

Hanford Facility Dangerous Waste Permit

The Department of Ecology continues to write Hanford's new dangerous waste permit (also known as the site-wide permit). Since the permit is a long and complex document, many people have questions about it. Here are answers to the frequently asked questions and those we anticipate. We will update this document as needed. New and revised questions are marked accordingly.

Why the permit matters

Q: Why is there a permit for Hanford?

A: The permit's purpose is to protect human health and the environment. The permit sets conditions based on the state's laws and regulations that control the treatment, storage, and disposal (TSD) of dangerous wastes. Ecology is required to establish these permit conditions by the Dangerous Waste Regulations in Washington Administrative Code (WAC) [173-303](#). Protection of human health and the environment underlies every permit condition.

Q: Who should care about the permit? Why should I care?

A: The U. S. Department of Energy (USDOE) and its contractors will care about this permit, since it will regulate their treatment, storage, and disposal of dangerous wastes at Hanford. If you are interested in how Ecology is going about its job of protecting human health and the environment through its regulation of Hanford's cleanup, you should care about this permit.

Q: Will cleanup cost more or take longer with the new permit in place?

A: No. Just as it costs less, in the long run, to do a job safely, it costs less to do work in compliance. The permit makes sure the permittee does not leave waste in unsafe or illegal conditions. It would cost less in the near term to do less cleanup. But the cost to the Northwest and to downstream residents could be beyond measure. Furthermore, the clear requirements in the permit allow effective integration of work and elimination of unnecessary work. A truer statement is that the longer cleanup takes, the more it costs.

WHY IT MATTERS

The site-wide permit regulates how the United States Department of Energy and its contractors treat, store, and dispose of dangerous wastes. It ensures protection of human health and the environment.

MORE INFORMATION

Visit Ecology's website at www.ecy.wa.gov/programs/nwp/sections/wasteman/sitewide/pages/DWP_status.html

Join the Hanford Cleanup email list at www.ecy.wa.gov/maillist.html.

Email Hanford@ecy.wa.gov or call the Hanford Cleanup Information line at 800-321-2008.

CONTACT

Contact Madeleine Brown at 509-372-7936 or Madeleine.Brown@ecy.wa.gov.

SPECIAL ACCOMMODATIONS

To ask about the availability of this document for the visually impaired, call Ecology's Nuclear Waste Program at 509-372-7950. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.

Q: What enforcement authority does Ecology have through the permit?

A: Ecology has enforcement authority through the permit as described in Revised Code of Washington (RCW) [Chapter 70.105](#), the Hazardous Waste Management Act. Among other things, if the permittees do not comply with the terms of the permit, the penalty can be up to \$10,000 per day per violation of the permit. The public and EPA can also enforce conditions of the permit. See www.ecy.wa.gov/pubs/0805003.pdf for more about enforcement for Hanford's cleanup.

What the permit covers**Q: What regulatory authority is behind the permit?**

A: The main laws and regulations underlying the permit are WAC 173-303, Dangerous Waste Regulations, and Hazardous Waste Management Act of 1976, as amended, RCW Chapter 70.105. Underlying the state's hazardous waste law is the federal Resource Conservation and Recovery Act (RCRA). In 1992, Congress amended RCRA with the Federal Facility Compliance Act. That law requires the federal government to comply with RCRA to the same extent as any other person.

Q: Whom does the permit regulate?

A: The permit regulates USDOE and its Hanford contractors. The permit refers to them as the "Permittees."

Q: What does the permit regulate?

A: The permit regulates the treatment, storage, and disposal of dangerous wastes. The permit regulates these activities within the entire 586-square-mile Hanford Facility. The legal description of the Hanford Facility is in Attachment 2 of the permit.

The dangerous waste regulations don't cover all wastes at Hanford. For example, the permit does not directly regulate radioactive wastes. But it does regulate the dangerous waste component of mixed radioactive and hazardous wastes. If dangerous wastes are mixed with radioactive wastes, Ecology still applies its dangerous waste standards and requirements to the waste.

USDOE regulates radioactive wastes under the authority of the Atomic Energy Act of 1954, as amended.

Other legal authorities besides the permit apply at Hanford. For example, EPA oversees the cleanup of parts of Hanford under the Comprehensive Environmental Response, Compensation, and Liability Act

"SITE" VS. "FACILITY"

We use both terms to refer to Hanford, but they have different nuances.

It is the Hanford "Site" on maps and when people speak. When Hanford workers describe where they work, they say, "on the site."

But the Hanford area is regulated under the dangerous waste regulations, which authorize the state to implement its own dangerous waste program in place of the federal RCRA program.

In regulatory terms, Hanford is a "facility," a very large facility – 586 square miles.

Part of the official definition of "facility" is "...all contiguous land, and structures, other appurtenances, and improvements on the land used for recycling, reusing, reclaiming, transferring, storing, treating, or disposing of dangerous waste" (WAC 173-303-040).

Both terms refer to the area in south-central Washington where workers made plutonium for the nation's nuclear weapons program, and created huge volumes of chemical and radioactive waste.

(CERCLA), the “Superfund” law. The permit regulates cleanup of the same areas, but generally allows the CERCLA process to take the lead.

Q: What is different in this version of the permit?

A: Revised This is the first time since 1994 that the public can review and comment on the entire permit. Also, when the permit is issued, all TSD units will have final and enforceable permit conditions or a schedule for the permittee to submit documentation that will lead to final permit conditions (for example, the closure plan for the single-shell tanks is due in several years). Hanford has hundreds of spill sites ("solid waste management units"), waste sites, operating facilities, and burial grounds. The regulations allow for a phase called "interim status" before a final facility permit is issued. Until now, much of Hanford has been operating under interim status standards, which may be less stringent than final status standards.

Q: Are the single-shell tanks in the permit?

A: Yes. The single-shell tank system is closing, so it is in Part V of the permit, with other units that are closing. One of the requirements in [WAC 173-303-640](#) is for secondary containment. The aging and leaking tanks cannot meet this requirement, among others. This is why the system must be closed. It will be many years until all the tanks can be closed. So we are imposing conditions in the permit for actively managing the waste in the tanks until workers can empty and close them.



C-Farm tank construction, 1944.

Q: Where in the permit are conditions for groundwater?

A: At the start of Hanford’s cleanup, the [Tri-Party Agreement](#) agencies organized Hanford’s waste sites into operable units. They defined groundwater under the waste sites as distinct operable units. Groundwater is addressed in Section II.F of the General Conditions and in the unit-specific conditions of operating units (Part III), closure units (Part V), and corrective action areas (Part IV).

Q: Will the permit address how much waste is left in the soil? What information will support this decision?

A: Yes. We will decide how much waste is left in the soil in the unit-specific closure plans. When the closure plans are final, they become part of the permit. Information supporting closure plan decisions will come from historical records, sampling, environmental analyses, and statistical data. We will review the information and seek public involvement for each closure plan before we approve it.

Q: How does the permit address plutonium in the soil?

A: The permit doesn't directly address plutonium in the soil, because plutonium is a radionuclide and Ecology is preempted by the Atomic Energy Act from directly regulating radionuclide safety. But the permit does address soil sites where both radioactive and dangerous wastes are buried. USDOE will have to address radionuclide cleanup where permit standards require cleanup of dangerous waste.

The permit's relationship to other decisions**Q: How does the permit affect cleanup decisions?**

A: The permit will cover the "end state" of final cleanup, for any part of the Hanford Facility (any TSD unit, spill, or waste pile) under the authority of the dangerous waste regulations, which has or had any dangerous waste at any time. It won't have any role in cleanup decisions for Hanford facilities without dangerous wastes (for example, plutonium disposition).

New**WHAT IS A "FACT SHEET?"**

Under the state's dangerous waste regulations, a fact sheet is a special publication that defines the process for decision making and the basis for the conditions in the permit ([WAC 173-303-840\[2\]\[f\]](#)).

This publication is also called a Statement of Basis.

Ecology must prepare and issue this document whenever we submit a draft dangerous waste permit for public review and comment.

This "fact sheet" is not the same as a flyer, public notice, or focus sheet that explains issues to the public.

What is NOT in the permit?**Q: What is NOT regulated by the permit?**

A: The permit does not regulate the cleanup of strictly radioactive materials, such as plutonium. For example, the permit does not address the plutonium in the Plutonium Finishing Plant, though it does address soil and groundwater sites near it.

Q: Can the permit prevent USDOE from bringing more waste to Hanford?

A: Ecology doesn't have authority to directly regulate purely radioactive wastes, including preventing the import of purely radioactive wastes through a dangerous waste permit. But we do regulate the dangerous waste component of mixed radioactive and dangerous wastes. If the radioactive waste coming to Hanford is mixed with dangerous wastes, then we still may apply dangerous waste requirements to the waste. Ecology believes it has the authority to impose any conditions necessary to protect human health and the environment in permitting USDOE's treatment, storage and disposal of dangerous waste, including placing limits on waste disposal based on conditions at the Hanford facility.

Relationship of the permit to other decisions**Q: How does the State Environmental Policy Act (SEPA) apply to the permit?**

A: Revised SEPA applies to dangerous waste permits that Ecology issues. We have SEPA checklists for most individual units. For the full permit, we will summarize the SEPA documentation in the permit's fact sheet. We will address individual units in their sections of the fact sheet. The public comment period for the SEPA documentation is the same as for the permit.

Q: Can you issue the permit without a final Tank Closure and Waste Management Environmental Impact Statement (EIS)?

A: Yes. We have SEPA coverage from earlier studies to support the decisions in this permit. We will need more environmental analyses to support decisions that will be made under the permit in the future (such as closing tank farms).

The USDOE needs the EIS for its decisions, and the permit is our framework for future decisions. As a cooperating agency we provided guidance to help USDOE provide enough information so that we may be able to adopt the Tank Closure and Waste Management EIS and meet the state's SEPA requirements.

Permit structure, how to review, decision-making

Q: How long is the permit in effect?

A: Revised The term for the permit is 10 years. This is the longest period the regulations ([WAC 173-303-806](#)[11]) allow. The regulations ([WAC 173-303-806](#)[6] and [7]) allow the old permit to remain in place until the new permit is issued.

Q: How is the permit organized?

A: It is organized into six parts:

Part I has standard conditions. These are conditions common to all dangerous waste permits in the state. The basis for these conditions is in [WAC 173-303-810](#). The types of items covered by these conditions are the effect of the permit, duty to provide information, and reporting requirements.

Part II has the general conditions that apply to the entire Hanford Facility. These conditions address items such as training and facility record keeping for the overall site.

Part III has unit-specific conditions for operating units that treat, store, or dispose of dangerous wastes. Examples of these units are the Waste Treatment Plant and the Central Waste Complex.

Part IV has conditions for corrective action areas to clean up spills and releases from sites no longer in use. These areas consist of soil cleanup sites and cleanup of groundwater.

Part V has specific conditions for units undergoing closure. The basis for these conditions is in [WAC 173-303-610](#). Units in Part V are those that cannot meet the minimum technical standards required of [WAC 173-303-600](#). Examples of these units are ponds, cribs, and ditches.

Part VI has unit-specific conditions for closed sites that require long-term monitoring.



Permit regulates treatment, storage, and disposal of dangerous and mixed wastes.

Q: What is a variance?

A: A variance is a situation in which the permittee does not comply with a particular regulation. It is normally used if the regulation imposes an extraordinary hardship. The permittee can request a variance (in writing) and if we agree, we would craft a condition based on the agreed-to requirements.

Other questions about the site-wide permit?

Send them to Madeleine Brown (see sidebar on page 1).

When it is not possible to meet the letter of the regulation, a variance allows the permittee to meet the intent of the regulation. The reasons for variances can range from technical impracticability to preventing risk to workers from radiation. For example, in the Waste Encapsulation and Storage Facility, the permit does not require visual inspection of the waste capsules, because they are under several feet of water for protection of human health and environment from the high radioactivity levels.

Q: Where is public involvement in the permit?

A: Public involvement is not in any of the permit conditions. Public involvement is part of the decision-making for the permit. Public involvement is required by law and regulation in the decision-making ([WAC 173-303-840](#)) and the Tri-Party Agreement. (The Tri-Party Agreement is Attachment 1 of the permit.)



Hanford has vast volumes of waste to manage safely.

Q: What does Ecology expect or want from the public comment process?

A: We want the public to let us know whether we have met the permit's intent—to protect human health and the environment by ensuring the safe treatment, storage, and disposal of dangerous wastes. And if we haven't, we hope the review will show how the permit should change to achieve this intent.

We don't really expect people to wade through thousands of pages of technical jargon, but we certainly respect the public's right to review any part of the permit.

Q: Why has the release of the permit been delayed?

A: There are several reasons. Preparing the permit has required an extended development and review period. More than half of Ecology's Nuclear Waste Program's 75 employees are authors or reviewers. We had to resolve a number of difficult issues for example, how to coordinate between RCRA and CERCLA authorities at Hanford. In addition to Ecology's internal process, we have worked with the permittees and EPA to address their concerns.

Q: How can the permittee appeal the permit or parts of it?

A: Anyone who can show legal “standing” (a stake in the legal controversy) and who submitted comments on the draft permit explaining why they think one or more aspects of the draft permit is inappropriate can appeal Ecology’s final permit decision. See WAC 173-303-840(6)(a) and [WAC 173-303-845](#). The permit’s fact sheet will describe the process for submitting appeals.

Q: How will Ecology make the permit available for public review and comment?

A: The full permit will be available online and at the following locations:

- Ecology’s Nuclear Waste Program Office in Richland.
- Ecology’s Regional office in Yakima.
- Hanford Information Repositories.
- White Salmon’s public library.

Other publications will explain the permit and how you can participate in the decision process. The public notice will have the basic facts about the permit and the public comment process. It will come out when the comment period dates are firm.

The regulations require a fact sheet, or statement of basis, that lays out the process for decision making, permit basics, and the basis for permit conditions and variances. If you want to understand how we interpret and apply the regulations for a particular unit, this is the document to read. We expect the statement of basis will be about 100 pages, but readers can focus on the units they are interested in.



Permit's purpose is to protect human health and the environment.

Q: What is the public comment process?

A: During the public comment period, Ecology will receive written (mail, email, fax) comments for 90 days. We plan to hold public hearings as well. We will schedule and announce the hearings when the permit is closer to its public comment period.

We will issue a comment response summary and a permit decision after the comment period closes.

Q: When will the site-wide permit public comment period start?

A: Revised Permit writing and reviewing are underway now. We hope it will be ready for review in early 2011. When more information is available, we will email an advance notice to the Hanford cleanup email list. To join the email list go to www.ecy.wa.gov/maillist.html. We will also announce the dates in meetings, publications, and on Ecology's Nuclear Waste Program website: www.ecy.wa.gov/programs/nwp/commentperiods.htm.



Ecology's mission is to protect, preserve and enhance Washington's environment.