yes	Yes	1385-ICPP-SCI-P-216	Yes	Yes
MW-7	Yes	Yes	1386-ICPP-SCI-P-217	Yes	Yes
1387-ICPP-SCI-P-218	Yes	Yes	1397-ICPP-SCI-P-228	Yes	Yes
1388-ICPP-SCI-P-219	Yes	Yes	1398-ICPP-SCI-P-229	Yes	Yes
1389-ICPP-SCI-P-220	Yes	Yes	1399-ICPP-SCI-P-230	Yes	Yes
1390-ICPP-SCI-P-221	Yes	Yes	1400-ICPP-SCI-P-247	Yes	Yes
1391-ICPP-SCI-P-222	Yes	Yes	1401-ICPP-SCI-P-248	Yes	Yes
1392-ICPP-SCI-P-223	Yes	Yes	1402-ICPP-SCI-P-249	Yes	Yes
1393-ICPP-SCI-P-224	Yes	Yes	1403-ICPP-SCI-P-250	Yes	Yes
1394-ICPP-SCI-P-225	Yes	Yes	1404-ICPP-SCI-P-251	Yes	Yes
1395-ICPP-SCI-P-226	Yes	Yes	1405-ICPP-SCI-P-252	Yes	Yes

Well Number	Label	Locked		Well Number	Label	Locked
1396-ICPP-SCI-P-227	Yes	Yes		1397-ICPP-SCI-P-228	Yes	Yes
NEW CPP-1800	Yes	Yes		NEW CPP-1831	Yes	Yes
NEW CPP-1801	Yes	Yes		NEW CPP-1881	Yes	Yes
NEW CPP-1804	Yes	Yes		NEW CPP-1882	Yes	Yes
NEW CPP-1807	Yes	Yes		NEW CPP-1883	Yes	Yes
NEW CPP-1829	Yes	Yes		—	—	—
CPP = Chemical Processing Plant ICPP = Idaho Chemical Processing Plant USGS = United States Geological Survey						

Well Number	Label	Locked		Well Number	Label	Locked
USGS-34	Yes	Yes		USGS-77	Yes	Yes
USGS-35	Yes	Yes		USGS-82	Yes	Yes
USGS-36	Yes	Yes		USGS-84	Yes	Yes
USGS-37	Yes	Yes		USGS-85	Yes	Yes
USGS-38	Yes	Yes		USGS-111	Yes	Yes
USGS-39	Yes	Yes		USGS-112	Yes	Yes
USGS-40	Inaccessible			USGS-113	Yes	Yes
USGS-41	Inaccessible			USGS-114	Yes	Yes
USGS-42	Inaccessible			USGS-115	Yes	Yes
USGS-43	Yes	Yes		USGS-116	Yes	Yes
USGS-44	Yes	Yes		USGS-121	Yes	Yes
USGS-45	Yes	Yes		USGS-122	Yes	Yes
USGS-46	Yes	Yes		USGS-123	Inaccessible	
USGS-47	Inaccessible			USGS-128	Yes	Yes
USGS-48	Yes	Yes		LF2-08	Yes	Yes
USGS-49	Inaccessible			LF2-09	Yes	Yes
USGS-51	Inaccessible			LF2-10	Yes	Yes
USGS-52	Inaccessible			LF2-11	Yes	Yes
USGS-57	Inaccessible			LF2-12	Yes	Yes
USGS-59	Yes	Yes		LF3-08	Yes	Yes
USGS-67	Yes	Yes		LF3-09	Yes	Yes
MW-18	Yes	Yes		LF3-10	Yes	Yes
				USGS-77	Yes	Yes
USGS = United States Geological Survey						

Appendix B
List of Relevant Documents

Appendix B

List of Relevant Documents

Portions of the following documents that implement, manage, or assess institutional controls at the Idaho National Laboratory have been integrated into this Sitewide Institutional Controls Plan.

WAG 1

DOE-ID, 1995, *Record of Decision Declaration for the Technical Support Facility Injection Well (TSF-05) and Surrounding Groundwater Contamination (TSF-23) and Miscellaneous No Action Sites Final Remedial Action*, Document ID: 10139, Rev. 0, U.S. Department of Energy Idaho Operations Office, August 1995.

DOE-ID, 1999, *Final Record of Decision for Test Area North Operable Unit 1-10*, DOE/ID-10682, Rev. 0, U.S. Department of Energy Idaho Operations Office, October 1999.

DOE-ID, 2001, *Record of Decision Amendment Technical Support Facility Injection Well (TSF-05) and Surrounding Groundwater Contamination (TSF-23) and Miscellaneous No Action Sites, Final Remedial Action*, DOE/ID-10139 Amendment, Rev. 0, U.S. Department of Energy Idaho Operations Office, September 2001.

DOE-ID, 2003, *Explanation of Significant Differences for the Record of Decision for the Test Area North Operable Unit 1-10*, DOE/ID-11050, Rev. 0, U.S. Department of Energy Idaho Operations Office, April 2003.

INEEL, 1997, *Explanation of Significant Differences from the Record of Decision for the Technical Support Facility Injection Well (TSF-05) and Surrounding Groundwater Contamination (TSF-23) and Miscellaneous No Action Sites, Final Remedial Action*, INEEL/EXT-97-00931, Rev. 0, Idaho National Engineering and Environmental Laboratory, November 1997.

INEEL, 2000, *Institutional Control Plan for the Test Area North Waste Area Group 1*, INEEL/EXT-2000-00917, Rev. 0, Idaho National Engineering and Environmental Laboratory, September 2000.

WAG 2

DOE-ID, 1992, *Record of Decision Test Reactor Area Perched Water System Operable Unit 2-12*, Document ID: 5230, Rev. 0, U.S. Department of Energy Idaho Operations Office, December 1992.

DOE-ID, 1997, *Final Record of Decision Test Reactor Area Operable Unit 2-13*, DOE/ID-10586, Rev. 0, U.S. Department of Energy Idaho Operations Office, December 1997.

DOE-ID, 2000, *Explanation of Significant Differences to the Record of Decision for Test Reactor Area Operable Unit 2-13*, DOE/ID-10744, Rev. 0, U.S. Department of Energy Idaho Operations Office, May 2000.

WAG 3

DOE-ID, 1999, *Final Record of Decision Idaho Nuclear Technology and Engineering Center Operable Unit 3-13*, DOE/ID-10660, Rev. 0, U.S. Department of Energy Idaho Operations Office, October 1999.

DOE-ID, 2003, *Institutional Control Plan for the Idaho Nuclear Technology and Engineering Center, Waste Area Group 3, Operable Unit 3-13*, DOE/ID-10729, Rev. 3, U.S. Department of Energy Idaho Operations Office, January 2003.

WAG 4

DOE-ID, 2000, *Final Comprehensive Record of Decision for Central Facilities Area Operable Unit 4-13*, DOE/ID-10719, Rev. 2, U.S. Department of Energy Idaho Operations Office, July 2000.

WAG 5

DOE-ID, 1996, *Record of Decision Stationary Low-Power Reactor-1 and Boiling Water Reactor Experiment-I Burial Grounds (Operable Units 5-05 and 6-01), and 10 No Action Site (Operable Units 5-01, 5-03, 5-04, and 5-11)*, INEL-95/0282, Rev. 0, U.S. Department of Energy Idaho Operations Office, January 1996.

DOE-ID, 2000, *Record of Decision Power Burst Facility and Auxiliary Reactor Area Operable Unit 5-12*, DOE/ID-10700, Rev. 0, U.S. Department of Energy Idaho Operations Office, January 2000.

DOE-ID, 2000, *Operations and Maintenance Plan for Power Burst Facility and Auxiliary Reactor Area, Operable Unit 5-12*, DOE/ID-10805, Rev. 0, U.S. Department of Energy Idaho Operations Office, December 2000.

WAG 6/10

DOE-ID, 2002, *Record of Decision Experimental Breeder Reactor-I/Boiling Reactor Experiment Area and Miscellaneous Sites*, DOE/ID-10980, Rev. 0, U.S. Department of Energy Idaho Operations Office, November 2002.

DOE-ID, 2005, *Remedial Design/Remedial Action Work Plan for Operable Units 6-05 and 10-04, Phase III*, DOE/NE-ID-11202, Rev. 0, U.S. Department of Energy Idaho Operations Office, September 2005.

WAG 7

DOE-ID, 1993, *Record of Decision Declaration for Pit 9 at the Radioactive Waste Management Complex Subsurface Disposal Area*, Document ID: 5569, Rev. 0, U.S. Department of Energy Idaho Operations Office, October 1993.

DOE-ID, 1994, *Record of Decision Declaration for Pad A at the Radioactive Waste Management Complex Subsurface Disposal Area*, Document ID: 5632, Rev. 0, U.S. Department of Energy Idaho Operations Office, January 1994.

DOE-ID, 1994, *Record of Decision Declaration for Organic Contamination in the Vadose Zone Operable Unit 7-08*, Document ID: 5761, Rev. 0, U.S. Department of Energy Idaho Operations Office, December 1994.

Sitewide

DOE-ID, 1997, *Idaho National Engineering and Environmental Laboratory Comprehensive Facility and Land Use Plan*, DOE/ID-10154, U.S. Department of Energy Idaho Operations Office, December 1997 (Official Use Only). Unclassified version is available at <http://cflup.inel.gov>.

DOE-ID, 2006, *Five-Year Review of CERCLA Response Actions at the Idaho National Laboratory*, DOE/NE-ID-11201, Rev. 1, U.S. Department of Energy Idaho Operations Office, June 2006.

Appendix C

Institutional Control Signs at the Idaho National Laboratory

Appendix C

Institutional Control Signs at the Idaho National Laboratory

Institutional control (IC) signs are the predominant method of access restriction at the Idaho National Laboratory (INL) Site. They identify the location of controlled sites to any persons who may intentionally or inadvertently enter or disturb a site. Signs are posted at sites when residual contamination at the site could pose a current or future risk to human health or the environment. A site at the INL may not require posting if the site does not pose an unacceptable risk to workers, the public, or the environment.

New sites that are identified at the INL may be posted with IC signs prior to being subject to a final Record of Decision. These sites are tracked on an internal database and are included in the CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act) module of the *Idaho National Engineering and Environmental Laboratory Comprehensive Facility and Land Use Plan* (DOE-ID 1997) when subject to an agency decision. Signs for new sites must reflect the requirements of this plan.

As a minimum, the IC signs provide information on the principle hazard(s) at the site, the media of concern, a point of contact with phone number, and a warning to *not* disturb the area unless authorized. The point of contact for the INL is the Warning Communications Center, which coordinates any calls to Long-Term Stewardship contact persons as needed or to contact persons in the related waste area group (WAG). The signs list generalized hazard(s) information (e.g., organics, inorganics, radionuclides, polychlorinated biphenyls, asbestos, or ordnance) without identifying specific chemicals or radionuclides. The INL CERCLA warning signs are orange in color and the format of the signs is consistent throughout the INL Site (see Figure C-1).

Placement and frequency of warning signs are sufficient to prevent inadvertent access to a CERCLA site. While the configuration of IC sites varies greatly at the INL and exceptions will occur, the following guidelines are used in determining the placement of signs:

- Signs will be clearly posted
- Signs will be placed at normal approach points
- Signs may be placed intermittently along the boundary of a site
- The effect upon visibility from opening doors or other changes in configuration will be considered when posting warning signs
- At least one sign may be placed on each side of an area's boundary
- Warning signs will be securely affixed and located so that signs and labels remain in place.

At sites where the sign location may interfere with traffic patterns or be inaccessible because of geographic restrictions, the signs are placed such that they best advise personnel of the presence of a hazard. In some cases, signs are placed near but not on the site. Signs may include a map showing the configuration of the site and adjacent buildings and structures. Signs and labels are built to endure expected environmental conditions. Signs do not include references to coordinates. Existing signs are replaced on an as-needed basis.



Color: Orange

Suggested Size: 12 × 12 in.

Figure C-1. Example of an institutionally controlled area sign.

Appendix D

Notice of Soil Disturbance Process

Appendix D

Notice of Soil Disturbance Process

This soil disturbance process manages and documents soil disturbance activities at the Idaho National Laboratory (INL) Site consistent with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (42 USC § 9601 et seq.); the “National Oil and Hazardous Substances Pollution Contingency Plan” (40 CFR 300); and the *Federal Facility Agreement for the Idaho National Engineering Laboratory* (DOE-ID 1991) remedial investigations and response actions. As components of on-Site CERCLA response actions, these soil disturbances are performed in accordance with and under authority of CERCLA, 40 CFR 300, and the Federal Facility Agreement and Consent Order (FFA/CO), including CERCLA Section 121(e)(1). This process will apply to soil disturbances at the following types of locations:

1. Within the Operable Unit (OU) 3-13 area of contamination (AOC).
2. CERCLA sites within the INL Site that have been determined to be “no action” or “no further action” sites, when additional information is identified that demonstrates there are potential unacceptable risks to human health and the environment associated with the site that can be addressed effectively through a soil disturbance activity. A notice of soil disturbance (NSD) will be prepared as a minor modification to the applicable Record of Decision (ROD) and submitted for U.S. Environmental Protection Agency (EPA) and Idaho Department of Environmental Quality (DEQ) review to provide for removal of contamination from the site and management of waste under CERCLA consistent with the agency-approved NSD.
3. Newly identified CERCLA sites being screened in accordance with the CERCLA new site identification process or those sites being investigated under the OU 10-08 CERCLA process.

The following sections provide the information associated with the NSD at the INL.

D-1. SOIL DISTURBANCES WITHIN THE OPERABLE UNIT 3-13 AREA OF CONTAMINATION

Soil disturbances within the OU 3-13 AOC require the preparation of an NSD form. In accordance with the requirements in the *Final Record of Decision Idaho Nuclear Technology and Engineering Center Operable Unit 3-13* (DOE-ID 1999), NSD forms completed for institutional control (IC) sites at the Waste Area Group (WAG) 3 AOC will be submitted to the regulatory agencies for review. The OU 3-13 NSD process is intended to:

- Ensure that a disturbance does not interfere with remedial actions
- Ensure that remedies remain operational and functional
- Provide for a review of potential contaminants that may be encountered
- Provide agency notification of planned disturbances in IC sites within the WAG 3 AOC sites.

Soil disturbances will be initiated as follows:

- Review the IC site maps to determine which CERCLA response activities(s) will be affected by the activity
- Prepare an abbreviated activity summary that includes the following information, as applicable:
 - Description and location of the activity
 - CERCLA response activities impacted by the activity
 - Soil quantities and maximum depths
 - Soil sampling requirements
 - Management of soil and waste generated that exceed remediation goals for the location from which they are taken
 - Proposed schedule of the activity.

The Long-Term Stewardship Program will assemble the NSD packages, including maps depicting the location of the planned disturbance, and submit them to the U.S. Department of Energy Idaho Operations Office (DOE-ID) for review. Following their review, the U.S. Department of Energy (DOE) transmits the package to the EPA and DEQ (the Agencies) for review. The Agencies will provide comment within 7 calendar days of notification. If no response is received within 7 calendar days, work will proceed.

D-2. SOIL DISTURBANCE AT “NO ACTION” OR “NO FURTHER ACTION” SITES AT THE IDAHO NATIONAL LABORATORY

This section includes soil disturbances at “no action” or “no further action” sites at the INL where new information is identified that determines there are potential unacceptable risks to human health and the environment.

An NSD will be prepared at CERCLA “no action” or “no further action” sites when additional information discovered prior to or during excavation demonstrates that there are potential unacceptable risks to human health and the environment associated with the site. The NSD will be submitted for EPA and DEQ review as described above.

Soil disturbances will be initiated as follows:

- Identify CERCLA “no further action” site(s) affected by the proposed soil disturbance
- Provide a description of the new information that identifies the potential unacceptable risks to human health or the environment associated with the site
- Prepare an abbreviated activity summary that includes the following information, as applicable:
 - Description and location of the activity
 - CERCLA sites impacted by the activity and the prior ROD(s) that will be modified by this minor action
 - Soil quantities and maximum depths

- Soil sampling requirements
- Management of soil and waste generated
- Description of the process that will be used to verify that removal of contamination has been successful
- Description of summary information to be provided to the Agencies at completion of the activities
- Proposed schedule of the activity.

The Long-Term Stewardship Program will assemble the NSD packages and submit them to DOE-ID for review. Following their review, DOE transmits the packages to the Agencies for review and approval. Upon obtaining agency approval, work will proceed.

D-3. NEWLY IDENTIFIED CERCLA SITES AND SITES BEING INVESTIGATED UNDER OPERABLE UNIT 10-08

This section discusses the soil disturbances process for newly identified CERCLA sites being screened in accordance with the CERCLA new site identification process or those sites being investigated under the OU 10-08 CERCLA process.

Disturbances at newly identified CERCLA sites undergoing investigation, in accordance with the CERCLA new site identification process, will be subject to the NSD process. An NSD will be submitted for agency review, as identified above.

Soil disturbances will be initiated as follows:

- Prepare an abbreviated activity summary that includes the following information, as applicable:
 - Description and location of the activity
 - CERCLA site(s) undergoing investigation impacted by the activity
 - Soil quantities and maximum depths
 - Soil sampling requirements
 - Management of soil and waste generated
 - Description of a summary report to be provided to the Agencies at completion of the activities (e.g., summary description of the activity, photos of activity, sampling results if applicable), extent of area disturbed and depths, management of waste (Idaho CERCLA Disposal Facility [ICDF], INL landfill, or off-Site)
 - Proposed schedule of the activity.

The Long-Term Stewardship Program will assemble the NSD packages and submit them to DOE-ID for review. Following their review, DOE transmits the packages to the Agencies for review and approval. Upon obtaining agency approval, work will proceed.

The following pages include an example of the NSD form.

Agency Notification Form

The U.S. Department of Energy Idaho Operations Office, the U.S. Environmental Protection Agency Region 10, and the State of Idaho Department of Environmental Quality have received the attached notice of soil disturbance (NSD) number NSD-XX-XX. The stated disturbance will not interfere with the conduct of planned remedial activities pursuant to the FFA/CO. The conditions checked below will be in effect:

- Soil disturbed in site XXX will be scanned or sampled for XXX per this NSD. Soil contaminated with XXX above the OU X-XX remediation goal (RG) will be managed as CERCLA waste. Soil containing XXX below the Operable Unit (OU) RG will be considered "clean" from an OU X-XX CERCLA standpoint. The characterization of such waste is the responsibility of the requesting project or party.
- Non-soil waste (e.g., PPE) contaminated from contact with CERCLA soil (i.e., soil containing XXX above the RG) may be managed as CERCLA waste. Waste generated as part of the VCO activities that is required to be regulated under HWMA/RCRA will be managed accordingly and will not be managed as CERCLA waste.
- If ALARA concerns prevent soil from being returned to the excavation, then the soil may be managed as CERCLA waste.
- Results of any soil scan/sampling/characterization activities associated with this soil disturbance will be provided to the NSD Coordinator or designee.
- If unusual or unexpected conditions are discovered such as discoloration or unexpected contamination during this soil disturbance, the NSD Coordinator or designee will be notified. NSD Coordinator or designee will coordinate the notification of the agencies concerning the unexpected conditions.

Comments on this package are noted below and retained in the file:

DOE-ID OU X-XX manager		
		Date
EPA OU X-XX manager		
		Date
DEQ OU X-XX manager		
		Date

**Notice of Soil Disturbance Form
NSD-XX-XX**

Requestor Name (Phone number) _____

Classification Emergency Maintenance Projects

The CERCLA areas affected by these removal activities include XXXX

This section will provide a brief description of the soil disturbance activities. NSD

Anticipated time period of activity: _____

How much soil disturbance is anticipated? (% , yd³ , etc.) _____

Maximum depth of excavation or soil disturbance: _____

Will proposed activity interfere with the conduct of other planned remedial activities and/or remediation strategies? _____

Map showing area of the anticipated disturbance is Attached Not attached

SAMPLING EVALUATION (This section to be completed by the NSD Coordinator.)

1. Disturbed soil will be surveyed by RadCon.
2. The in situ gamma spectrometer (or approved equivalent) or laboratory analyzed samples shall be used to determine levels of XXXX in the excavated soil. This data will also be used to determine if the soil complies with the OU X-XX remediation goal, if it may be reused, or if it requires removal and management as CERCLA waste.
3. Excavated soil from each excavation will be sampled/scanned for XXXX
4. Soil that exceeds the OU X-XX remediation goal for XXXX will be characterized, containerized, and managed as CERCLA waste for ICDF disposal. These activities are performed at the expense of the requesting organization.

Soils are required to meet the ICDF WAC before they can be disposed of at that facility.

5. Sample and/or scan data will be reported to the NSD Coordinator. This shall occur prior to backfilling or reuse of the soil or containerization of the soil waste.

REVIEW OF PACKAGE

Requestor	_____	_____
Reviewer	_____	_____
Reviewer	_____	_____
Reviewer	_____	_____
Reviewer	_____	_____

NSD PACKAGE TRANSMITTED TO DOE BY

NSD Coordinator: _____ Date: _____

D-4. REFERENCES

- 40 CFR 300, 2006, "National Oil and Hazardous Substances Pollution Contingency Plan," *Code of Federal Regulations*, Office of the Federal Register, January 2006.
- 42 USC § 9601 et seq., 1980, "Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA/Superfund)," *United States Code*, December 11, 1980.
- DOE-ID, 1991, *Federal Facility Agreement and Consent Order for the Idaho National Engineering Laboratory*, Administrative Docket No. 1088-06-29-120, U.S. Department of Energy Idaho Operations Office; U.S. Environmental Protection Agency, Region 10; Idaho Department of Health and Welfare, December 4, 1991.
- DOE-ID, 1999, *Final Record of Decision Idaho Nuclear Technology and Engineering Center Operable Unit 3-13*, DOE/ID-10660, U.S. Department of Energy Idaho Operations Office, October 1999.
- DOE-ID, 2005, *Five-Year Review of CERCLA Response Actions at the Idaho National Laboratory*, DOE/NE-11201, Rev. 0, U.S. Department of Energy Idaho Operations Office, October 2005.

Appendix E

Assessment Guidance and Sample Checklist

Appendix E

Assessment Guidance and Sample Checklist

E-1. ASSESSMENT GUIDANCE AND SAMPLE CHECKLIST

The following is a general description of activities that should take place before field assessment:

1. Review current institutional control plan, the *Idaho National Engineering and Environmental Laboratory Comprehensive Facility and Land Use Plan* (DOE/ID-10154), well maintenance reports, and the last assessment report.
2. Prepare checklists and a photo log for the current assessment.
3. Review Management Control Procedure (MCP) -3562, “Hazard Identification, Analysis, and Control of Operational Activities.”
4. Obtain work authorization by placing inspection on the plan of the day/plan of the week. Check with the facility (shift supervisor) prior to beginning work.

INSTITUTIONAL CONTROLS ASSESSMENT CHECKLIST

WAG X CERCLA Site ID _____ DATE: _____
 CERCLA Site Description _____ Time: _____

Assessment Team:	Title	Signature
	LTS IC Coordinator	
	Sitewide LTS Integration Lead	

The above signatures certify that the information contained on this form is true and accurate to the best of the individual's knowledge.

1. Warning Notices:

Signs visible:	Yes	No	NA	comment: _____
Signs located as required:	Yes	No	NA	comment: _____
Signs legible/correct:	Yes	No	NA	comment: _____
Contact number(s):	Yes	No	NA	comment: _____
Boundary monuments:	Yes	No	NA	comment: _____

2. Access Controls:

Public access/security controls:	Yes	No	NA	comment: _____
Physical barriers (e.g., fences/gates):	Yes	No	NA	comment: _____
Radiation work permits:	Yes	No	NA	comment: _____

3. Land use controls: (CFLUP information correct) Yes No Date: _____

Comments: _____

Deficiencies: _____

Improvements/Recommendations: _____

Take photographs? _____