Chapter 2. Environmental Compliance Summary

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2. ENVIRONMENTAL COMPLIANCE SUMMARY

This chapter reports the compliance status of the Idaho National Laboratory (INL) Site with environmental protection requirements. Section 2.1 discusses the compliance status of the INL Site with respect to major environmental acts, agreements, and orders. Section 2.2 discusses environmental occurrences, which are nonpermitted releases that require notification of a regulatory agency outside of the U.S. Department of Energy (DOE). Section 2.3 presents a summary of environmental permits for the INL Site. The programs in place to attain compliance with major acts, agreements, and orders are discussed in Chapter 3.

2.1 Compliance Status

Operations at the INL Site are subject to numerous federal and state environmental statutes, executive orders, and DOE orders. These are listed in Appendix A. This section presents a brief summary of the INL’s compliance status with those regulations. Table 2-1 shows how the discussion is organized.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) provides the process to assess and remediate areas contaminated by the release of chemically hazardous and/or radioactive substances. Nuclear research and other operations at the INL Site left behind contaminants that pose a potential risk to human health and the environment. The INL Site was placed on the National Priorities List under CERCLA on November 29, 1989. The U. S. Department of Energy-Idaho Operations Office (DOE-ID), the state of Idaho, and the U.S. Environmental Protection Agency (EPA) Region 10 signed the Federal Facility Agreement and Consent Order (FFA/CO) in December 1991. The cleanup contractor, CH2M-WG Idaho, LLC (CWI) in accordance with the FFA/CO, is conducting environmental restoration activities at the INL Site.
The INL Site is divided into ten Waste Area Groups (WAGs) as a result of the FFA/CO. Field investigations are used to evaluate potential release sites within each WAG when existing data are insufficient to determine the extent and nature of contamination. After each investigation is completed, a determination is made whether a “No Further Action” listing is possible or if it is appropriate to proceed with an interim cleanup action or further investigation using a remedial investigation/feasibility study (RI/FS). Results from the RI/FS form the basis for assessment of risks and alternative cleanup actions. This information, along with the agencies proposed cleanup plan is presented to the public in a document called a Proposed Plan. After reviewing public comments, DOE-ID, EPA, and the State reach a final cleanup decision, which is documented in a Record of Decision (ROD). Cleanup activities then can be designed, implemented, and completed. Specific environmental restoration activities are discussed in Chapter 3.
Natural Resource Trusteeship and Natural Resources Damage Assessment – Executive Order 12580, Section 2(d), appoints the Secretary of Energy as the primary Federal Natural Resource Trustee for natural resources located on, over, and under land administered by DOE. Natural resource trustees act on behalf of the public when natural resources may be injured, destroyed, lost, or threatened as a result of the release of hazardous substances. In the case of the INL Site, other natural resource trustees with jurisdiction over trust resources are the state of Idaho and U.S. Department of Interior (Bureau of Land Management and the U.S. Fish and Wildlife Service). Past releases of hazardous substances resulted in the INL Site’s placement on the National Priorities List. These same releases created the potential for injury to natural resources. DOE is liable under CERCLA for damages to natural resources resulting from releases of hazardous substances to the environment.

Although the ecological risk assessment is a separate effort from the Natural Resources Damage Assessment, it is anticipated that the ecological assessment performed for CERCLA remedial actions can be used to help resolve natural resource issues. Ecological risk assessments at the INL Site have been conducted using the established guidance manual for conducting screening level ecological risk assessments (Van Horn et al. 1995).

Emergency Planning and Community Right-to-Know Act
The Emergency Planning and Community Right-to-Know Act (EPCRA) is intended to help local emergency response agencies better prepare for potential chemical emergencies and to inform the public of the presence of toxic chemicals in their communities.

311 Report – EPCRA Section 311 reports were submitted quarterly for those chemicals that met the threshold planning quantities. These reports were sent to local emergency planning committees, the State Emergency Response Commission, and to local fire departments for each quarter in calendar year 2007. These quarterly reports satisfied the 90-day notice requirement for new chemicals brought onsite.

312 Report – The Emergency and Hazardous Chemical Inventory (Tier II) Report for calendar year 2006 was provided to local and state planning and response agencies. This report identified the types, quantities, and locations of hazardous and extremely hazardous chemicals stored at INL Site facilities that exceeded regulatory thresholds. The threshold for Extremely Hazardous Substances is 230 kg (500 lbs) or the Threshold Planning Quantity, whichever is lower, and 4536 kg (10,000 lbs) for other hazardous chemicals.

313 Report – The Toxic Chemical Release Inventory Report was transmitted to the EPA and the state of Idaho by the July 1, 2007, due date. The report identifies quantities of 313-listed toxic chemicals that were used above activity thresholds for manufacturing, processing, or otherwise use. Once these activity thresholds are exceeded, a Toxic Release Inventory Form R report must be completed for each specific chemical. Releases under EPCRA 313 reporting include transfers to offsite waste storage and treatment, air emissions, recycling, and other activities. The INL Site submitted
seven reports for calendar year 2006 for benzene, lead, naphthalene, nickel, polycyclic aromatic compounds, toluene, and xylene.

National Environmental Policy Act
The National Environmental Policy Act (NEPA) requires federal agencies to consider and analyze potential environmental impacts of proposed actions and explore appropriate alternatives to mitigate those impacts, including a “no action” alternative. Agencies are required to inform the public of the proposed actions, impacts, and alternatives and consider public feedback in selecting an alternative. DOE implements NEPA according to procedures in Code of Federal Regulations (10 CFR 1021) and assigns authorities and responsibilities according to DOE Order 451.1B, “National Environmental Policy Act Compliance Program.” Processes specific to DOE-ID are set forth in its Idaho Operations Office Management System.

The DOE-ID issued the Annual NEPA Planning Summary in January 2007. The summary is a requirement of DOE Order 451.1B, and it is prepared to inform the public and other DOE elements of:

- The status of ongoing NEPA compliance activities,
- Environmental assessments (EAs) expected to be prepared in the next 12 months,
- Environmental impact statements (EISs) expected to be prepared in the next 24 months, and
- The planned cost and schedule for completion of each NEPA review identified.

Ongoing NEPA reviews of INL Site projects are described below.

Idaho High-Level Waste and Facilities Disposition Environmental Impact Statement (Idaho HLW & FD EIS) – This EIS describes the potential environmental impacts of various alternatives for treating and managing high-level radioactive waste and related radioactive wastes and facilities at the Idaho Nuclear Technology and Engineering Center (INTEC). DOE received and considered agency and public comments on a draft EIS. In response to those comments and updated information, DOE incorporated changes into the final EIS. The final EIS was issued in the fall of 2002.

DOE planned for a phased decision-making process. In December 2005, DOE issued a ROD for the Idaho HLW & FD EIS. DOE decided to treat sodium–bearing liquid waste using the steam reforming technology; conduct performance-based closure on all existing facilities directly related to the High-Level Waste (HLW) Program at INTEC, except for the INTEC Tank Farm Facility and bin sets, once their missions are complete; design and construct new waste processing facilities needed to implement the decisions in the ROD consistent with clean closure methods and planned to be clean closed when their missions are complete; and develop HLW calcine retrieval demonstration process and conduct risk-based analysis, including disposal options, focused on the calcine stored at INTEC. An amended ROD addressing closure of the INTEC Tank Farm Facility was issued in November 2006 in coordination with the Secretary of Energy’s determination, in consultation with the Nuclear Regulatory Commission, under Section 3116 of the Fiscal Year 2005 Ronald W. Reagan National Defense Authorization Act. An additional ROD for HLW calcine disposition and bin set closure is scheduled for issuance in 2009.
Environmental Assessment for the Idaho National Laboratory Remote-Handled Waste Disposition (Formerly known as the Remote Treatment Project) - The proposed action is to provide heavily shielded handling services for the sodium contaminated remote-handled (RH) waste stored at the Materials and Fuels Complex (MFC) and the Hanford Reservation and other INL Site legacy RH waste. The project would include a shielded hot cell with equipment for sorting, characterizing, treating and repackaging highly radioactive transuranic, mixed, and other radioactive waste. The facility mission is to make RH radioactive wastes ready for shipment to disposal locations. Much of the proposed action was analyzed in the Programmatic Spent Nuclear Fuel Management and Idaho National Engineering Laboratory Environmental Restoration and Waste Management Programs Final EIS (DOE-ID 1995) as the Remote Mixed Waste Treatment Facility project. DOE notified the state of Idaho and Shoshone-Bannock Tribal contacts in January of 2001. The draft EA is scheduled for public comment in 2008.

Environmental Assessment for the National Security Test Range – In April 2007, DOE issued the final environmental assessment and determined that a finding of no significant impact was appropriate. The test range is specifically designed and constructed to accommodate testing activities in support of analyzing the effects of explosives and explosive devises, munitions, and similar items on security systems, facilities, vehicles, structures, and other materials. The draft environmental assessment was released on December 6, 2006, for public review and comment.

Environmental Assessment for the Consolidation and Expansion of Idaho National Laboratory Research and Development at a Science and Technology Campus – In March 2007, DOE issued the final environmental assessment and determined that a finding of no significant impact was appropriate. Research and development programs that could be conducted at the campus (located near University Place in Idaho Falls) include microbiology (less than Bio safety level 3), geochemistry, materials characterization and testing, welding, ceramics, thermal fluids behavior, analytical and environmental chemistry, and biotechnology. The draft environmental assessment was released on November 29, 2006, for public review and comment.

Endangered Species Act
The Endangered Species Act provides a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, provides a program for the conservation of such endangered species and threatened species, and takes such steps as may be appropriate to achieve the purposes of the international treaties and conventions on threatened and endangered species. It requires that all federal departments and agencies shall seek to conserve endangered species and threatened species and shall use their authorities in furtherance of the purposes of this act.

Personnel in the Environmental Surveillance, Education and Research Program conduct ecological research, field surveys, and NEPA evaluations regarding ecological resources on the INL Site. Particular emphasis is given to threatened and endangered species and species of special concern identified by the U.S. Fish and Wildlife Service and Idaho Fish and Game Department.
One federally protected species, the gray wolf (*Canis lupus*), may occasionally spend time on the INL Site. Gray wolves found in the geographical region that includes the INL Site are identified as an experimental/nonessential population and treated as a threatened species. There have been unsubstantiated sightings of gray wolves on the INL Site.

**Executive Order 11988 – Floodplain Management**

Executive Order 11988 – Floodplain Management requires each federal agency to issue or amend existing regulations and procedures to ensure that the potential effects of any action it may take in a floodplain are evaluated and that its planning programs and budget requests reflect consideration of flood hazards and floodplain management. It is the intent of this Executive Order that federal agencies implement floodplain requirements through existing procedures such as those established to implement NEPA. The 10 CFR 1022 contains DOE policy and floodplain environmental review and assessment requirements through the applicable NEPA procedures. In those instances where impacts of actions in floodplains are not significant enough to require the preparation of an EIS under NEPA, alternative floodplain evaluation requirements are established through the INL Site environmental checklist process.

For the Big Lost River, DOE-ID has accepted the Big Lost River Flood Hazard Study, INL, Idaho, U.S. Bureau of Reclamation, 2005. This flood hazard report based on geomorphological models and has undergone peer review. On January 12, 2006, DOE-ID directed the Idaho Cleanup Project contractor to use this floodplain determination for any activities that require the characterization of flows and hazards associated with the Big Lost River. All activities on the INL Site requiring characterization of flows and hazards are expected to use this report.

For facilities at Test Area North (TAN), the 100-year floodplain has been delineated in a U.S. Geological Survey (USGS) report (USGS 1997).

**Executive Order 11990 – Protection of Wetlands**

Executive Order 11990 requires each federal agency to issue or amend existing regulations and procedures to ensure wetlands are protected in decision-making. It is the intent of this executive order that federal agencies implement wetland requirements through existing procedures such as those established to implement NEPA. The 10 CFR 1022 statute contains DOE policy and wetland environmental review and assessment requirements through the applicable NEPA procedures. In those instances where impacts of actions in wetlands are not significant enough to require the preparation of an EIS under NEPA, alternative wetland evaluation requirements are established through the INL Site environmental checklist process. Activities in wetlands considered waters of the United States or adjacent to waters of the United States may also be subject to the jurisdiction of Section 404 and 402 of the Clean Water Act (CWA).

The only area of the INL Site identified as potentially jurisdictional wetlands is the Big Lost River Sinks. The U.S. Fish and Wildlife Service National Wetlands Inventory map is used to identify potential jurisdictional wetlands and nonregulated sites with ecological, environmental, and future development significance. In 2007, no actions took place or had an impact on potentially jurisdictional
wetlands on the Site, no future actions are planned that would impact wetlands. However, private parties do conduct cattle grazing in the Big Lost River Sinks area under Bureau of Land Management permits.

**Resource Conservation and Recovery Act**
The Resource Conservation and Recovery Act (RCRA) established regulatory standards for generation, transportation, storage, treatment, and disposal of hazardous waste. The Idaho Department of Environmental Quality (DEQ) is authorized by EPA to regulate hazardous waste and the hazardous components of mixed waste at the INL Site. Mixed waste contains both radioactive and hazardous materials. The Atomic Energy Act, as administered through DOE Orders, regulates radioactive wastes and the radioactive part of mixed wastes. Idaho DEQ has issued two RCRA Part A permits for the INL Site and seven Part B permits. One additional Part B permit is pending.

**Notices of Violation/Non-compliance** – On March 5-9, 2007, Idaho DEQ conducted an inspection of the INL Site. The Idaho DEQ issued a Warning Letter to DOE-ID and INL Site contractors Bechtel BWXT Idaho, LLC (BBWI), Battelle Energy Alliance (BEA), and CWI on May 29, 2007, for four alleged violations. DOE-ID, BEA and Idaho DEQ conducted a meeting on June 21, 2007, to discuss the four alleged violations. Information on corrective actions and deliverables to resolve the issues raised in the Warning Letter were provided to Idaho DEQ for review. On October 2, 2007, Idaho DEQ determined that no further action would be taken on the four alleged violations based upon the corrective actions taken and information provided by the INL Site.

**RCRA Closure Plans** – The state of Idaho approved closure plans for the following facilities in 2007:

- Reactor Technology Complex Materials Test Reactor Warm Waste System (TRA-007)
- INTEC Fluorinel Dissolution Process Make-up and Cooling and Heating Systems (INTEC-066, 067, 068, and 072)
- INTEC Headend Storage Tank System (CPP-640)
- INTEC Westside Waste Holdup Tank System (CPP-641).

**RCRA Reports** – As required by the state of Idaho, the INL Site submitted the Idaho Hazardous Waste Generator Annual Report for 2007. The report contains information on waste generation, treatment, recycling, and disposal activities at INL Site facilities.

**Federal Facility Compliance Act**
The Federal Facility Compliance Act requires the preparation of site treatment plans for the treatment of mixed wastes stored or generated at DOE facilities. Mixed waste contains both hazardous and radioactive components. The INL Site Proposed Site Treatment Plan was submitted to the state of Idaho and EPA on March 31, 1995. This plan outlined DOE-ID’s proposed treatment strategy for INL Site mixed-waste streams, called the “backlog,” and provided a preliminary analysis of potential offsite mixed low-level waste treatment capabilities.

The INL Site Proposed Site Treatment Plan formed the basis for negotiations between the state of Idaho and DOE-ID on the consent order for mixed waste treatment at the INL Site. The Federal
Facility Compliance Act Consent Order and Site Treatment Plan were finalized and signed by the state of Idaho on November 1, 1995.

A status of Site Treatment Plan milestones for 2007 is provided in Chapter 3.

**Toxic Substances Control Act**
The Toxic Substances Control Act (TSCA), which is administered by EPA, requires regulation of production, use, or disposal of chemicals. TSCA supplements sections of the Clean Air Act, the CWA, and the Occupational Safety and Health Act. Because the INL Site does not produce chemicals, compliance with TSCA at the INL Site is primarily directed toward use and management of certain chemicals, particularly polychlorinated biphenyls (PCBs). Removal of PCB-containing light ballasts continues at buildings undergoing demolition. The ballasts are disposed of off-site in a TSCA-approved disposal facility.

A release of polychlorinated biphenyls occurred at the MFC during maintenance on electrical equipment in July 2006. The release was cleaned up in accordance with Federal regulations. The INL contractor, BEA, received a Notice of Violation issued by EPA in July 2007. The issue was closed in December 2007 with BEA paying a fine of $30,500.

**DOE Order 435.1, Radioactive Waste Management**
DOE Order 435.1, “Radioactive Waste Management,” was issued to ensure that all DOE radioactive waste is managed in a manner that protects the environment and worker and public safety and health. This Order, effective July 1, 1999, replaces DOE Order 5820.2A, “Radioactive Waste Management,” and includes the requirements that DOE facilities and operations must meet in managing radioactive waste. INL Site activities related to this Order are discussed in Chapters 3 and 6.

**State of Idaho Reclamation and Reuse of Municipal and Industrial Wastewater Permits**
Applications for state of Idaho Reclamation and Reuse of Municipal and Industrial Wastewater (formerly Wastewater Land Application) Permits have been submitted for all existing land application facilities. The Central Facilities Area Sewage Treatment Plant, the Test Area North/Technical Support Facility (TAN/TSF) Sewage Treatment Plant, the Reactor Technology Complex Cold Waste Ponds, and the combined INTEC Sewage Treatment Plant effluent and service wastewater for disposal at the new INTEC percolation ponds have current permits. Idaho DEQ is reviewing the permit application for the MFC industrial waste pond. As part of decontamination and decommissioning activities, the TAN/TSF Sewage Treatment Plant is being closed under an Idaho DEQ-approved closure plan. Effluent discharge ceased in 2007 and closure activities are expected to be completed in 2008.

**Idaho Settlement Agreement**
On October 16, 1995, DOE, the U.S. Navy, and the state of Idaho entered into an agreement that guides management of spent nuclear fuel and radioactive waste at the INL Site. The Agreement limits shipments of DOE and Naval spent nuclear fuel into the State and sets milestones for shipments of spent nuclear fuel and radioactive waste out of the State. DOE must have all Idaho spent nuclear fuel in dry storage by 2023 and all spent nuclear fuel out of Idaho by 2035.
The INL Site continues to make transuranic (TRU) waste shipments in compliance with the Settlement Agreement requirement to ship a running average of no fewer than 2,000 cubic meters of TRU waste per year out of Idaho. The running average over the past three years stands at 6108 cubic meters (7989 cubic yards). In calendar year 2007, 5988 cubic meters (7832 cubic yards), including 35 cubic meters (46 cubic yards) of remote-handled, TRU waste were shipped out of Idaho.

The INL Site received nine truck cask shipments containing a combined total of 0.235 metric tons (2,205 lbs) spent nuclear fuel from DOE Hanford (six shipments); DOE Sandia National Lab (two shipments); and Texas A&M University (one shipment). By the end of the calendar year 2007, 1801 of 3178 fuel handling units identified in the Idaho Cleanup Project contract had been moved to dry storage.

**Clean Air Act**

The Clean Air Act is the law that forms the basis for the national air pollution control effort. Basic elements of the act include national ambient air quality standards for major air pollutants, hazardous air pollutant standards, state attainment plans, motor vehicle emissions standards, stationary source emissions standards and permits, acid rain control measures, stratospheric ozone protection, and enforcement provisions.

The EPA is the federal regulatory agency of authority, but states may administer and enforce provisions of the act by obtaining EPA approval of a state implementation plan. Idaho has been delegated such authority.

The Idaho air quality program is primarily administered through the permitting process. Potential sources of air pollutants are evaluated against regulatory criteria to determine if the source is specifically exempt from permitting requirements and if the source’s emissions are significant or insignificant. If emissions are determined to be significant, several actions may occur:

- Permitting determinations to demonstrate that the project/process either is below emission thresholds or listed as exempted source categories in state of Idaho regulations allowing self-exemption.
- Submittal of an application for a Permit to Construct (PTC). If emissions are deemed major under Prevention of Significant Deterioration (PSD) regulations, then a PSD analysis must be completed. If not deemed significant per PSD regulations, an application for only a PTC without the additional PSD modeling and analyses is needed. All PTCs are applied for using the state of Idaho air regulations and guidelines.
- Additionally, a Title V operating permit (also known as a Tier I operating permit) is required for major sources. Major sources are sources that emit, or may emit, 100 or more tons of any regulated air pollutant per year, 10 or more tons per year of any one hazardous air pollutant, or 25 or more tons per year of any combination of hazardous air pollutants.

**Title V Operating Permit** – Title V of the 1990 Clean Air Act Amendments required the EPA to develop a federally enforceable operating permit program for air pollution sources to be administered by state and/or local air pollution agencies. The EPA promulgated regulations in July 1992 that
defined the requirements for state programs. Idaho has promulgated regulations and EPA has given full approval of the Idaho Tier I Operating Permit program. The INL has two Tier I operating permits with effective dates of June 28, 2005, and November 15, 2006.

**National Emission Standards for Hazardous Air Pollutants** – CFR Title 40, part 61, subpart H applies to operations of facilities owned and operated by DOE. Administration of this subpart has not been delegated to Idaho and is regulated by the EPA. DOE-ID submitted the *National Emission Standards for Hazardous Air Pollutants-Calender Year 2007 INL Report for Radionuclides* to EPA, DOE Headquarters, and state of Idaho officials in June 2008. Subpart H requires the use of an EPA-approved computer model to calculate the hypothetical maximum individual effective dose equivalent to a member of the public resulting from INL Site airborne radionuclide emissions. The calculations for this code are discussed further in Chapter 8, “Dose to the Public.”

Permitted sources of air pollutants at the INL Site are listed in Table 2-2.

**Clean Water Act**
The CWA, passed in 1972, established goals to control pollutants discharged to U.S. surface waters. Among the main elements of the CWA are effluent limitations, set by the EPA, for specific industry categories and water quality standards set by states. The CWA also provided for the National Pollutant Discharge Elimination System (NPDES) permit program, requiring permits for discharges into regulated surface waters.

The INL Site complies with two CWA permits through the implementation of procedures, policies, and best management practices. The permits are:

- Discharges from Idaho Falls facilities to the city of Idaho Falls publicly owned treatment works.
- NPDES General Permit for Storm Water Discharges from Construction Activities provides protective requirements for construction activities located within the INL Site storm water corridor (63 FR 31).

**National Pollutant Discharge Elimination System Permits** – The city of Idaho Falls is authorized by the NPDES permit program to set pretreatment standards for nondomestic discharges to publicly owned treatment works. This program is set out in the Municipal Code of the city of Idaho Falls regulations in Chapter 1, Section 8. Industrial Wastewater Acceptance Forms are obtained for facilities that discharge process wastewater through the City of Idaho Falls sewer system. In 2007, the City determined that most of the facilities with Industrial Wastewater Acceptance Forms did not have discharges that met the criteria for issuance. Therefore, there is only one Industrial Wastewater Acceptance permit which covers discharges from specified buildings at the INL Research Center. All others were withdrawn by the City.

The Industrial Wastewater Acceptance permit contains special conditions and compliance schedules, prohibited discharge standards, reporting requirements, monitoring requirements, and effluent concentration limits for specific parameters. All discharges from Idaho Falls facilities in 2007 were within compliance levels established on the acceptance form.
Storm Water Discharge Permits for Construction Activity – DOE-ID obtained coverage for the
INL Site under the General Permit for Storm Water Discharges from Construction Sites issued in June
1993. The coverage under the general permit has been renewed twice. INL Site contractors obtain
coverage under the general permit for individual construction projects. Storm Water Pollution Plans
are completed for individual construction projects. Inspections of construction sites are performed in
accordance with permit requirements.

Only construction projects that are determined to have a reasonable potential to discharge pollutants
to a regulated surface water are required to have a Storm Water Pollution Prevention Plan and
Permit.

Safe Drinking Water Act
The Safe Drinking Water Act was reauthorized on August 6, 1996. It establishes primary standards
for water delivered by systems supplying drinking water to 15 or more connections or 25 individuals
for at least 60 days per year. The INL Site drinking water supplies meet these criteria for public water
systems and are classified as either nontransient noncommunity or transient noncommunity systems.
The INL Site has 12 active public water systems, one of which serves the Naval Reactors Facility. All
facilities at the INL Site perform sampling of drinking water as required by the State and EPA. Chapter
5 contains details on drinking water monitoring results.

National Historic Preservation Act
Preservation of historic properties on lands managed by DOE is mandated under Section 106 of the
National Historic Preservation Act (NHPA) of 1966. The Section 106 process is the legal mechanism
used to determine if adverse effects to historic properties will occur and if so, the nature and extent
of these adverse effects. Consultation with the Idaho State Historic Preservation Office (SHPO) and
interested parties are then conducted to mitigate these effects.

The INL Site Cultural Resources Management Plan (CRMP) was written specifically for site
resources, providing a tailored approach to comply with Section 106 of the NHPA. The CRMP is
reviewed and updated annually. Additionally, a Programmatic Agreement between DOE-ID, the
Management of Cultural Resources on the INL Site, formally implements the CRMP.

In 2007, 40 known resources, five projects, and three ground disturbing activities were reviewed on
the INL for compliance with the CRMP. Briefly, there were no adverse effects to historic properties
during the 2007 time frame. Several U.S. Navy built brick buildings from the World War II period were
monitored to update their documented condition. The buildings have evolved from being targets for
demolition as they are recognized as features of the historic landscape of the INL. The Experimental
Breeder Reactor-I was monitored as it is the INL’s single national Historic Landmark because of its
role in early development of U.S. nuclear reactors and reactor technology.

The Experimental Test Reactor, TAN Hot Shop, and Power Burst Facility were covered under the
previous negotiations with SHPO. Mitigation of adverse impacts to signature properties is completed
or in the process of being completed as required by the Programmatic Agreement and as outlined in
a memorandum of agreement regarding these properties with the SHPO. No new negotiations with SHPO were required for 2007 as no new properties not previously identified and negotiated have been impacted.

Native American Graves Protection and Repatriation Act
The INL Site is located on the aboriginal territory of the Shoshone and Bannock people. The Shoshone-Bannock Tribes are major stakeholders in INL Site activities. They are particularly concerned with how the remains of their ancestors and culture are treated by DOE-ID and its contractors. The Native American Graves Protection and Repatriation Act provides for the protection of Native American remains and the repatriation of human remains and associated burial objects. Repatriation refers to the formal return of human remains and cultural objects to the Tribes with whom they are culturally affiliated.

In 2007, several sites of tribal sensitivity were monitored with tribal participation. Sites included caves, buttes, craters, and locations of known remains. No evidence of unauthorized human activity was observed and details of sites are kept to a minimum to ensure protection of ancestral properties and resources.

2.2 Environmental Occurrences
In 2007, three releases were deemed reportable to external regulatory agencies:

- On March 22, 2007, a diesel oil spill was discovered at the Central Facilities Area (CFA). Approximately 3900 gallons of diesel #2 spilled from the B-646 day tank used for the CFA-688 boiler. The diesel overflowed from the day tank and spread to the asphalt in the parking lot and the soil. Approximately 300 gallons were estimated to have reached the soil. The spill exceeded the reportable quantity of 25 gallons and could not be completely remediated within 24 hours of discovery. Notification was made to appropriate authorities within the state of Idaho according to regulatory requirements and the area of the spill was subsequently remediated.

- On July 20, 2007, a mineral oil spill was discovered at an Idaho Falls facility. A tank pump within the INL Engineering Demonstration Facility contained a leaking flange and approximately 350 gallons of mineral oil leaked from the tank into the building. Approximately 25 gallons of mineral oil reached the soil outside the building. The spill was remediated within 24 hours of discovery. Notification was made to appropriate authorities within the state of Idaho.

- On November 8, 2007, mercury were spilled during decontamination and decommissioning operations at TAN. Voluntary Consent Order (VCO) lines in the former V-Tank area were being drained. These VCO lines are subject to 40 CFR 265.196(d) (Subpart J). Approximately 1.3 kg (3 lbs) elemental mercury were released to the soil. The spill also contained various radionuclides at activity levels below reportable quantities. The leak was discovered immediately and the mercury was retrieved in its entirety within 24 hours of discovery, including incidental underlying soils. Since the spill was to soil and exceeded the 0.5 kg (1 lb) reportable quantity, notification was made to appropriate authorities within the state of Idaho according to regulatory requirements.
None of these releases posed significant threats to the environment or human health. All releases were appropriately remediated.

2.3 Permits

Table 2-2 summarizes active and pending permits for the INL site through year-end 2007.

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<th>Issuing Agency</th>
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\(^a\) Part B permit is a single Permit comprised of several volumes.
REFERENCES


