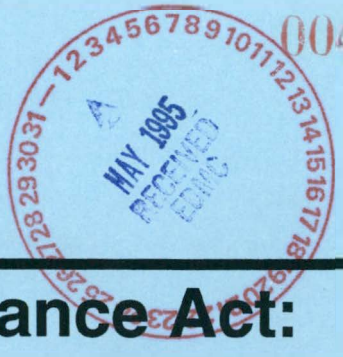

WASHINGTON STATE DEPARTMENT OF ECOLOGY

Focus

Federal Facility Compliance Act:

Site Treatment Plans for USDOE facilities

The Federal Facility Compliance Act (FFCA) of 1992 requires the Secretary of Energy to plan for capacity and technologies to treat mixed wastes (wastes with both radioactivity and hazardous chemicals) for each facility where the U. S. Department of Energy (USDOE) stores or generates such wastes. If the USDOE is not in compliance by October 6, 1995, it will be subject to fines and penalties.

To help implement the requirements of the act, the 22 states with USDOE nuclear facilities formed the Mixed Waste Task Force under the joint auspices of the National Governors' Association and the Department of Energy. The task force encouraged USDOE to plan mixed-waste treatment on a site-specific, or "bottom up" basis. Throughout the process, the states expressed a preference for on-site treatment as the first option in drafting plans.

Although on-site treatment is preferred, USDOE believes developing treatment facilities at all its sites is neither feasible, nor appropriate. For some wastes, the department wants to use centralized treatment facilities, either existing or planned, including those at Hanford.

In response, the Mixed Waste Task Force developed guidance for off-site treatment. In summary, the policy states that, in general, mixed wastes will not be shipped off site until appropriate treatment facilities are in place; hazardous treatment residues will be returned to originating sites; and no state will accept off-site mixed wastes if the Department of Energy is not meeting its commitments to that state.

The USDOE followed a three-phased approach for developing the Site Treatment Plans for 48 facilities in its nuclear weapons program. The Mixed Waste Task Force and the U.S. Environmental Protection Agency have assisted the USDOE in evaluating treatment options and plans. In the first phase, Conceptual Site Treatment Plans identified the broad range of options available to treat the USDOE's waste. The second phase, Draft Site Treatment Plans, narrowed the range of treatment options and presented the individual site's proposed options for their mixed wastes. Currently, the USDOE and the states are seeking public input on the third phase, Proposed Site Treatment Plans.

The Proposed Site Treatment Plans resulted from discussions among the states, the Environmental Protection Agency, tribal governments and the public, and from the USDOE's evaluation of its treatment needs. Further discussions will take place after the issuance of the proposed plans in working toward the treatment configuration that will be enforced through Compliance Orders at each site.

April 1995

F-NW-95-123

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The compliance act calls for the USDOE to treat its mixed wastes to standards set forth in the Resource Conservation and Recovery Act (RCRA) Land Disposal Restrictions. Essentially, the rules say that before hazardous wastes can be placed in legal landfills, they must be stabilized, incinerated, neutralized, or encapsulated so their volume is minimized and their hazardous components can never reenter the environment. Because the radioactivity in mixed wastes needs a medium to migrate to the environment, treating the hazardous chemicals to RCRA standards will safely fix in place both the chemical and radioactive contaminants.

Effects in Washington

Two of the USDOE's 49 sites are in Washington state, Hanford and the Puget Sound Naval Shipyard. The shipyard overhauls and refuels nuclear powered ships and also dismantles surplus nuclear powered submarines and surface vessels. The Navy operates its nuclear-powered ships program jointly with the Department of Energy, which brings several facilities, including the Puget Sound Naval Shipyard, under Federal Facility Compliance Act requirements.

Hanford is specifically exempt from development of a site treatment plan because it already has a document that meets the legal requirements specified under the Federal Facility Compliance Act. Under Hanford's *Federal Facility Agreement and Consent Order*, or Tri-Party Agreement, the Department of Energy's Richland office submits to Ecology, the Environmental Protection Agency and the public an annual report on mixed wastes that includes information on characterization, storage, treatment, waste reduction, and progress toward compliance.

Hanford currently has 7,186 cubic meters of mixed waste stored on site. Of this, 562 cubic meters have been received from off-site generators as of March 28, 1995. Hanford has been receiving mixed waste from an average of 25 off-site generators per year in accordance with a 1989 permit application and a 1991 Central Waste Complex permit application. Additional off-site waste is to be reviewed as part of the FFCA process. Hanford is the only USDOE site that has received mixed wastes from off site generators during this time period. In addition, 37 submarine reactor compartments, or about 33,000 cubic meters of mixed waste, have come to Hanford for disposal since 1990.

Thirteen sites propose to send about 100 cubic meters of mixed waste to Hanford treatment facilities (equivalent to about 470 full 55-gallon drums). About 34 cubic meters already are in storage at the 13 sites, the remainder is based on estimates of volumes to be generated over the next five years.

The Puget Sound Naval Shipyard currently has 45 cubic meters of mixed waste stored on site, and projects to place an additional 36 cubic meters in storage over the next five years.Wastes from the shipyard consist of debris with heavy metals, solvents, lead, and other inorganic debris. Based on the small volumes of mixed waste requiring treatment, Puget Sound Naval Shipyard and the USDOE conclude it is not feasible to develop new mixed waste treatment facilities at the shipyard. The Puget Sound Naval Shipyard Proposed Site Treatment Plan instead proposes off-site treatment at other USDOE and

commercial facilities. The shipyard proposes sending 27 cubic meters to Hanford, 19 cubic meters to the Idaho National Engineering Laboratory, and 35 cubic meters to a commercial facility in Tennessee.

Treatment of Hanford Mixed Wastes

The proposed plans which specify treatment at Hanford are based on building the Waste Receiving and Processing Module 2A (WRAP2A). WRAP2A would encapsulate mixed wastes containing hazardous inorganic components such as lead and other heavy metals, paint chips, glass, incinerator ash, asbestos and miscellaneous debris.

The USDOE is currently working to privatize the treatment of its mixed wastes, including those at Hanford. In lieu of building a WRAP2A, the USDOE now proposes to contract with private firms to provide mixed waste treatment services. Designated off-site facilities needing mixed waste treatment would ship their waste directly to the private firm for treatment. This privatization proposal is currently under negotiation with Ecology and the Environmental Protection Agency. No matter where treatment takes place, after the Consent Orders are signed on October 6, 1995, Hanford will not receive any mixed waste that is not included in a site's approved Site Treatment Plan.

Mixed Waste Disposal

Both the USDOE and the states recognize that disposal is an integral part of treatment discussions. As a result, the USDOE established the Disposal Working Group to examine sites for the disposal of low level mixed waste residues left after treatment. The USDOE, through public input and evaluation processes, will determine which sites should be proposed as disposal sites, and initiate the permitting process with appropriate state and federal regulators. The Hanford Site has not been eliminated from the list of candidate disposal sites. A great deal more analysis and stakeholder involvement must still be conducted before any decisions will be made as to the final repositories of treated mixed waste within the USDOE complex.

Public Involvement

The departments of Energy and Ecology are committed to a continuing, open dialogue on the site treatment plans. A 90-day joint comment period on both the Puget Sound Naval Shipyard Proposed Site Treatment Plan and Hanford's role in the overall process will run through July 5.

Send written comments to: **Jeff Breckel**
Washington State Department of Ecology
P.O. Box 47600
Olympia, WA 98504-76900

Attend a public meeting:

In Kennewick
Wednesday, May 3
Department of Ecology Office
1315 W. 4th Avenue
7 p.m. to 9 p.m.

In Bremerton
Tuesday, May 9
School Administration Office
300 N. Montgomery
7 p.m. to 9 p.m.

Washington State Department of Ecology
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P.O. Box 47600
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Summaries of all site treatment plans and full texts of plans from sites proposing to send wastes to Hanford are available in the Hanford Information Repositories:

Seattle

University of Washington
Suzzallo Library
Government Publications Room
(206) 543-4664
Attn. Eleanor Chase

Portland

Portland State University
Branford Price Millar Library
934 S.W. Harrison
(503) 725-3690
Attn. Michael Bowman or Susan Thomas

Spokane

Gonzaga University
Foley Center
E. 502 Boone
(509) 328-4220 Ext. 3844
Attn. Tim Fuhrman

Richland

USDOE Reading Room
Washington State University, Tri-Cities
Room 130 West, 100 Sprout Road
(509) 376-8583
Attn. Terri Traub

The summary and the Puget Sound Naval Shipyard plan will be available at the Bremerton Public Libraries Central and Downtown branches.

For more information call Hanford Cleanup toll-free 1-800-321-2008; if you have special accommodation needs, please contact Michelle Davis, Department of Ecology, (360) 407-7126, or (360) 407-6206.