



300-FF-2 "Plug-In" Waste Sites for Fiscal 2010

Annual Listing of waste sites plugged into the remove, treat and dispose remedy in the 2001 interim action Record of Decision for 300-FF-2.

The interim action Record of Decision (ROD) for the 300-FF-2 portion of Hanford's 300 Area remedial action issued in April 2001, authorized the use of a "Plug-In" or "Analogous Sites" approach for additional sites. This approach allows additional waste sites to be cleaned up under this ROD under certain conditions. The conditions apply to candidate or newly discovered waste sites that fit the 300-FF-2 site profile, and where contaminant concentrations exceed cleanup levels established in the ROD. Remove, Treat as necessary and Dispose (RTD) is the selected remedy for these sites, and cleanup work for the sites will be added to the 300 Area Tri-Party Agreement cleanup milestone M-16-00B.

The 300-FF-2 site profile is based on the site characteristics that were detailed in a study that evaluated remedial alternatives for waste site cleanup. These characteristics are defined by the following:

- Types of contaminants
- Types of contaminated environmental media
- Types of contaminated waste material

When a newly discovered site fits the site profile, and contaminant levels exceed cleanup levels, it is appropriate to use the plug-in approach and apply RTD remedy for remediation of a waste site.

The 2009 Explanation of Significant Differences (ESD) to the ROD authorized that sites where plug-in approach has been used will be documented in the administrative record and a fact sheet published annually identifying the plug-in and candidates sites that have been added. Fact sheets will be published only for years when the plug-in approach is used. One site was added to the RTD remedy for 300-FF-2 in fiscal year 2010.

Site Code	Description
600-290:1	<p>Contaminated Concrete Foundation West of 618-13, Pad and Loading Dock</p> <p>The 600-290:1 pad and loading dock is thought to have been used for storage of hexone from solvent extraction studies in the 321 Building. The hexone was stored in 208 liter drums between 1950 and 1954 prior to being buried in the 618-9 Burial Ground. Physical evidence (rust-colored patterns on the concrete) and the proximity of the pad to the 618-9 Burial Ground support this theory. The solvent waste buried at the 618-9 Burial Ground consisted of hexone, kerosene, and uranyl nitrate hexahydrate, suggesting that hexone may not have been the only solvent stored at 600-290:1. The site has been remediated in accordance with the 300-FF-2 interim action ROD that this site is being added to.</p>



Site 600-290:1

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Background

The 300 Area is adjacent to the Columbia River and is located one mile north of the Richland city limits. The 300 Area began operations in 1943 as a fuels fabrication complex for the nine plutonium production reactors located in the 100 areas. Most of the facilities in the area were involved in the fabrication of nuclear reactor fuel elements. Also located in the 300 Area were technical and administrative functions, as well as research and development activities related to the development and fabrication of reactor fuels. Before 1973, solid waste and debris generated by those activities were disposed in a series of unlined trenches or sites, called burial grounds. The burial grounds were located north and west of the 300 Area complex and some contained drummed liquid wastes. Liquid disposal trenches occupied the northeast side of the 300 area.

The 300-FF-2 OU comprises waste sites falling into four general categories: waste sites in the

300 Area industrial complex; outlying waste sites north and west of the 300 Area industrial complex; general content burial grounds; and transuranic-contaminated burial grounds. The selected remedy in the ROD includes the following components:

- Removal of contaminated soil, structures, and associated debris
- Treatment, as necessary, to meet waste acceptance criteria at an acceptable disposal facility
- Disposal of contaminated materials at the Hanford Site's Environmental Restoration Disposal Facility; the Waste Isolation Pilot Plant in Carlsbad, New Mexico; or other facilities approved in advance by the U.S. Environmental Protection Agency (EPA)
- Recontouring and backfilling of excavated areas followed by revegetation
- Institutional controls, as necessary, to prevent unacceptable exposures to residential contamination

Remediation of 300-FF-2 waste sites began in 2002 and is scheduled for completion in September 2018.



300-FF-2

To request additional information, please contact:

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