



Compliance Recertification Application shows WIPP compliance

On March 26, 2009, the U.S. Department of Energy (DOE) submitted the Waste Isolation Pilot Plant's (WIPP) Compliance Recertification Application (CRA) to the Environmental Protection Agency (EPA). The CRA documents WIPP's continued compliance with federal regulations for radioactive waste disposal established to protect human health and the environment.



Before disposal operations could begin, the WIPP Land Withdrawal Act (LWA) required the EPA certification of WIPP compliance with radioactive waste disposal regulations (40 CFR Part 191 Subparts B and C). The initial Compliance Certification Application demonstrated how the geological, hydrological, physical, chemical and environmental characteristics of the site, along with engineered features of the facility, would safely contain radioactive waste for the 10,000-year regulatory time period. The EPA issued DOE its certification in May 1998.

The LWA also requires DOE to submit documentation of continued compliance every five years until the decommissioning of the facility is complete. The recertification process is not a reconsideration of the decision to open WIPP, but a process to verify that changes in the preceding five-year period demonstrate compliance with the radioactive waste disposal standards. Based on updated data in WIPP's CRA-2004, the EPA recertified WIPP in March 2006.

The CRA-2009 shows that no significant changes have taken place since the CRA-2004 was submitted. Changes documented and analyzed in the CRA-2009 include:

- TRU Waste Inventory - The CRA-2009 uses updated waste inventory information based on waste already disposed at WIPP, waste known to be at sites that will be disposed at WIPP in the future and waste anticipated to be generated in the future.
- Remote-handled transuranic (RH-TRU) waste - WIPP began disposing RH-TRU waste in January 2007.
- Performance Assessment - The long-term performance of the repository is analyzed using computer modeling. Changes reflect such items as changes in gas generation modeling, parameter changes, new calculations, code improvements and corrections. These changes are based on actual experience with the repository.
- Engineered Barriers - The EPA approved a DOE request to reduce the amount of magnesium oxide (MgO) required in the repository. Used as an engineered barrier, MgO would serve to slow the migration of radionuclides from the disposal area in any brine present in the repository after closure.
- Peer Review - Documentation and results of WIPP peer reviews pertaining to RH-TRU waste visual examination data verification and sealed sources at Los Alamos National Laboratory.

Structure of CRA-2009

The CRA-2009 is organized into 23 sections that correspond to the disposal regulations at 40 CFR Part 194.

Each section includes:

- Requirements
- Background information
- The 1998 certification decision
- Changes in the CRA-2004
- EPA's evaluation of compliance for the 2004 recertification
- Changes or new information since the 2004 recertification
- References

The 23 sections, along with the document's 13 appendices total about 2,000 pages.

Result: WIPP compliance

To maintain compliance with the radioactive waste disposal standards, DOE must demonstrate that changes from the previous five years do not compromise the WIPP repository's ability to safely contain the waste for the 10,000 year regulatory period. A performance assessment is done with computer modeling to show that any radioactive releases from the repository are well below the standards set by the EPA to protect human health and the environment.

The CRA-2009 demonstrates that WIPP continues to comply with the disposal standards.

EPA's recertification process

Now that the CRA-2009 has been submitted, the EPA will begin a two-step process. The first is to determine the completeness of the CRA. The EPA may request additional information. The requests, the DOE responses and the CRA-2009 will all be available on the EPA's WIPP website (www.epa.gov/radiation/wipp).

Once a completeness decision is made, EPA has six months to complete a technical evaluation of the application and reach a final decision regarding WIPP's continued compliance with the waste disposal regulations.

Public comment period

The EPA has announced a public comment period of the CRA-2009. The official comment period began June 16, 2009 and will extend until EPA issues a Federal Register notice announcing its completeness determination and the subsequent end of the comment period. Stakeholders may review all related materials on the EPA's WIPP Web site (www.epa.gov/radiation/wipp). Comments may be submitted by the following methods:

Mail

Air and Radiation Docket
EPA Docket Center (EPA/DC)
Attn: Docket ID No. EPA-HQ-OAR-2009-0330
Mail Code 2822T
1200 Pennsylvania Ave., N.W.
Washington, DC 20460

E-mail

a-and-r-docket@epa.gov
(Attn: Docket ID No. EPA-HQ-OAR-2009-0330)

Fax

(202) 566-1741
(Attn: Docket ID No. EPA-HQ-OAR-2009-0330)

For more information

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