State of Idaho Oversight Monitor

Focus on Cleanup
July 2002

Oversight is a state agency that monitors activities at the INEEL on behalf of the citizens of Idaho.

New initiative for "sooner, safer" INEEL cleanup launched

On May 30, the State of Idaho, the Department of Energy and the Environmental Protection Agency signed a letter of intent to support a 50-year acceleration of final INEEL cleanup and increase the site's 2003 cleanup budget from $594 million to $704 million.

Governor Kempthorne and Idaho's Congressional delegation view this as an opportunity not only for increasing the INEEL budget, but also for securing the site's future. "This is a major advance in getting the INEEL cleaned up faster and ensuring a long-term mission for the talented Idahoans who work at the lab in helping this country meet its national security, basic science, environmental and energy needs." Governor Kempthorne said.

"I appreciate Energy Secretary Spencer Abraham's recognition of the importance of both accelerating cleanup and cultivating the INEEL's tremendous science and engineering capabilities. Together with the members of Idaho's Congressional delegation, we are committed to a bright future for the site," he added.

The letter of intent provides a framework for:

- Accomplishing priority cleanups by 2012 and completing cleanup activities at the entire INEEL site by 2020, instead of the current target of 2070 and
- Transferring INEEL lab sponsorship from DOE's cleanup program to other sponsors to support new and continuing missions.

DOE will collaborate with the State and EPA to develop a more detailed plan for accelerating cleanup. The accelerated cleanup plan will meet all environmental requirements and standards. "Our efforts will focus on achieving our cleanup goals sooner and more efficiently. Idaho's goals and priorities remain the same," said Kathleen Trever, head of Idaho's INEEL Oversight Program.

Striking a balance

Managing waste is a balance of risks and costs. More treatment and waste handling can translate to more emissions, more risks for workers, and more short-term costs.

Less treatment can translate to increased risks during transportation and near disposal sites, with higher long-term management and monitoring costs.

Less treatment can translate to lower short-term costs, allowing money to be spent on other priorities.

There are (or will be) standards set to protect workers and the public for treatment facilities, transportation and disposal sites.

Is "meeting standards" good enough?

How much should we spend for a small return in risk reduction or margin of safety?

DOE's cleanup program plans to shift waste management costs (and other costs) now paid by the environmental management program to the program that generates the waste.

What should DOE consider in making this transfer?

Idaho's fundamental priority for INEEL cleanup is protection of the Snake River Plain Aquifer. More detailed priorities are listed on the back page of this newsletter.

"The accelerated cleanup plan will meet all environmental requirements and standards..."

From concept to fine print—where do we go from here?

In moving from vision to details, INEEL has published a draft Performance Management Plan for discussion with regulators and the public. The plan describes opportunities for accelerating the resolution of 9 cleanup problems. On the next two pages, we've tried to summarize the cleanup problems and DOE's proposals for acceleration, along with our perspective and issues the process must address. The entire plan, and the INEEL's summary, are available on the internet at www.inel.gov/environment/accelerating-cleanup/.

Citing deadlines of the federal budget cycle, DOE plans to wrap up the first version of the plan by August 1, 2002. DOE's first comment period is short—comments were due on July 8, 2002. We also welcome your feedback directly to us and have enclosed a postage-paid feedback card for your use. We expect the important task of INEEL cleanup to be an ongoing, interactive process.

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What can we learn from other DOE sites and their host states?

DOE also plans to accelerate cleanup at other sites. DOE signed similar letters of intent to accelerate cleanup at Hanford (Washington), Oak Ridge (Tennessee), the Nevada Test Site, and Sandia and Los Alamos (New Mexico). But these cleanups cannot succeed in a vacuum. INEEL initiatives may affect DOE activities at other sites and vice versa. For example, DOE has made proposals to accelerate shipments to WIPP from INEEL, Oak Ridge, Los Alamos, Hanford and the Nevada Test Site in addition to meeting existing commitments to complete cleanup work at the Rocky Flats site in Colorado by 2006. These schedules pose significant challenges to the WIPP transportation system. DOE and states will need to work collectively on these and other issues for individual site initiatives to succeed.

For more information: draft INEEL plan: www.inel.gov/environment/accelerating-cleanup/
draft Hanford plan: http://www.hanford.gov/docs/hpmp/ draft Oak Ridge plan: http://www.bechteljacobs.com/doeclean/_pu-pmp.html

	Problem	Current plan	Proposed
Liquid high-level waste	1. **Liquid high-level waste:** Eleven underground tanks hold about 900,000 gallons of highly radioactive liquid waste. Prior leaks from transfer lines to this "tank farm" have contaminated area soils. The Settlement Agreement requires INEEL to remove liquids from tanks and solidify them for shipment out of Idaho. The Cleanup Agreement requires the INEEL to get the tank farm and area soils into a safe condition for the long term.	• Get liquids out of the Tank Farm by 2012. The INEEL has not yet decided how to do this. • Prepare solidified waste for removal from Idaho by 2035. The INEEL has not yet decided how to do this. • Meet state and federal requirements for closing tanks, date not yet determined. • Remediate contaminated soil to an undetermined risk level, method and date also not yet determined.	• Determine if waste can meet requirements for shipment to WIPP. • Determine whether a treatment other than conversion to glass form will meet shipment and disposal requirements. • Determine ways to more effectively reduce remaining contamination. • Determine whether treatment can be timed to allow shipment to the disposal site without the need for storage in between treatment and shipment.
Solid HLW	2. **Solid high-level waste:** Six storage bins hold over 9,000 cubic meters of highly radioactive waste in powder form. The Settlement Agreement requires the INEEL to treat this material so it can be sent to a disposal site outside Idaho.	• Prepare solidified waste for removal from Idaho by 2035. The INEEL has not yet decided how to do this.	• Determine if the waste can meet requirements for shipment and disposal with little or no additional treatment. • Determine whether treatment can be timed to allow shipment to the disposal site without the need for storage in between treatment and shipment.
Buried waste	3. **Buried waste:** An 88-acre landfill at the Radioactive Waste Management Complex (RWMC) contains chemical and radioactive wastes which have migrated or could migrate to the Aquifer. About 10-12 acres contain plutonium-contaminated waste. The Settlement Agreement requires all transuranic waste now at the INEEL be shipped out of Idaho. The Cleanup Agreement requires the INEEL to ensure RWMC does not pose a threat to human health and the environment over the long term.	• See the story on pages 4 and 5 for more information about this issue. • Retrieve transuranic waste for removal from Idaho by 2018 (DOE does not agree that this is required of it.) • Make a decision on cleaning up the rest of the landfill by 2006.	• Evaluate interim steps for reducing risk. One option that might be evaluated is increased extraction of hazardous organic vapors; another is stabilization of areas with more mobile contaminants. • Evaluate other options for retrieval of waste. • Complete landfill cleanup by 2020.
Transuranic waste	4. **Shipments of transuranic waste to WIPP**: Transuranic waste, nuclear garbage from creation of nuclear weapons, has been stockpiled at the INEEL. Much of the transuranic waste at the INEEL came from the Rocky Flats nuclear weapons production facility in Colorado. The Settlement Agreement requires the INEEL to remove all transuranic waste now at the INEEL from Idaho. Shipments are now being made.	• Again, see the story on pages 4 and 5. • Remove all transuranic waste from Idaho by December of 2018. • Ship 3,100 cubic meters of transuranic waste by Dec. 2002, and average 2,000 cubic meters per year until all waste is removed. • Start shipping remote-handled transuranic waste by 2010, finish by 2018.	• Complete shipments of waste from the storage area by 2012. • Start shipping remote-handled transuranic waste by 2004 (six years earlier than planned), and finish by 2012 (six years earlier than planned.)
Spent nuclear fuel	5. **Spent nuclear fuel** (SNF) containing about 270 metric tons of heavy metals is stored at several INEEL locations, including several water pools. The Settlement Agreement requires the INEEL to prepare spent nuclear fuel for removal from Idaho and place it in dry storage prior to shipment.	• Move SNF now at Test Area North to Idaho Nuclear Technology & Engineering Center by 2017. • Complete transfer of all SNF from wet to dry storage by 2023. • Have SNF shipped out of Idaho by January 1, 2035.	• Move SNF from Test Area North to Idaho Nuclear Technology & Engineering Center by 2005 (12 years earlier.) • Complete transfer of all SNF from wet to dry storage by 2012 (11 years earlier.)
Usable	6. Some usable uranium and other nuclear materials are not being used.	• No clear plan.	• Develop plan for use or disposal.
Misc.	7. Miscellaneous locations contaminated with radionuclides, metals, or chemicals.	• Follow schedule in cleanup agreement (detailed elsewhere in this newsletter.)	• Speed up cleanup of miscellaneous tanks and smaller contaminated sites; complete active cleanup by 2020.
Maintain	8. The cleanup program spends nearly $200 million each year maintaining facilities and infrastructure.	• Close down and decontaminate ("decommission") facilities as funding allows.	• Consolidate cleanup at INTEC, transfer facilities to programs with ongoing missions, get rid of unwanted buildings.
LLW & Mixed Waste	9. Ongoing DOE operations continue to generate low-level waste (LLW) and mixed (hazardous & radioactive) waste.	• Use on-site LLW facility until it runs out of room. Store MW at six locations before treating it or shipping it off site.	• End on-site disposal of LLW by 2009. Consolidate MW, use other DOE or commercial facilities.

	Issues	Perspective
Liquid high-level waste	• There's no clear plan for treating this waste, and no place ready to take it once it's treated. • "Disposal criteria," rules that say what the facility can accept, are a key consideration for any disposal site. Since there's no disposal facility ready for high-level waste and spent nuclear fuel, the disposal criteria aren't set. WIPP, the disposal facility built for transuranic waste, has not set disposal criteria for waste like this, which requires special (remote) handling. • DOE must take additional steps to evaluate what's in this waste to meet cleanup standards for tanks and soils; and must also meet shipping standards set by the Nuclear Regulatory Commission and the U.S. Dept. of Transportation.	Although currently classified as waste destined for the repository for high-level waste, this waste may be appropriately classified as waste suitable for disposal at WIPP. Use of the WIPP facility could allow DOE to remove waste from Idaho sooner. For this option to succeed, the waste would have to meet EPA, New Mexico and DOE's internal standards for disposal at WIPP, some of which are still being set. Until recently, DOE assumed waste would be treated to a glass or ceramic form to go to the high-level waste repository. DOE is re-evaluating that assumption. The WIPP facility does not accept liquids, but can accept a range of solid forms. DOE is looking at treatment options that produce solids from powders to glass. What factors should be involved in making these decisions?
Solid HLW	• There's no clear plan for treating this waste, and no place ready to take it once it's treated. • Disposal criteria, as above, are an unresolved issue. • DOE must take additional steps to evaluate what's in this waste to meet standards for shipping set by the Nuclear Regulatory Commission and the U.S. Department of Transportation.	Until recently, DOE assumed waste would be treated to a glass or ceramic form to go to the high-level waste repository. DOE is reevaluating that assumption. Less treatment and waste handling at the INEEL means fewer emissions and lower worker risk. It can also reduce the time for waste removal and "free up" money for DOE to spend on other cleanup. DOE is evaluating whether the powder form of the waste can meet transportation and disposal standards with less or no treatment. Is meeting standards good enough in light of the reduced INEEL risk, time and cost savings? What assurances need to be in place?
Buried waste	• It will take several years for the INEEL to complete its evaluation of what's in the landfill, and then develop alternatives for retrieving, stabilizing, and treating the waste.	Much of the public discussion on buried waste cleanup has focused on plutonium-contaminated waste. The agencies' evaluation of this aspect of cleanup, relying partly on the Pit 9 project, will take time. There may be steps DOE can take to reduce risks from other, more mobile contaminants in the short term.
Transuranic waste	• DOE has not identified ways to deal with problem wastes. These include waste contaminated with polychlorinated biphenyls (PCBs, which are nearly indestructible,) and other hazardous chemicals which don't meet shipping or disposal standards. • WIPP is not ready to accept remote-handled wastes, and has not set disposal criteria for them. • DOE must take additional steps to evaluate buried transuranic waste and methods for retrieving it. • DOE is evaluating speeding up WIPP shipments for several sites, but has a limited number of shipping containers, trucks and drivers. Remote-handled waste will pose more challenges.	DOE has made commitments to states, tribes and the public regarding safety and notification measures. DOE has proposed to reevaluate its transportation system and look at rail shipments as well. How should shipments from various sites be prioritized, and can the health and safety commitments be honored? DOE also made commitments to public interest groups in Wyoming and Idaho to look at alternatives for incineration of problem wastes to enable those wastes to meet shipment and disposal criteria. The status of those commitments is unclear. How should meeting these commitments fit into cleanup priorities?
Spent nuclear fuel	• There is no permanent disposal site for spent nuclear fuel.. • Disposal criteria, as with high-level waste, are an unresolved issue. • Some spent nuclear fuel may need special treatment before it can be shipped.	DOE is not proposing to change <u>how</u> it will transfer spent fuel to dry storage, but to change <u>when</u>. DOE is looking at getting SNF out of older pools at Test Area North and at two reactors that are no longer operating in the next few years. Under this proposal, INEEL fuel operations would be concentrated at INTEC, the Naval Reactors Facility, and Argonne West. Because often the same people are involved in receiving spent fuel from other places as well as moving spent fuel on the INEEL, DOE should reevaluate its national spent fuel plans to see if they are still consistent with priorities.
Usable	• It's not clear what programs will assume responsibility for these materials.	DOE needs to develop a strategy for management of its special nuclear materials. This should take into account infrastructure needed to support ongoing nuclear projects at the INEEL.
Misc.	• Some cleanup work may have to be resequenced.	In many cases, cleanup "success" depends on what is done with contaminated soil. Some may be appropriate for the new on-site landfill for cleanup materials.
Maintain	• It's not clear what programs will assume responsibility for managing these facilities, infrastructure, and long-term monitoring.	DOE's cleanup program can spend more money on actual cleanup by reducing its overhead costs for facility management. DOE needs to develop a strategy for long-term management of facilities & infrastructure.
LLW & Mixed Waste	• It's not clear how ongoing operations will manage their waste using facilities other than the RWMC. DOE needs to develop a strategy for management of newly generated wastes.	Although the cleanup program may stop paying costs associated with managing wastes from ongoing projects, the government must still pay these costs.

Thorny issues impede cleanup progress, progress made on each

Most of the contentious issues that dominated the relationship between the Department of Energy and the State of Idaho were settled With the 1991Cleanup Agreement and the 1995 Settlement Agreement. A few issues remain, however, dominating public perception of the site and obscuring the progress that has been made under the two agreements. The issues are Pit 9, the fate of the rest of the buried waste (other than that in Pit 9,) and the definition of the word "all" in the Settlement Agreement.

The cleanup agreement set up a three-party management system for site cleanup, a process for decision-making and resolution of conflicts, and enforceable deadlines to ensure continued progress. The management triumvirate—the state Department of Environmental Quality, the federal Environmental Protection Agency, and the Department of Energy—makes decisions together and serves as checks and balances. It hasn't been an easy road, agree cleanup managers for the three agencies, but it has led to real progress.

The Settlement Agreement set out deadlines for decision-making, treatment, and transport of three types of nuclear waste: transuranic waste, "nuclear garbage" created by weapons-making activities; spent nuclear fuel; and high-level waste, the by-product of reprocessing (recycling) of spent nuclear fuel.

While not everyone is happy with the particulars of each agreement, most agree that they paved the way for progress on cleanup; decision-making, treatment, and disposal of cold-war wastes, and long-term planning for the site and the communities that depend on it.

Waste disposal at the Radioactive Waste Management Complex, before 1970 (1962.)

Pit 9

In a major breakthrough towards removing buried waste from Idaho, the Department of Energy, the State of Idaho, and the Environmental Protection Agency agreed on April 17 to a new approach and schedule for moving ahead with the Pit 9 demonstration project. "We have a commitment tied to on-the-ground performance instead of studies and more paperwork," Governor Kempthorne said.

The DOE will adopt a new approach and schedule for moving ahead with the Pit 9 demonstration project and a thorough technical investigation of options for cleaning up the entire 88-acre Radioactive Waste Management complex. DOE has agreed to pay $800,000 for delays in Pit 9 cleanup and establish a $5 million reserve fund for possible future settlement payments in the event terms of the new agreement are not met.

The $800,000 penalty will be used to fund "supplemental environmental projects" that protect the public and the environment by preventing pollution, reducing the amount of pollution entering the environment, or enhancing, repairing, or restoring the quality of an environmental resource impacted by DOE's activities.

Supplemental environmental projects funded by a similar penalty paid by DOE for failing to meet deadlines include the purchase of Box Canyon Springs in Gooding County for use as a state park, protection and improvement of riparian habitat in the Island Park area, and funding for the Teton Regional Land Trust in the Teton River Basin and the Wood River Land Trust in an area on the border of Camas and Blaine counties. The four projects totaled $870,000. $100,000 was also paid to the EPA's superfund account.

Each party to the agreement--the state, the DOE, and the EPA—

Out of sight but not out of mind: INEEL's "buried waste"

"Buried waste" isn't formally defined, but it typically means waste from the Rocky Flats nuclear weapons production facility that was buried at the Radioactive Waste Management Complex before 1970. Much of this waste is contaminated with plutonium or other elements that were made when weapons were produced.

At the time, strict regulations requiring waste characterization (testing and identifying) and careful record-keeping were not in effect. So we don't know exactly what's in this waste or how much waste there is.

DOE, EPA and Idaho agreed to postpone their cleanup decision for the 88-acre landfill by about 3 years to evaluate information from the retooled Pit 9 project. Before making a decision, the agencies will increase their understanding of what's in the landfill and its risks, and evaluate cleanup options. The agencies plan to present a cleanup plan for public input in 2006.

Waste disposal at the RWMC after 1970.

All's well?

Most issues relating to the INEEL are complex, but this one is simple: what is the meaning of the word "all?"

The 1995 Settlement Agreement says that "...DOE shall ship all transuranic waste now located at the INEL, currently estimated at 65,000 cubic meters, to the Waste Isolation Pilot Plant (WIPP) or other such facility..."

The state contends that means all of the transuranic waste at the INEEL: including "buried waste" contaminated with transuranic elements at a concentration of at least 100 nanocuries per gram. That concentration represents DOE's definition of transuranic waste. The state's representatives say that inclusion of buried transuranic was clearly their intent when the Agreement was negotiated.

In a nutshell, the state's position is that "all" means...all.

The Department of Energy and its contractors that run the lab have another view of the definition of "all." DOE maintains that "all" does not include transuranic waste buried in pits and trenches before 1970.

Before 1970, waste was essentially tossed into pits and trenches, then dirt bulldozed over it. Much of the waste wasn't always identified or tracked.

After 1970, waste was stacked in a huge pile that was eventually covered by an earthen berm and enclosed in a building, or stacked in shelters that were eventually replaced by buildings.

DOE contends that its intent when the Agreement was negotiated and signed was that pre-1970 waste was included in "transuranic" and post-1970 waste was not, so "all" means "some."

appoints one person to help decide how money will be spent. Decisions, which have to be made within a year, have to be unanimous.

$5 million will be placed in a special reserve account. The Department of Energy can get it back by meeting deadlines, and has to use it to fund work relating to Pit 9 cleanup. If deadlines aren't met, the money goes to the state, and will be distributed to supplemental environmental projects using the same process:

- $1 million for commencing construction of the Pit 9 retrieval facility by November 2002,
- $2 million for beginning a small-scale excavation of waste (about 150 barrels) from the pit by March 31, 2004, and
- $2 million for completing the small-scale excavation by October 31, 2004.

"The Secretary and I expect to see performance, not penalties. Cleanup of the site is our goal; preserving the future of the INEEL is our goal," Kempthorne said.

"The Secretary and I expect to see performance, not penalties. Cleanup of the site is our goal; preserving the future of the INEEL is our goal." Governor Dirk Kempthorne

What's fair in waste cleanup and disposal? All?

Just one day after the Pit 9 agreement was announced, Idaho took another significant step toward resolving issues relating to the long-term disposition of waste at the INEEL. Attorney General Al Lance asked the United States District Court in Boise to issue an order declaring that the 1995 Agreement includes nuclear waste buried at the INEEL. This order would resolve the long-standing disagreement over the interpretation of the word "all" in the Agreement.

"This is extremely important, because DOE maintains that the Agreement does not require removal of an estimated 30,000 cubic meters of buried transuranic waste," Attorney General Lance said. "However, one need only read the plain language of the agreement to conclude that this waste is included. We intend to take whatever further action may be necessary to ensure that DOE fully complies with the consent agreement."

"Governor Kempthorne and I have been working with the Department of Energy to bring this issue to a resolution," Attorney General Lance said. "Regrettably, the department is unwilling to accept that the agreement means what it says. Since the day Governor Batt and I signed the agreement, the State of Idaho has been clear and consistent in stating that the agreement will be vigorously enforced. Resolution of this issue will allow Idaho's elected leadership to continue working to see that the site cleanup is completed on schedule and that the INEEL remains a vital participant in Idaho's economic future."

"We agree to disagree with the Secretary of Energy, and I have tremendous confidence in Attorney General Al Lance to affirm through the court system the state's position," Governor Dirk Kempthorne said. "Both Secretary Abraham and I agree that this court action will in no way impact our major breakthrough on cleaning up the site, nor impact future missions at the INEEL."

"DOE maintains that the Agreement does not require removal of an estimated 30,000 cubic meters of buried transuranic waste... one need only read the plain language of the agreement to conclude that this waste is included." Attorney General Alan G. Lance

Cleanup glossary

Agencies—the three parties to the 1991 cleanup agreement between the State of Idaho, the Environmental Protection Agency, and the Department of Energy. The state agency is the Department of Environmental Quality, or DEQ.

Agreement, Cleanup—the 1991 cleanup agreement between the State of Idaho, the Environmental Protection Agency, and the Department of Energy to clean up INEEL. The agreement's official title is the "Federal Facilities Agreement and Consent Order" and it is sometimes called the FFA/CO. It is different from the 1995 Settlement Agreement between the state and DOE. On-line at www.Oversight.state.id.us/cleanup/CleanupAgreement.htm.

Agreement, Settlement: On-line at www.Oversight.state.id.us/waste/SettlementAgreement.htm.

Bioremediation—using living organisms to clean up or remove contaminants from soil, water, or wastewater.

Cesium-137—a radioactive isotope of Cesium commonly separated during processing of nuclear waste.

Decommission—to close a facility.

DEQ—Idaho Department of Environmental Quality.

DOE—United States Department of Energy.

EPA—the United States Environmental Protection Agency.

Feasibility Study—figuring out which of the cleanup options proposed during Remedial Investigation is the most cost-effective way of getting the job done.

Groundwater—fresh water found beneath the Earth's surface.

Heavy metals—metallic elements with high atomic weights that tend to accumulate in the food chain.

Kochia—*Kochia scoparia* (also known as summer cypress, fireweed, and burning bush) is a fast-growing broadleaf weed.

Operable Unit—the smallest unit of treatment dealt with in the agreement between Idaho, EPA, and DOE. The INEEL is subdivided into various large sites-such as TAN, ARA, CFA, etc.-which are in turn subdivided into Operable Units.

Perched water—a relatively small groundwater body lying above the general groundwater table.

Phytoremediation—remediation in which plants are used to draw contaminants from soil.

Plume—distribution of a contaminant from a point source.

Radionuclide—an atom that is radioactive.

RCRA—Resource Conservation and Recovery Act, which focuses on preventing and cleaning up contamination from operating facilities

Record of Decision—a document that defines the approach DOE will use to clean up a contaminated site.

Remedial Action Report—a document that describes how effective cleanup was.

Remedial Design/Remedial Action Work Plan—a cleanup plan.

Remedial Investigation—defining options for cleaning up a contaminated site.

RI/FS (pronounced "Rifis," like "Rufus"): Verbal shorthand for Remedial Investigation, Feasibility Study, the first two phases of data-gathering when making cleanup decisions. In the remedial investigation options for cleanup are defined, and in the feasibility study each option is evaluated. The completed study is officially titled "Remedial Investigation and Feasibility Study Report", but you'll often hear it called "Rifis."

Remediation—the work done to remove contamination.

Sludge—a semi-solid residue. Goop.

Cleanup at the INEEL: what's been done since '91

The 1991 Federal Facility Agreement and Consent Order, or FFA/CO, is often referred to as the "Cleanup Agreement." A three-party agreement between Idaho, the Environmental Protection Agency (EPA), and the Department of Energy (DOE,) it established a process for investigating contaminated sites; assessing risks, and evaluating and selecting alternative remedial (cleanup) actions. Ten years later, what has been accomplished? The following shows what has been done at each of the ten Waste Area Groups (WAGs) over the past decade.

WAG 1: Test Area North (TAN)

Description

WAG 1 is Test Area North, which includes the following facilities:

- Technical Support Facility (TSF)
- Initial Engine Test (IET) Facility
- Loss of Fluid Test (LOFT) Facility
- Specific Manufacturing Capabilities (SMC) Facility and
- Water Reactor Research Test Facility (WRRTF)

There are two Operable Units within WAG 1:

- *1-07B*: Trichloroethylene (TCE,) an organic solvent contaminating groundwater beneath the TAN.
- *1-10*: V-Tanks and PM-2A Tanks (radioactive/hazardous waste in underground tanks); contaminated soil areas (radioactive/ diesel fuel spill); and burn pits (organics).

Issues

The TCE plume is roughly two miles long. The contaminant is primarily from organic cleaning solvents injected into the Snake River Aquifer until 1972. If not treated, TCE concentrations at the "hotspot"(plume area of highest concentration) will continue to exceed allowable drinking water limits into the future.

A V-tank is a round tank that holds mixed (radioactive and hazardous) liquid waste and sludge. No one knows what the V stands for.

Cleanup of TAN also addresses soils and wastewater ponds contaminated with metals, radionuclides, and other organics—along with removal of liquids and sludges—treating as necessary, and final disposal since residual risks are deemed unacceptable.

Status

1-07B: Groundwater plume cleanup is proceeding in accordance with an amendment made to the original Record of Decision. The Original Record of Decision was issued in 1995, and has been amended twice. A Record of Decision, or ROD, can be amended by the three agencies that manage the cleanup if new information changes the proposed remedy.

The first, issued in 2001, allowed for bioremediation of part of the groundwater plume. The second amendment, due in 2003, is necessary because the facility that had been fdesignated or treatment of sludges from the V-tanks closed. The amendment will probably include on-site treatment (instead of the originally proposed off-site treatment) and disposal of these sludges. The treatment method is not yet agreed upon.

Cleanup of the plume is being performed in three zones:

- The "hotspot" is being treated using bioremediation, cleanup technology using microorganisms to break organic contaminants into less hazardous or harmless compounds.
- Water in the medial zone surrounding the hotspot is pumped to the surface for treatment.
- The agencies will monitor the areas of lower contamination and make sure they reach non-hazardous levels with time.

1-10: V-Tank Remedial Design/Remedial Action Work Plan is complete, and evaluation of potential technologies for remediation is underway. Preparation of the PM 2A tanks design study has been initiated.

Milestones

Key milestones reached for the Operable Units within this WAG are as follows:

- *1-07B*: Record of Decision amendment signed 09/2001; cleanup underway.
- *1-10*: Draft cleanup plan under review. Cleanup slated to start 2003.

A leftover from the Aircraft Nuclear Propulsion Program at the Test Reactor Area. The project tried to develop a nuclear-powered airplace engine.

WAG 2: Test Reactor Area (TRA)

Description

WAG 2 is the Test Reactor Area (TRA), which houses extensive facilities for studying the effects of radiation on materials, fuels, and equipment.

There are three Operable Units within WAG 2:

- *2-12*: Post Record of Decision groundwater monitoring.
- *2-13*: Warm Waste Pond, Chemical Waste Pond, and Sewage Leach Pond.
- *2-14*: Miscellaneous sites, such as underground piping.

Issues

The cleanup of TRA is relatively straightforward, addressing soils contaminated with radionuclides, heavy metals, and organics.

Status

- *2-12*: Groundwater monitoring continues.
- *2-13*: Consolidated contaminated sites into a new landfill.
- *2-14*: All sites have been addressed under the CERCLA remediation or the RCRA closure program.

Milestones

Key milestones reached for the Operable Units within this WAG are:

- *2-12*: Record of Decision is complete. It calls for continued monitoring of groundwater and "perched" groundwater. "Perched" water is trapped by an impervious layer of rock, clay, or soil underground. Imagine a shelf keeping the water from moving right to the aquifer. Eventually, perched water will reach the aquifer, but it is delayed by the shelf. Project managers expected that since the perched waste sources, unlined wastewater ponds, were closed down, they would dry up. But this has not been the case, so scientists are monitoring to see of further actions are necessary.
- *2-13*: Record of Decision complete and cleanup underway.

WAG 3: Idaho Nuclear Engineering & Technology Center

Description

WAG 3 is the Idaho Chemical Processing Plant (ICPP), now called the Idaho Nuclear Technology and Engineering Center (INTEC). This center houses facilities for reprocessing (recycling) spent fuel from government defense and

The Idaho Nuclear Technology & Engineering Center

research reactors. Facilities at INTEC include spent fuel storage and reprocessing areas, a waste solidification facility (the calciner) and related waste bins, remote analytical laboratories, and a non-operating coal-fired steam generating plant.

INTEC sites investigated/to be investigated include facilities associated with wastewater disposal systems (e.g., sumps, ponds, and an injection well), spills, and tank farm storage of mixed waste.

WAG 3 includes the area within the INTEC fence and those immediately adjacent areas where waste activities have taken place; it also includes all surface and subsurface areas.

There are two Operable Units within WAG 3:

- *3-13*: All potential INTEC remediation other than tank farm soils, including groundwater contamination and soils under buildings.
- *3-14*: Tank Farm soils and other sites within the Tank Farm.

Issues

3-13: Cleanup will address groundwater and soil contamination (heavy metals, organics and radionuclides) from wastewater disposal ponds, facility operations, and an injection well. The current cooling water disposal process at INTEC using percolation or "perc" ponds, is scheduled to be closed and re-opened far south from INTEC in order to reduce the amount of water available for dragging WAG 3 area contaminants downward towards the underlying aquifer.

An on-site RCRA, low-level radioactive waste, and PCB-compliant disposal facility, known as the INEEL CERCLA Disposal Facility (ICDF) is being constructed at WAG 3 to primarily dispose of contaminated soils and debris from WAG 3 but also to dispose of CERCLA wastes from WAGs 1-10. Some wastes may also be disposed of off-site at commercial or other government facilities if they do not meet the Waste Acceptance Criteria for the ICDF.

3-14: Ongoing storage of liquid wastes from spent fuel rod processing (high-level wastes) may complicate the cleanup investigation around the tank farm. It may take ten or more years to close the tanks under the RCRA program.

Status

3-13: Status of this Operable Unit includes the following:

- Although some grading of the tank farm area was completed, sealing of the surface of the tank farm with a polyurethane coating to prevent infiltration of ground water was not performed by DOE as scheduled in the Work Plan.
- Construction is proceeding on the ICDF with completion scheduled by the end of the year.
- Gathering of data on perched water and analysis of data collected on groundwater sampling is ongoing.

3-14: The Draft Phase II Characterization work plan is due on January 31, 2005.

Milestones

Key milestones reached for the Operable Units within this WAG are as follows:

- *3-13*: Record of Decision complete; cleanup underway.
- *3-14:* The next milestone is The Draft Phase II Characterization work plan, due on January 31, 2005. Based on INEEL's progress toward non-enforceable "interim" deadlines, state officials are concerned that this deadline may not be met.

Some of the facilities at INTEC used to treat and store high-level waste.

WAG 4: Central Facilities Area

Description

WAG 4 is the Central Facilities Area (CFA), where services for all of INEEL are headquartered. These services include environmental laboratories, security, fire protection, medical facilities, communications systems, warehouses, a cafeteria, vehicle and equipment pools, bus system, and laundry. The U.S. DOE Radiological and Environmental Sciences Laboratory and U.S. Geological Survey offices are located here.

There are two Operable Units within WAG 4:

- *4-12*: Central Facilities Area closed landfills I, II, and III
- *4-13:* Central Facilities Area other sites, including sewage treatment drainfields (radioactive soil contamination and nitrate contaminated groundwater); wastewater ponds (mercury contamination); and a transformer yard (lead contamination).

Issues

The landfills had inadequate covers to control infiltration and erosion. Elevated groundwater contamination from nitrate is suspected to have originated from the sewage drainfield. Mercury contamination in the wastewater pond is deemed a risk to ecological receptors. Soil contamination from lead at the transformer yard was deemed an unacceptable risk to future inhabitants.

Status

The status of WAG 4 cleanup is as follows:

- The implemented remediation for the landfills (construction of native soil covers with grass), on-going organic vapor and moisture monitoring is undergoing a five-year review to determine the adequacy of the remedial action.
- The sewage drainfield remedial action work plan was completed and removal of the drainfield components and soil has begun. Nitrate levels in groundwater will continue to be monitored to see if removal of the drainfield will reduce the concentrations over time.
- Lead contaminated soils from the transformer yard were removed and disposed of off-site.
- Mercury-laden sediments in the wastewater pond have been

covered with gravel as an interim measure to preclude possible dispersion and resuspension from range fires.
- Removal of the gravel and contaminated sediments will commence after the ICDF opens in the summer of 2003.

Milestones

Key milestones reached for the Operable Unit within this WAG are as follows:

- *4-12:* Five-year review in progress
- *4-13*: Record of Decision complete; cleanup ongoing.

Power Burst Facility

WAG 5: Power Burst Facility/Auxiliary Reactor Area

Description

WAG 5 consists of the Power Burst Facility (PBF) and Auxiliary Reactor Area (ARA).

PBF is located in an area originally constructed for the Special Power Excursion Reactor Tests (SPERT). Four SPERT reactors were built beginning in the late 1950s in a radial array around what is now the PBF control/personnel building complex. All of the SPERT reactors have been removed and the SPERT facilities have undergone partial or complete decontamination and decommissioning (D&D).

The ARA consists of four separate groupings of buildings in which various activities have occurred, including the operation of test reactors. All of the ARA reactors have been removed from the facility and have undergone partial or complete D&D.

PBF/ARA sites investigated include tanks and components of wastewater disposal systems (e.g., evaporation ponds, percolation ponds, leach fields, pits, and dry wells). Contaminants of concern included radionuclides, heavy metals, and organic solvents.

There is one Operable Unit within WAG 5:

- *5-12*: The Power Burst Facility and Auxiliary Reactor Area

Issues

The WAG 5 Remedial Design/Remedial Action has been divided into two phases in an effort to accelerate the schedule. Phase I included the remediation of the ARA-02 Sanitary Waste System and the ARA-16 underground tank containing radionuclides and PCBs. In addition, four inactive waste system sites (ARA-07, ARA-08, ARA-13, and ARA-21) have been removed or abandoned in place if the residual risk was acceptable. The ARA-16 tank sludge is currently stored in a high integrity container at WAG 5 awaiting further on-site or off-site treatment and final disposal.

Phase II will address removal of windblown soils contaminated by prior cleanup of the nearby SL-1 reactor accident which occurred in 1961. This is scheduled for 2004.

Milestones

Key milestones reached for the Operable Unit within this WAG are as follows:

- *5-12*: Record of Decision complete, Phase 1 cleanup complete—except for final disposal of ARA-16 liquid and sludge. Pre-Final Inspection completed.

WAG 6: Experimental Breeder Reactor I

Description

WAG 6 consists of the Experimental Breeder Reactor No. I (EBR I) and Boiling Water Reactor Experiment (BORAX) areas. Both the EBR I and BORAX areas were originally constructed to house test reactors.

EBR I is now a National Historic Landmark, open to the public. The BORAX area was once home to five different reactors, but all except EBR-I were dismantled or moved and no operations other than monitoring take place in the area now.

EBR I/BORAX sites investigated were primarily old tanks, but also included a small spill area and several liquid and solid waste disposal locations.

Issues, status and milestones

WAG 6 operations have been rolled into WAG 10.

WAG 7: Radioactive Waste Management Complex (RWMC)

Description

WAG 7 is the Radioactive Waste Management Complex (RWMC). RWMC was established in 1952, and through 1970 it received both offsite and onsite waste for mostly subsurface disposal within the area currently known as the Subsurface Disposal Area (SDA).

The SDA includes numerous pits, trenches, and soil vaults that were used for burial of various low-level radioactive waste, transuranic waste, mixed waste, and hazardous wastes, as well as an above-ground asphalt pad where similar wastes were stacked and covered with soil.

There are five active Operable Units within WAG 7 undergoing investigation, remedial design, remedial action, or continuing monitoring:

- *7-06*: Groundwater monitoring for the SDA.
- *7-08*: Organic Contamination in the Vadose Zone (OCVZ). Continuing Remedial Action and maintenance.
- *7-10*: Pit 9 TRU Pit. Continuing Remedial Design leading to construction and excavation demonstration.
- *7-12*: Pad A. Continuing Operation and Maintenance.
- *7-13/14*: Subsurface Disposal Area landfill (SDA). Continuing Remedial Investigation.

Issues

7-06: This Operable Unit involves groundwater monitoring of the SDA. Wells within, adjacent to, and more than a mile away from the SDA are used to try and determine the origin of contaminants in the underlying aquifer (from upgradient sources and/or the buried waste) and to assist in calibration of the risk assessment model for potential future groundwater users.

Radioactive Waste Management Complex (RWMC)

7-08: Thousands of drums containing Volatile Organic Compounds (VOCs) in solidified sludges, (e.g. carbon tetrachloride, trichloroethylene) were buried in the SDA, eventually releasing vapors to the atmosphere and into the underlying soil and basalt strata. Infiltrating precipitation and flooding events at the SDA partitioned these vapors into a liquid phase and forced them downward into the underlying aquifer. Vapor will be extracted and treated.

7-10: This is a demonstration project to gather information from a small-scale excavation (20' X 20') within a high plutonium concentration area of Pit 9, a one-acre pit within the SDA, containing mostly transuranic (TRU) waste from Cold War nuclear weapons production at the Rocky Flats Plant near Denver, Colorado. This project, following agreement of a formal dispute between the Department of Energy, EPA, and the State of Idaho, is now scheduled for completion in 2004.

7-12: Between the time that certain wastes were banned from burial in the SDA and the above-ground storage area at the Transuranic Storage Area (TSA) adjacent to the SDA was opened, wastes from the Rocky Flats Plant (RFP) in Colorado and other wastes removed from the SDA to ascertain container degradation over time, etc; were placed on Pad A and covered with soil. A remedial action was completed to recontour and revegetate the pad and to provide for increased monitoring to discover and remedy erosion and subsidence in a more timely manner.

Status

7-06: Quarterly groundwater monitoring is continuing, and the monitoring data will be used in the ongoing Remedial Investigation/Feasibility Study.

7-08: Since 1996, vacuum pumps have been used to remove—and thermal and catalytic oxidizers to destroy—VOCs in the vadose zone between the ground surface and the underlying aquifer. A thermal oxidizer heats up the vapors until the VOCs change into less harmful chemicals. A catalytic oxidizer does the same thing, but at a lower temperature, so the unit will last longer. The two types of oxidizers have extracted and treated more than 100,000 pounds of VOCs.

How much is left? We don't know for sure. As this project has been taking place, scientists have collected data that have changed their assessment of the contamination. There may be as much as 7 or 8 times more contamination than originally thought.

There are two non-catalyst units that use propane for thermal oxidation. They have had many operational problems, with one unit eventually being taken out of service after having being been rebuilt twice. The newer unit design, with thermal energy provided by electrical heaters and having a special reactive catalyst for VOCs, is functioning as expected after a prolonged shakedown period. Replacement of the older units and/or use of some other treatment technology is currently being evaluated. Installation of additional extraction wells in higher concentration VOC waste drum areas is scheduled to begin in July of 2002.

7-10: A three-stage approach to cleaning up Pit 9 has begun. It is detailed in the story on pages 4 and 5.

7-12: The most recent activity (fall 2001) was to till, fertilize and reseed specific areas of pad A that, due to typical weather conditions found at the INEEL (high winds, strong precipitation events, snow accumulation) typically erode and lose their vegetative cover. The pad will be maintained until final remedial action decisions for the SDA are complete. It will continue to undergo additional seed cultivation activities (tilling, fertilizer addition, re-seeding) to maintain a viable cover and moisture inhibiting evapotranspiration system. Evapotranspiration involves the use of plants that reduce the downward migration of water by bringing water up through their roots.

7-13/14: Because the SDA contains many types of waste, DOE is evaluating technologies for immobilizing or removing waste constituents in the soil to reduce their downward migration to the aquifer from infiltration moisture due to precipitation events such as rain and melting snow. These technologies include:

- Waste retrieval and waste processing options that would allow the waste to be treated and disposed of off-site.
- In situ vitrification-using high amperage conducting electrodes to melt the silica in the native soil, and the waste itself, into a glassy, lava-like substance that is very impermeable.
- In situ grouting with high pressure to form an encapsulating barrier within the waste and contaminated soils.
- Thermal desorption, an process involving the use of probes in and around the waste. The probes are heated up so they drive off solvent vapors. This could speed up extraction of VOCs from the vadose zone in the short term, reducing the amount of contamination to be treated in the long term.

Milestones

Key milestones reached for the Operable Units within this WAG are as follows:

- *7-08*: Record of Decision complete; cleanup underway.
- *7-10*: Record of Decision issued. See related story on pages 4 and 5.
- *7-12*: Record of Decision complete. Remedial action complete.
- *7-13/14*: Agencies have reviewed the pre-Draft Remedial Investigation/Baseline Risk Assessment (RI/BRA) leading to issuance of the Draft RI/BRA and Feasibility Study in 2005.

WAG 8: Naval Reactors Facility

Description

WAG 8 is the Naval Reactors Facility (NRF), where prototype reactors were operated for reactor plant development and training of naval officers and enlisted personnel.

NRF sites investigated under the agreement include landfills, old spills, wastewater disposal systems (e.g., ponds, ditches, basins, drains, and drain fields), and storage areas.

WAG 8 is primarily the developed area of the NRF site. However, it also includes waste operations that extended outside the NRF developed area, such as the wastewater ditch. All of WAG 8 is within the overall 7-square mile NRF site and includes surface and subsurface areas.

There is one Operable Unit within WAG 8:

- *8-08*: Naval Reactors Facility

Issues

The cleanup of NRF is relatively straightforward, addressing soils and wastewater ponds contaminated with radionuclides, heavy metals, and organics.

Status

Excavation continues, with good progress being made overall. However, contamination of soil by Cesium 137 is greater than anticipated. An on-site landfill that is larger than originally planned is under construction. It is at least twice as large as the originally planned landfill.

Milestones

The key milestones reached for the Operable Unit within this WAGis:

- *8-08*: Record of Decision complete; cleanup underway.

One of the vessels that sends spent nuclear fuel to the Naval Reactors Facility.

WAG 9: Argonne National Laboratory West

Description

WAG 9 is Argonne National Laboratory West (ANL-W), which is primarily devoted to the testing of breeder-reactor technology such as the Experimental Breeder Reactor II (EBR-II), the first pool-type liquid-metal reactor. In addition to EBR-II, the ANL-W complex has four other reactors and two fuel examination facilities.

ANL-W sites that were investigated under the agreement include tanks and wastewater handling/disposal systems such as ditches, ponds, pits, drains, etc.

There is one Operable Unit within WAG 9:

- *9-04*: ANL-W

Issues

Argonne cleanup must address soils contaminated with cesium and heavy metals like mercury, chromium, and other heavy metals. Wastewater ponds are also an issue. Unlike the other Waste Area Groups, where decisions were based on threats to human health and the environment, decisions at this Waste Area Group are driven by threats to the environment only. That's because there was no risk to human health identified.

Status

Soils with high concentrations of contaminants were removed and buried elsewhere. The soils with low levels of contaminants are being addressed through phytoremediation.

DOE conducted an initial two-year phytoremediation test at Argonne to see whether plants can be used to remove cesium from the soils, thereby eliminating the need for digging up soils and disposing of them elsewhere. The results appear promising, but an additional two-year test is underway. After completion of this second test, a final decision on this approach will be made.

Phytoremediation treatment uses Kochia weeds that draw up Cesium 137 and hybrid poplars that draw up chromium and other heavy metals. The plants are harvested periodically and stored, pending disposal based on the concentrations of contaminants.

State officials are now awaiting test results, expected in July, which will show if cleanup goals have been met. If they have, the phytoremediation project can end. If they haven't, the soils might have to be removed and disposed of elsewhere.

Milestones

Key milestones reached for the Operable Unit within this WAG are as follows:

- *9-04*: Record of Decision complete; additional two-year test underway to assess long-term viability of phytoremediation approach.

WAG 10: Miscellaneous Sites; Eastern Snake River Plain Aquifer

Description

WAG 10 includes WAG 6, miscellaneous surface sites, and liquid disposal areas throughout the INEEL that are not included within other WAGs. WAG 10 also includes regional Snake River Plain Aquifer concerns related to INEEL that cannot be addressed on a WAG-specific basis. Specific sites currently recognized as part of WAG 10 include:

- Liquid Corrosive Chemical Disposal Area, or LCCDA, located between WAGs 6 and 7.
- Organic Moderated Reactor Experiment, or OMRE, located between WAGs 4 and 5.
- Former ordnance areas, including the Naval Ordnance Disposal Area (NODA) located at numerous sites within the INEEL.
- The Site Training Facility, or STF, which was a practice shooting range for large and small guns.

One of the many springs from the Eastern Snake River Plain Aquifer in the Thousand Springs area in the Magic Valley. Operations in WAG 10 aim to protect this aquifer.

There are two Operable Units within WAG 10:

- *10-04*: LCCDA, OMRE, STF, and Ordnance Areas.
- *10-08*: Future INEEL-wide groundwater monitoring program of all CERCLA sites to determine if contamination will meet projected cleanups within an acceptable time frame.

Issues

10-04: This Operable Unit includes cleanup of unexploded ordnance and explosives residues. DOE has partially cleared some known range locations but continues to look for ordnance as it investigates other locations. Ordnance is the explosive, shell, and propellant from a projectile shot from a large weapon. It is like a giant bullet and shell, but much larger in scale. Unexploded ordnance is handled differently than exploded ordnance.

After the ORME and LCCDA were investigated, the DOE, EPA, and the state decided that the risk posed to human health and the environient was so small that it did not justify the expense of a cleanup. Assessment of the STF, however, showed an unacceptable risk. Cleanup plans are in development, and will be addressed in the Record of Decision expected in late 2002.

10-08: This Operable Unit is in the preliminary stages of investigation, and will form the basis for a groundwater monitoring plan for all of the CERCLA sites.

Status

10-04: The agencies have completed investigations and are now preparing a draft Record of Decision, which states the choosen remedies. It is expected to be released in late 2002. The remedy was changed based on comments received from the public. Instead of cleaning up areas with unexploded ordnance and any other contaminated area that posed a risk, as originally proposed, the remedy now involves a process based on assessing risks and prioritizing sites based on that assessment. This process ensures that sites that pose the most risk will be addressed first, and extends cleanup time frames for those sites that pose less risk.

10-08: Early planning for site-wide groundwater monitoring and multiple new sites in this new Operable Unit are being conducted.

Milestones

Key milestones reached for the Operable Units within this WAG are as follow:

- 10-04: Remedial Investigation and Feasibility Studies complete.

WAGs & OUs: the alphabet soup that defines cleanup units

INEEL has been home for a variety of special facilities, ranging from the Naval Proving Ground in 1943 to the many nuclear reactor facilities built during the days when INEEL had an extensive nuclear research program. Widely scattered across INEEL's 890 square miles of space, these facilities have been grouped into ten *Waste Area Groups*—WAGs, for short.

Waste Area Groups

The WAGs are as follows:

- WAG 1: Test Area North
- WAG 2: Test Reactor Area
- WAG 3: Idaho Nuclear Engineering & Technology Center
- WAG 4: Central Facilities Area
- WAG 5: Power Burst Facility/ Auxiliary Reactor Area
- WAG 6: Experimental Breeder Reactor I
- WAG 7: Radioactive Waste Management Complex
- WAG 8: Naval Reactors Facility
- WAG 9: Argonne National Laboratory West
- WAG 10: Miscellaneous Sites, including the Snake River Aquifer

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See graphic on web page: WAGmap&ststus.htm

Operable Units

The WAGs form the primary level to which cleanup actions are being directed.

But within each WAG are one or more *Operable Units*, each of which presents a specific cleanup problem. Each Operable Unit is identified numerically, like this: 1-07B—TCE Groundwater Plume.

In this example, the first number shows that the Operable Unit belongs to Waste Area Group 1, and second number shows that this is Operable Unit 7B within this group. The descriptive title reveals that cleanup is focused on trichloroethylene in groundwater.

Many of the operable units defined in the 1991 Agreement have been combined, so the numbering of the units no longer goes 1, 2, 3, and so forth.

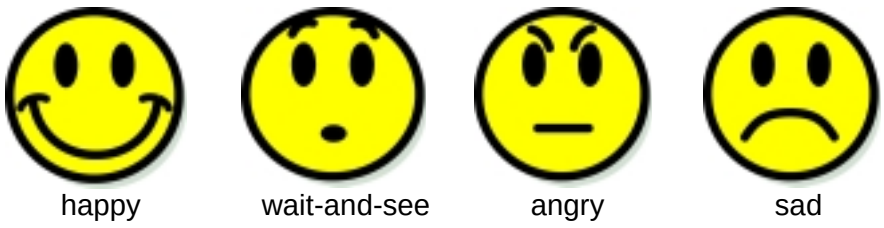
Oversight news & notes

We need your feedback

The feedback card in this issue of the newsletter is critically important. Feedback we receive from you will help guide Oversight's activities relating to the cleanup program, the Accelerated Cleanup proposal, and priority-setting for the INEEL.

Guide to icons

In this issue of the newsletter we have used icons to give you a quick read on the status of each cleanup project. We prepared a happy face, a "wait-and-see" face, an angry face, and a sad face. but only used the happy face and the wait-and-see face.



happy wait-and-see angry sad

Please don't take the icons as meaning we don't take seriously. We take cleanup very seriously . But we realize that people have many demands on their time, that these issues are extraordinarily complex, and that you deserve to know the status of these issues and the cleanup as a whole. That's why we decided to try this approach.

Please let us know what you think. As always, your questions, comments, and suggestions are most welcome.

This is a special issue of the INEEL Oversight *Monitor*. The *Monitor* is published about six times a year by the INEEL Oversight Program, a state agency that monitors activities at the INEEL on behalf of the citizens of Idaho.

This issue of the *Monitor* updates the cleanup section of Oversight's biennial report: "*2000 Oversight Overview: a synopsis of activities and issues relating to the INEEL from the state agency charged with overseeing the site on behalf of the citizens of Idaho.*"

Copies of *Overview* are available free upon request. It can also be viewed or downloaded via the internet at www.Oversight.state.id.us/library.

Your comments, questions, and suggestions are welcome, now or at any time. You can contact the Oversight via the enclosed postage-paid postcard, calling 1-800-232-4635, e-mailing AskOversight@deq.state.id.us, or visiting www.Oversight.state.id.us.

Idaho's environmental priorities for the INEEL:

- **Solidify liquid high-level waste in the Idaho Nuclear Technology and Engineering Center ("INTEC") tank farm and treat high-level waste for removal from Idaho;**

- **Continue shipments of plutonium-contaminated ("transuranic") waste from the INEEL to the Waste Isolation Pilot Plant (WIPP) in New Mexico.**

- **Remediate buried plutonium-contaminated ("transuranic") and other waste at the INEEL.**

- **Transfer spent nuclear fuel at the INEEL from wet storage into dry storage and ultimately remove it from Idaho.**

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INEEL Oversight
Idaho's eyes on the INEEL