

# Reissue of the Hanford Facility Dangerous Waste Permit

(commonly called the Hanford “site-wide permit”)

Washington Department of Ecology  
Nuclear Waste Program

# Ecology's job at Hanford

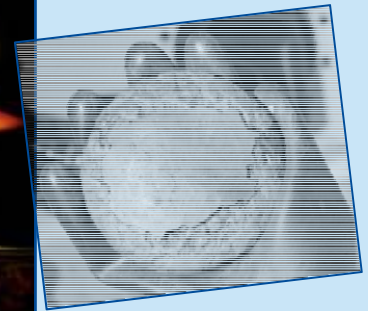


- Ensure that Hanford cleanup follows state and federal laws to protect human health and the environment
- In particular, protect the Columbia River
- Protect, preserve and enhance the state's air, land and water for current and future generations



# Background

- Hanford made plutonium for nuclear weapons 1944-87
- Hanford created millions of tons of waste
- Nation enacted most environmental laws in the 1970s
- Hanford regulation by the state begins in mid-1980's



# Scope of the Hanford cleanup

- About 70 square miles of contaminated groundwater
- 56 million gallons of radioactive and chemical wastes in underground tanks
- Hundreds of contaminated buildings
- Hundreds of contaminated soil sites
- Millions of tons of contaminated soil



# Federal environmental laws



- Atomic Energy Act (AEA) – 1954 (Radionuclides)
- Resource Conservation and Recovery Act (RCRA) – 1976 (Hazardous Waste Management)
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) - 1980 -- more commonly known as Superfund (Cleanup of hazardous and mixed waste)
- Federal Facilities Compliance Act – 1992 (Waste treatment schedules and regulatory compliance for federal sites like Hanford)

# Tri-Party Agreement



- Hanford Federal Facility Agreement and Consent Order (May 15, 1989)
- Provides enforceable schedules: to get Hanford into compliance with environmental laws – including permitting
- Defines USDOE, EPA, and Ecology coordination to clean up Hanford

# How the state implements RCRA

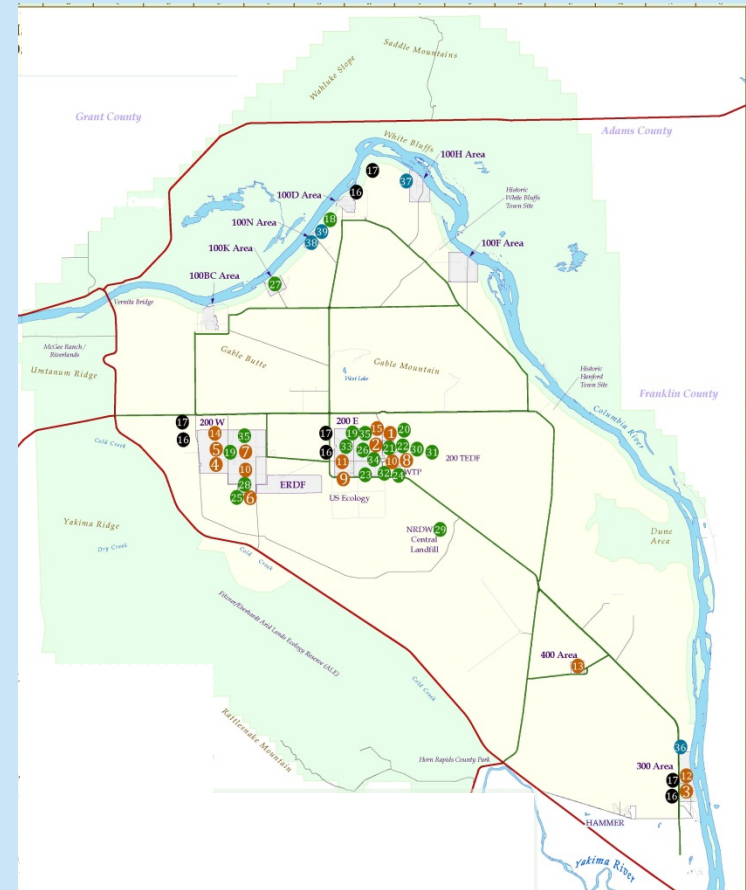
- Hazardous Waste Management Act - 1976
- Dangerous Waste Regulations
- State authorized to run its dangerous waste rules in lieu of federal program
- Federal RCRA exempts strictly radioactive materials





# What the permit covers

- The entire Hanford Site (“Facility”)
- Mixed wastes (both radioactive and chemically hazardous)
- 37 units for Treatment, Storage, and Disposal of dangerous (chemically hazardous) wastes
- 2 Corrective Action units (soil and groundwater cleanup sites)





# What the permit does NOT cover



- Solely radioactive materials



# How does the permit protect?

- Provides requirements for managing wastes safely from “cradle to grave”
- Ensures safe waste storage, treatment and disposal
- Provides criteria for knowing what waste you have and what waste you can accept
- Requires inspections
- Requires prompt emergency response, notifications, and cleanup



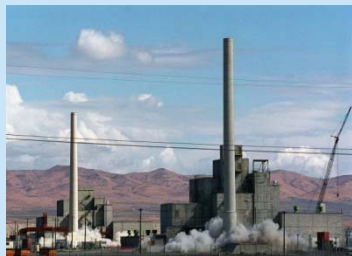
## How does the permit protect? (Cont.)

- Sets requirements for cleanup of contamination
- Requires liners and groundwater monitoring for landfill disposal sites
- Prevents hazards, through measures such as keeping incompatible wastes separate
- Defines financial and criminal penalties for violations



# Permit organization

- Part I – General, standard conditions
- Part II – Conditions applying to entire site
- Part III – Conditions for **operating units** - facilities that actively treat, store, or dispose of waste
- Part IV – Conditions for **corrective action units** - old waste disposal sites to be cleaned up
- Part V – Conditions for **closure units** - inactive sites to be investigated and “closed”
- Part VI – Conditions for **postclosure units** - closed sites with groundwater contamination



# Offsite Waste – what’s in, what’s not

- The permit allows
  - Operating burial grounds
    - Navy Reactor compartments trench
    - Integrated Disposal Facility
    - Trenches 31 & 34
  - Certain offsite wastes (from a court settlement)
    - Navy reactor compartments
    - Return of Hanford waste (mainly samples) sent off-site for treatment, analysis and testing
    - Hanford-related waste from the Pacific Northwest National Laboratory
- The permit does not include:
  - Mixed waste from other DOE sites



# Process Improvements

- Ecology and EPA Developed Guidance
  - Clarified what RCRA and state regulations require for each part of the permit
  - Used to measure whether DOE permit documents meet the criteria
  - Work through specific RCRA conditions with DOE
- Established joint permit team and process guidance for quick issue resolution

# The Permit is Subject to SEPA

- SEPA is a state policy that requires state and local agencies to consider the likely environmental consequences of a proposal before approving or denying the proposal.
- Ecology issuing the draft Hanford permit is an action\* subject to the requirements of SEPA.
  - Ecology will analyze the likely environmental consequences of this action



\*RCW 43.21C.030(2)(c) and WAC 197-11-704

# The permit is a living document

- Reissue: required every 10 years (old permit is in force during reissue)
- Modified: many times over the past 18 years
  - To add units (other parts of Hanford)
  - To remove units that are cleaned up





# Contact us:

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