



U.S. Department of Energy CERCLA
Five Year Review
for the Hanford Site
2005 - 2006

December 2005

U.S. Department of Energy CERCLA Five Year Review
for the Hanford Site
2005 - 2006

- CERCLA
 - Comprehensive Environmental Response,
Compensation, and Liability Act (Superfund)
 - Federal Law
 - Requires cleanup (removal actions and remedial actions) of sites where hazardous materials present a threat to human health or the environment.

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- CERCLA & Executive Order 12580 require that:
 - Department of Energy (DOE) is the lead agency responsible for conducting the response actions at the Hanford Site
 - DOE is required to conduct reviews of the status of the response actions no less frequently than once every five years.

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- *DOE Scope of Five-Year Reviews*
 - evaluate whether a remedy is operational and functional;
 - evaluate those assumptions critical to the effectiveness of the remedial measures or the protection of human health and the environment...made at the time of the remedial decision to determine, given current information, whether these assumptions are still valid;
 - determine what corrective measures are required to address any identified deficiencies; and
 - evaluate whether there are opportunities to optimize the long-term performance of the remedy or reduce life-cycle costs.

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- The primary objectives for this DOE review are:
 - to evaluate the performance of the selected remedy for each Record of Decision (ROD). (The purpose of this 5-Year review is not to reconsider decisions documented in RODs)
 - to confirm that immediate threats have been addressed and that the remedy(ies) will be protective when complete, where a remedial action has not been completed.
 - to confirm whether the selected remedy(ies) remain(s) protective where a site is in the Long-Term Stewardship phase.
 - to recommend actions to improve performance when the Five-Year review indicates that a remedy is not performing as designed.

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- Approach:
 - The second five-year review will update and supplement the 2001 five-year review that was done by EPA.
 - The 2001 five year review will be updated to reflect decisions made and activities initiated, terminated, or completed since 2000.
 - The cut-off date for the inclusion of newly issued decision documents is July 30, 2005.

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- The scope of this review is limited and does not include all of the activities covered by the Tri-Party Agreement.
- Only operable units listed as past-practice units under CERCLA are covered in this five-year review.
- Active treatment, storage, or disposal units regulated under RCRA, such as the tank farms, will not be part of this review.

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- The scope of this review includes CERCLA remedial and removal actions completed or being conducted in the:
 - **100 Area**
 - **200 Area**
 - **300 Area**
 - **1100 Area**

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- **100 Area Actions:**
 - Removal of spent nuclear fuel,
 - Removal of contaminated soil from inactive disposal sites,
 - Decontamination and/or demolition of contaminated buildings and/or inactive facilities,
 - Treatment of the wastes as appropriate,
 - Disposal of material in an appropriate facility,
 - Treatment of contaminated groundwater.

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- **200 Area Actions:**

- Removal of contaminated soil from inactive disposal sites,
- Decontamination and/or demolition of contaminated buildings and/or inactive facilities,
- Treatment of the wastes as appropriate,
- Disposal of material in an appropriate facility,
- Treatment of contaminated groundwater, and
- Operation of the Environmental Restoration Disposal Facility.

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- **300 Area Actions:**

- Removal of contaminated soil waste sites and debris,
- Decontamination and/or demolition of contaminated buildings,
- Treatment of the wastes as appropriate,
- Disposal of material in an appropriate facility
- Treatment of contaminated groundwater

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- **1100 Area:**
 - Remedial and Removal Actions have been completed.
 - 1100 Area has been deleted from the NPL
 - Horn Rapids Landfill being managed by a cap and institutional controls
 - Horseshoe Landfill remediated for unrestricted use
 - Recently discovered residual DDT contamination at Horseshoe Landfill has been removed