



Seattle Office  
1305 Fourth Avenue  
Cobb Building, Suite 208  
Seattle, Washington 98101  
(206) 382-1014  
FAX (206) 382-1148

Washington, D.C. Office  
Washington, D.C. Representative:  
Honorable Don Bonker  
c/o Arnold & Porter Consulting  
1155 21st Street N.W., Suite 1000  
Washington, D.C. 20036  
(202) 778-1019  
FAX (202) 331-9832

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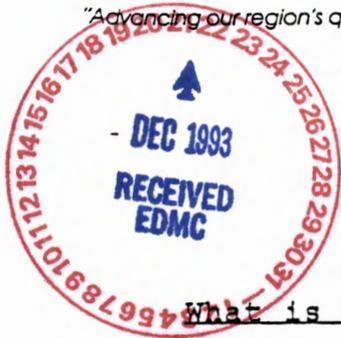
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"Advancing our region's quality of life."

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RCRA PERMITS SECTION



A Citizen's Guide To  
The Nation's Largest and Most Complex  
Hazardous Waste Permit:  
The Hanford "RCRA" Permit

What is RCRA and Why Is Washington State Giving Hanford a Permit?

RCRA stands for the "Resource Conservation and Recovery Act". It is our nation's basic federal hazardous waste law. RCRA regulates the safe handling, treatment, storage and disposal of hazardous wastes from 'cradle to grave'. Hazardous wastes include "mixed wastes" composed of both radioactive and hazardous chemical wastes.

Hanford is the Western Hemisphere's most contaminated land area - 560 square miles next to the Columbia River. The U.S. Department of Energy (USDOE) admits it has dumped 440 Billion Gallons of liquid radioactive and hazardous wastes into the soil at Hanford since the 1940's.

Washington State's Dept. of Ecology is given the authority under RCRA and state law to issue permits for new hazardous waste treatment, storage and disposal facilities. The United States EPA currently has the authority to issue permits and orders regarding the "closure" and clean-up of hundreds of hazardous-radioactive waste contaminated soil sites, weapons plants, reactors and buildings at Hanford.

What is the "Hanford RCRA Umbrella Permit"?

USDOE has applied for a permit under RCRA to build major waste storage, treatment and disposal facilities at Hanford as envisaged by the 1989 Hanford Clean-Up Agreement (Tri-Party Agreement involving USDOE, Ecology and EPA).

Because the Hanford site is so vast and involves so many waste dumps, contaminated plants and yet to be built clean-up facilities, Ecology and USDOE agreed to propose an "Umbrella Permit", one that would set all the ground rules for future Hanford waste permits.

<sup>1</sup> This "Citizen's Guide" has been prepared by Heart of America Northwest to assist you as an interested citizen in preparing comments for the public hearings or written comments on the RCRA permit. Written comments can be sent to WA Ecology, RCRA Permit, PO Box 47600 Olympia, WA 98504-7600 until March 1, 1992. Call or write Heart of America Northwest for additional information or if you would like to be informed of upcoming workshops.

The Hanford Permit Should Be Changed to Stop USDOE From  
Shipping Deadly Nuclear and Hazardous Wastes  
From Other USDOE Nuclear Weapons Plants and Foreign Reactors  
To Be Dumped At Hanford:

USDOE is desperately seeking a dumpsite for its mixed radioactive and hazardous wastes from other nuclear weapons production plants, including Rocky Flats. USDOE is also looking to bring to a USDOE site large quantities of High-Level Nuclear Waste from foreign reactors.

If these wastes are allowed to come to Hanford, they are likely to stay here forever - and drastically compound the already unsafe and illegal waste storage dumps and facilities at Hanford.

Yet, the proposed Hanford RCRA permit, in Sections II.N. and I.E.17, specifically foresees allowing USDOE to make Hanford the waste dump for both the entire USDOE nuclear weapons complex and foreign reactor fuels.

Other states have imposed strict RCRA waste storage limits on USDOE facilities and have directly stopped USDOE both from putting these deadly wastes on their highways and from turning their states into nuclear waste dumps.

Washington State has the authority to include in the Hanford Umbrella Permit conditions that would stop USDOE from turning Hanford into USDOE's nuclear waste storage dump. It is clear that this will only happen if citizens are determined to insist that Hanford's immense problems not be made worse by USDOE being allowed to bring to Hanford any wastes generated offsite.

A solution proposed by Heart of America Northwest is a permit condition that bars USDOE from accepting at Hanford any offsite generated regulated wastes at any Hanford facility covered by the Hanford RCRA permit.

So long as Hanford is the site of hundreds of illegal and unsafe RCRA regulated waste dumps, it is outrageous folly not to include in the permit conditions barring USDOE from adding to our waste problems at Hanford.

Can We Trust USDOE/Hanford to Comply With RCRA and The Permit?

Hanford officials continue to avoid RCRA regulation by diluting hazardous and radioactive waste streams that are dumped straight into Hanford's soils. Absent permit conditions requiring WASTE REDUCTION, RECYCLING and CLOSED LOOP cooling; and, conditions barring massive discharges of hazardous and radioactive wastes from being mixed in common sewer lines with noncontaminated waste waters, USDOE will continue to pour billions of gallons of untreated and unregulated wastes directly into Hanford's soil every year!!!

Ecology has conducted fewer than 10 RCRA inspections at Hanford over the past two years - and Ecology officials have dragged their heels resisting releasing the results of those inspections to the public. Can we truly trust USDOE to self-police itself??? Permit conditions charging the USDOE the full costs of inspections, monitoring and outside lab sampling are necessary to ensure that Ecology can protect the public interest at Hanford.

Within the Umbrella Permit, Ecology Proposes to Give USDOE  
Permits For Massive Questionable Projects in Early 1992 -  
Before An Environmental Impact Statement is Prepared:

In addition to Ecology issuing the "umbrella" rules for all RCRA hazardous waste permits at Hanford, Ecology is proposing to issue specific permits for major facilities to be built at Hanford that will irreversibly commit the clean-up of Hanford to a unproven course questioned by many scientists, tribes and watchdog groups.

The permits that Ecology proposes to give USDOE will irreversibly allow USDOE to build huge plants and literally create a huge above ground High-Level Nuclear Waste Dump at Hanford - all before a long promised Environmental Impact Statement is completed on the clean-up of Hanford and future land uses after clean-up of this area, which is half the size of the State of Rhode Island.

Facilities that are included in the 1992 Hanford RCRA permit:

1) The Hanford Waste Vitrification Plant:

This \$1.2 Billion project is supposed to turn the liquid High-Level Nuclear Wastes in Hanford tanks into solid glass (vitrification) logs that would eventually go to a "repository". Questions exist about USDOE's choice of technology, and whether USDOE knows enough about the chemistry of Hanford's liquid High-Level Nuclear Wastes to design a process that will not cause an explosion of the wastes, which contain highly explosive chemicals.

The Vitrification Plant - if it works perfectly accident free - will release to the air over 11 curies of radioactivity every year. For over 60 years, we would have a small Three Mile Island radioactive release occurring each year.

USDOE is seeking permission from Ecology to start constructing this enormously expensive plant prior to:

\*the completion of engineering and designs for the plant;

\*engineering, design and choice of technology for how the explosive liquid High-Level Nuclear Wastes will be pre-treated before being piped into the Vitrification Plant;

\*construction or operation of either a demonstration or production scale waste vitrification plant with the technology and design chosen by USDOE;

\*preparing an Environmental Impact Statement on the Plant itself which considers alternative technologies (i.e. a French modular design with different materials for the critical melters - which is the only operating nuclear waste vitrification process) and the impacts on the environment from creating a vast above ground High-Level Nuclear Waste Dump composed of the "grout" vaults for wastes that do not go through the Plant itself.

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## 2) Hanford Grout Treatment Facility:

Hanford officials want to take about 10% of all the radioactivity in the liquid High-Level Nuclear Waste Tanks and divert these liquid radioactive and chemical wastes to a "cement" mixer, reducing the volume of wastes that will go through the Hanford Waste Vitrification Plant. USDOE seeks to save large sums of money by diverting as much liquid High-Level Nuclear Waste to the "Grout" plant as possible. After being mixed with "grout", the liquid wastes would be poured into large cement vaults at Hanford.

Prior to completion of a promised Environmental Impact Statement on the future land uses and clean-up standards for Hanford's 560 square miles, *the Grout Facility will irreversibly make a large area of Hanford an above ground High-Level Nuclear Waste Dump with up to 20 million curies of radioactivity.* (The Three Mile Island accident released just 15 to 25 curies).

Questions abound regarding whether the "grout" can truly be expected to stand up to 10,000 years, 100,000 years or 240,000 years of exposure without releasing the deadly wastes mixed into the grout. One reason for these serious questions is that the cement or "grout" will have mixed into it a deadly brew of both hazardous unstable chemicals and highly radioactive elements. Noone knows what the byproducts of these mixtures will be over time - much less whether the grout will retain them or degrade.

The USDOE continues to say that only "incidental" or low levels of radiation will be put into the vaults.

In fact, USDOE wants to create a High-Level Nuclear Waste Dump above ground at Hanford for a huge quantity of deadly wastes - and Ecology has not proposed any permit conditions limiting the quantity of grout to be dumped into vaults or requiring that the maximum amount of Hanford's liquid wastes be turned into glass logs (vitrified). Heart of America Northwest urges citizens to insist that Ecology impose such permit conditions and prevent USDOE from creating a cheap above ground High-Level Nuclear Waste Dump.

## 3) The 183-H Solar Evaporator:

This is a contaminated facility for which a RCRA closure permit ( a clean-up permit ) is proposed. The Evaporator is a potential source of known groundwater contamination in the Hanford "100 Area", near the Columbia River. Ecology has issued a "Declaration of Non-Significance" under Washington State's Environmental Protection Act (SEPA), exempting the project from preparation of an Environmental Impact Statement. This declaration is based upon 2 year old documents prepared by USDOE. It is unclear whether the EPA and Ecology will require removal to background levels of contaminants or whether USDOE will simply cap contaminants with a "geotextile" barrier - a fancy term for placing soil, clay and a "woven synthetic" fabric over the contaminants.

## 4) The 616 Nonradioactive Dangerous Waste Storage Facility:

This is a storage building for dangerous wastes that are to be shipped offsite for treatment or disposal. RCRA sets strict standards for construction of new storage facilities.