## Idaho Completion Project

Bechtel BWXT Idaho, LLC

# Agencies issue amendment to Record of Decision for TAN V-Tanks

**WASTE AREA GROUP** 



#### Test Area North -

Established in the early 1950s, the original mission at TAN was to support the Aircraft Nuclear Propulsion project. Unique facilities at TAN support the storage, examination and research of spent nuclear fuel. TAN also houses the Specific Manufacturing Capability Project, which makes armor packages for Army tanks.

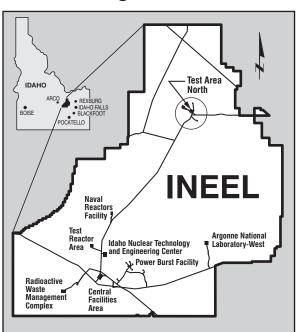
Federal Facility
Agreement and
Consent Order
(FFA/CO) — This is
an agreement among
the DOE, the EPA and
the state of Idaho to
evaluate potentially
contaminated sites at
the INEEL, determine
if remediation is
warranted, and select
and perform
remediation, if
necessary.

### Introduction

The U.S. Department of Energy, U.S. Environmental Protection Agency and state of Idaho have released an amendment to the 1999 Record of Decision for cleanup of the V-tanks at the INEEL's **Test Area North** facility. Test Area North is designated as Waste Area Group 1 under the INEEL **Federal Facility Agreement and Consent Order**.

### Why is the 1999 Record of Decision being amended?

Amending the remedy specified in the 1999 Record of Decision was necessary because the offsite commercial treatment option described in that document for the Vtank waste is no longer available. The new cleanup remedy for the V-tank waste was chosen by DOE, EPA and the state of Idaho after the agencies considered public comments on a range of alternatives. These alternatives were presented to the public in the 2003 New Proposed Plan for the V-Tanks Contents at Test Area North. The Amendment also makes less significant changes to other cleanup remedies as explained in this fact sheet.



#### What is the V-tanks site?

The V-tanks are located at the Test Area North facility.

The V-tanks site consists of four underground storage tanks, their associated piping, related structures and the surrounding contaminated soil. There are three out-of-service 10,000-gallon underground storage tanks, called V-1, V-2 and V-3, approximately 10 feet below the ground surface. There is also an out-of-service 400-gallon underground storage tank (V-9) approximately 7 feet below the ground surface.

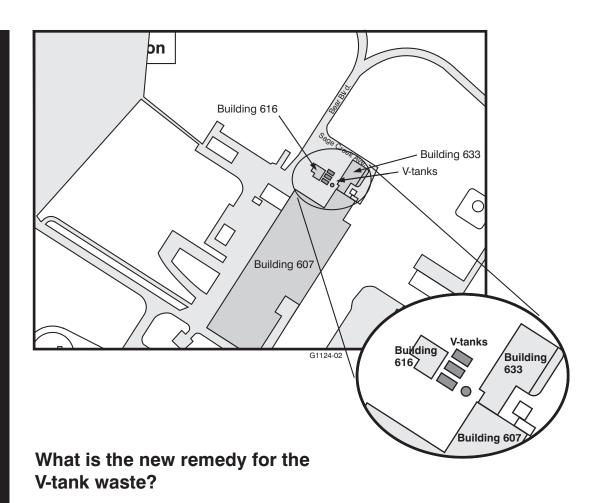
The tanks were installed in the early 1950s as part of a system designed to collect and treat radioactive effluents from operations at Test Area North. The soil at the site was contaminated primarily with cesium-137 as a result of spills when liquid was transferred to and from the tanks. The tank contents are contaminated with radionuclides, heavy metals and organic compounds, including polychlorinated biphenyls (PCBs).

### **Record of Decision** (ROD) Amendment – A record of decision is a public document that identifies the selected remedy at a site, outlines the process used to reach a decision on the remedy, and confirms that the decision complies with CERCLA. A ROD Amendment is issued when major changes for a cleanup remedy are required. The **ROD** amendment process has the same public involvement

requirements as a

record of decision.

**CERCLA** (Comprehensive **Environmental** Response, Compensation and Liability Act, or Superfund) - This is the federal law that establishes a program to identify, evaluate and remediate sites where hazardous substances may have been released (leaked, spilled, or dumped) to the environment.



The amended remedy is soil and tank removal, chemical oxidation/reduction with stabilization of the tank contents, and disposal. The major treatment activities will take place at the V-tanks site or in adjacent areas, as necessary. The amended remedy will protect workers, the public and the environment from contaminants in the V-tanks.

# Why did the agencies choose this remedy over the alternatives?

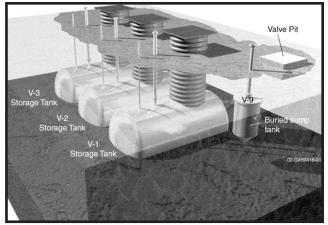
The agencies selected this remedy by evaluating several alternatives against the nine criteria specified for cleanup under **CERCLA**. These criteria, as well as the other alternatives, are described in detail in sections 6 and 7 of the **ROD Amendment**. This document can be found in the **Administrative Record** Web site. You can request a copy by contacting the Idaho Completion Project Community Relations Office. (See back page of this fact sheet for contact information.)

The amended remedy was determined by the agencies to be protective of human health and the environment. The remedy complies with federal and state requirements that apply to remedial actions, is cost-effective and satisfies the statutory preference for treatment as a principal element of the amended remedy.

# Changes from the remedy selected in the Proposed Plan

After the 2003 Proposed Plan was issued and discussed with the public, it was found that further sampling and analysis of the V-tank waste was needed to determine whether treatment is required for specific underlying **RCRA** hazardous constituents. Results of this review would be subject to agency review and concurrence.

The selected remedy, chemical oxidation/reduction, will treat the organic compounds in the waste to meet land disposal restrictions. This treatment will be done after the waste has been removed from the tanks. PCBs also will be destroyed with the same process to the extent practicable. The remaining residues will be solidified or stabilized as necessary to meet the waste acceptance criteria for the INEEL CERCLA Disposal Facility.



Cutaway view of V-tanks.

If laboratory studies establish a clear benefit, some of the less-contaminated liquid portion of the V-tank waste would be removed and treated separately in order to optimize the treatment of the V-tank contents.

# Clarification of contaminated soil remediation for the V-tanks and PM-2A tanks

In the original 1999 Record of Decision, a final remediation goal of 23.3 picocuries per gram was identified for the primary contaminant of concern (cesium-137) for the soil underneath the tanks and piping, or from any leaks that may have occurred. This goal is still in effect. Confirmation sampling will be completed after the tanks, piping and contaminated soils are removed to verify that the remediation goals are met.

# **Public participation**

Public participation played an important role in the selection of the amended remedy for the V-tanks. Between August 2002 and May 2003 a series of publications, proactive telephone calls, and face-to-face and teleconference briefings were held to provide opportunities for the public to comment on the alternatives under consideration by the agencies. A meeting was held in Idaho Falls to provide an opportunity for members of the public to record their comments.

The comments received on the Proposed Plan, as well as the agencies' responses to those comments, are in the Responsiveness Summary found in Part III of the ROD Amendment.

# **Explanation of Significant Differences from the 1999 ROD**

The ROD Amendment includes a section to provide an Explanation of Significant Differences from the 1999 Record of Decision for two cleanup sites at Test Area North–the PM-2A tanks and a reactor vessel burial site.

The PM-2A tanks are another set of tanks that stored waste from Test Area North operations. The remaining waste is similar to that of the V-tanks except that in the early 1980s an absorbent was added to the tanks in an attempt to solidify the waste. The 1999 Record of Decision remedy for the PM-2A tanks specified that the tank contents would be removed from the tank by vacuum extraction, treatment if necessary, and disposal on site. During the design of the remedy, it was determined that the tanks were structurally sound enough to be removed intact with the waste still inside. This change reduces the potential

**RCRA** (Resource **Conservation and Recovery Act)** – This is a federal waste management law whose guidelines regulate transportation, treatment, storage and disposal of waste. RCRA waste includes material that is listed on one of EPA's hazardous waste lists or meets one or more of EPA's four characteristics of ignitability, corrosivity, reactivity or toxicity.

Administrative
Record – documents
including correspondence, public
comments, records of
decision, and
technical reports
upon which the
agencies base their
remedial action.

Explanation of
Significant
Differences (ESD) –
A CERCLA document
that describes
changes to a record
of decision not major
enough to warrant a
ROD amendment.



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for worker exposure during excavation and treatment, and better supports accelerated cleanup at the INEEL.

Another significant difference from the 1999 Record of Decision pertains to the Reactor Vessel Burial Site. This potential release site was evaluated during the remedial investigation for Waste Area Group 1, and was determined to be a no action site because of the low level of risk to human health and the environment. In response to concerns expressed during public involvement activities in 2003, the documentation for this site was reviewed. Residual contamination at the site would preclude unrestricted land use, so the site status was changed to 'No Further Action' with institutional controls.

Details on the Explanation of Significant Differences can be found in Section 11 of the ROD Amendment.

The entire text of the Record of Decision Amendment for the V-tanks at Test Area North can be found in the Administrative

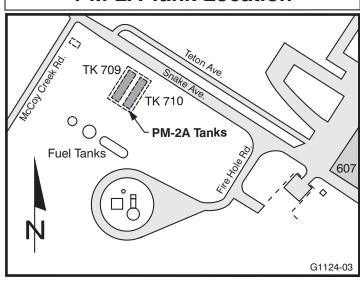
Record file for Operable Unit 1-10. The Administrative Record is located at the DOE Reading Room of the INEEL Technical Library in Idaho Falls. Copies can be found at Albertsons Library at Boise State University. The Administrative Record can be accessed on the Internet at <a href="http://ar.inel.gov/">http://ar.inel.gov/</a>.

For information about cleanup work at the INEEL, visit the Idaho Completion Project Web site at <a href="http://cleanup.inel.gov">http://cleanup.inel.gov</a> or call the Community Relations Office at (208) 526-3183 or e-mail <a href="mailto:campil@inel.gov">campil@inel.gov</a>.

Idaho Completion Project Community Relations Office MS 3940 P.O. Box 1625 Idaho Falls, ID 83415-3940

Address Service Requested

### **PM-2A Tank Location**



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