

The Project

The Department of Energy's Idaho Operations Advanced Mixed Waste Treatment Project (AMWTP) is the nation's premier transuranic radioactive waste facility. (Transuranic waste is contaminated with any radioactive element past uranium on the periodic table of elements.) Operated and managed for DOE by the Idaho Treatment Group, AMWTP was built to meet the Department's obligations and legally-enforceable milestones contained in the 1995 Idaho Settlement Agreement to remove radioactive waste out of Idaho. AMWTP has developed into the Department's facility of choice for characterizing and treating transuranic waste that has been stored in Idaho for decades, as well as receiving and treating waste from other sites in the DOE complex.



An employee checks for radiation before shipping nuclear waste out of Idaho.

A Regional Asset



An employee inspects a shipment of offsite waste sent to AMWTP to process.

received and processed radioactive waste from 11 other DOE sites around the country, eliminating the need to build expensive new processing plants and demonstrating why AMWTP is an important asset for helping to permanently dispose of the nation's radioactive waste.

As the only site in the DOE complex that has accepted, validated, and treated transuranic waste from other sites, AMWTP is a key element of the Department's successful regional waste processing plan. Since December 2008, AMWTP has safely

Waste Sources

DOE's Idaho site has the single largest concentration of transuranic radioactive waste in the United States. Most of this waste came from the Department's now closed Rocky Flats Plant near Denver, where nuclear weapon components were manufactured. In the 1970s and 1980s, truckloads of waste were shipped to Idaho. The waste contains industrial debris such as rags, work clothing, machine parts and tools, as well as soil and sludge, anything that was contaminated with a transuranic element, which in the case of Rocky Flats operations was primarily plutonium. In addition to the radioactive contamination, most of the waste is "mixed waste," or waste contaminated with radioactive and hazardous chemicals, such as oil or industrial solvents.



Employees remove dirt that covers radioactive waste stored at AMWTP.

Treatment Facility

AMWTP is unique within DOE as the facility houses the Department's only Supercompactor. By exerting 2,000 tons – 4 million pounds – of force, the Supercompactor is capable of reducing a 55-gallon drum to roughly one-fifth its original size. Compacting waste reduces the volume of waste, reduces the number of truck shipments leaving AMWTP, and reduces the amount of permanent disposal space required in the Waste Isolation Pilot Plant (WIPP), the site of the nation's only permanent disposal repository for transuranic waste, located in New Mexico.



AMWTP's Supercompactor compacts 55-gallon drums into pucks 4 to 6 inches high.



Employees use a high-powered X-ray to look inside every drum and box processed at AMWTP.



Idaho Treatment Group



Safety Performance

Comprehensive safety and compliant operations are the formula for unrivaled success at AMWTP. Since AMWTP is a Category II nuclear facility, a safe and compliant working environment is essential. Safety is a core value at AMWTP and is embedded in all aspects of our work and attitudes. The innovative ideas of AMWTP's employees help make the workplace safer by identifying and eliminating hazards.



AMWTP is a Department of Energy Voluntary Protection Program site.

AMWTP employees have worked millions of hours without a lost work day injury. This sustained safety performance is rarely achieved in production industries, especially at a facility operating a 24/7/365 schedule in the challenging Idaho environment. Pride, commitment, and a strong sense of teamwork are the ties that bind our safety program efforts and successes together, ensuring safe and compliant work.

In 2009, AMWTP's commitment to excellence in employee-driven safety and health programs was recognized when the project was awarded Star Status under the Department of Energy's Voluntary Protection Program. Star Status is an accomplishment achieved only by elite sites demonstrating strong ownership of safety by employees, a commitment from management to ensure a safe work environment, and a desire to continuously improve safety practices.

Safety is never taken for granted. By safely, compliantly, and productively satisfying our customer's needs and meeting the milestones set forth by the Idaho Settlement Agreement, AMWTP has become the facility of choice for transuranic waste processing operations for DOE.

Unrivaled Production

No other project in the DOE complex comes close to having safely and compliantly retrieved, treated and shipped as much transuranic radioactive waste as the employees at AMWTP. Since its inception, AMWTP has shipped tens of thousands of cubic meters of stored transuranic waste out of Idaho to WIPP, accounting for nearly half the waste permanently disposed at WIPP. The production at AMWTP becomes even more impressive when all of the waste is considered. In addition to the transuranic waste shipped out of Idaho, AMWTP employees have also shipped large amounts of mixed low-level waste – waste containing radioactive and chemical elements – out of the state. When these two waste streams are added together, two-thirds of the original 65,000 cubic meters of waste is now permanently disposed in federal and private sites outside of Idaho.



Transuranic Storage Area-Retrieval Enclosure, Pad 1, March 2010



The DOE complex's 10,000th shipment of transuranic waste leaves AMWTP on its one-way trip to the Waste Isolation Pilot Plant.

DOE site. In addition, AMWTP has been successfully audited each year by officials from the Nevada National Security Site, where AMWTP sends its mixed low-level waste for disposal. Those audits have not resulted in any adverse findings.



For more information, call 208-557-6552 or visit our web site at amwtp.inl.gov



**Idaho Treatment Group
PROJECT**



OVERVIEW

