

## The Agreement at-a-Glance: Key Terms and Conditions

### DOE agreed to:

- ✓ Remove all stored transuranic waste from the INEEL by a target date of 2015, but no later than 2018, with transuranic waste shipments out of Idaho beginning by April 30, 1999.
- ✓ Begin operating a mixed-waste treatment facility for transuranic and alpha-contaminated mixed low-level waste by 2003.
- ✓ Limit shipments of DOE-owned spent nuclear fuel until an out-of-state repository or interim storage facility is operating and accepting INEEL spent fuel.
- ✓ Complete removal of all spent nuclear fuel from the state by 2035.
- ✓ Finish treatment of all calcined high-level waste by 2035.
- ✓ Transfer all spent fuel from underwater storage to dry storage by 2023.
- ✓ Certify shipments are necessary to meet national security and nonproliferation requirements.

### The Navy agreed to:

- ✓ Ship only those shipments of naval spent fuel to the INEEL that are necessary to meet national security requirements.

### The state of Idaho agreed to:

- ✓ Allow the U.S. Navy to resume shipments of its spent nuclear fuel to the INEEL which may accept a total of 575 Navy shipments (55 metrics tons of heavy metal) through the year 2035.
- ✓ Allow up to 61 shipments of foreign research reactor spent fuel to the INEEL for storage through Dec. 31, 2000.
- ✓ Allow DOE-owned spent nuclear fuel to be shipped to the INEEL after Dec. 31, 2000, but limiting the total amount of DOE-owned spent nuclear fuel. No more than 55 metric tons of heavy metal owned by DOE (about 497 truck shipments) will be accepted.
- ✓ Process DOE permit applications in a timely manner, consistent with laws and regulations.

For more information on the settlement agreement, call 1 (800) 708-2680 or visit our Web page at <http://environment.inel.gov>

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The facts on...

## The Settlement Agreement



### An Historic Step

On Oct. 16, 1995, the U.S. Department of Energy, the Navy and the state of Idaho entered into an historic agreement that will guide management of spent nuclear fuel and radioactive waste at the Idaho National Engineering and Environmental Laboratory for the next 40 years. The settlement agreement ended years of litigation between the Federal government and the state over waste removal and environmental cleanup at the INEEL. The agreement also provided \$30 million in economic development funds to help diversify the economy of southeast Idaho.



## Spent Nuclear Fuel

Spent nuclear fuel is fuel that has been withdrawn from a nuclear reactor following irradiation, the constituent elements of which have not been separated by reprocessing.

The INEEL received its first shipments of DOE-owned spent nuclear fuel from nuclear weapons production reactors at the Hanford Site in Richland, Wash., in 1952. In 1957, the Navy began shipping spent nuclear fuel from nuclear-powered submarines and warships to the INEEL. The Idaho Nuclear Technology and Engineering Center at the INEEL reprocessed spent nuclear fuel to recover highly enriched uranium for reuse from 1953 to 1992, when reprocessing was discontinued.

The INEEL continues to receive and store DOE-owned and Navy spent nuclear fuel; prepare high-level and solid waste for disposal in a repository; and develop technologies for disposition of high-level waste, sodium-bearing waste, and spent nuclear fuel.



Spent nuclear fuel currently in underground storage basins at the Idaho Nuclear Technology and Engineering Center must be removed from the state by 2035.

## High-Level Waste

High-level waste is highly radioactive waste material that results from the reprocessing of spent nuclear fuel, including liquid waste produced directly from reprocessing and any solid waste derived from the liquid that contains a combination of transuranic and fission product nuclides in quantities that require permanent isolation.

Spent fuel reprocessing began at the Idaho Nuclear Technology and Engineering Center in 1953 and generated high-level liquid waste which was stored in a tank farm. Beginning in 1963, this liquid waste was calcined (evaporated) to a more stable solid form and stored in stainless steel storage bins.

As of May 1999, approximately 4,287 cubic meters of calcined solids were in storage. As of September 1999, approximately 5,044 cubic meters of liquid waste were in storage.



High-level waste stored in underground storage tanks at the Idaho Nuclear Technology and Engineering Center must be treated by 2035 and ready for shipment out of the state.

## Transuranic Waste

Transuranic waste contains man-made elements with an atomic weight heavier than uranium. Transuranic waste was produced during reactor fuel assembly, nuclear weapons production and fuel reprocessing operations. Physical characteristics of transuranic waste include coveralls, construction debris and sludges.

Transuranic waste has been received at the Radioactive Waste Management Complex since the 1950s. Waste received prior to 1970 was disposed of in shallow trenches in the Subsurface Disposal Area. Waste received after 1970 was placed in storage above ground on asphalt pads under earthen berm cover. Currently, transuranic waste is being stored on an interim basis pending treatment and disposal.



Approximately 65,000 cubic meters of stored transuranic waste at the Radioactive Waste Management Complex at the INEEL must be removed from Idaho no later than 2018.

## A Legally Binding Commitment

The settlement agreement is unique: **It makes Idaho the only state with a Federal court ordered agreement limiting shipments of DOE and Naval spent nuclear fuel into the state and setting milestones for shipments of spent nuclear fuel and radioactive waste out of the state.**

Should DOE or the Navy fail to meet any milestone outlined in the agreement, the state could ask a federal judge to halt their respective spent fuel shipments to the INEEL. If removal of spent nuclear fuel to an out-of-state facility has not been completed by Jan. 1, 2035, the Federal government is obligated to pay the state of Idaho \$60,000 a day in penalties. The Court may enforce the rights, obligations and requirements of the agreement by use of its contempt powers. No additional spent nuclear fuel from commercial reactors may be shipped to the INEEL, except for a specified quantity from the Fort St. Vrain reactor in Colorado, for treatment prior to disposal outside of Idaho.