

WIPP's 100000g 11th Year

For reasons yet-to-be-explained, the Department of Energy (DOE) and its operating contractor Washington TRU Solutions (WTS) for the Waste Isolation Pilot Plant (WIPP) are making sure that this year's required regulatory actions continue through much of next year, substantially increasing costs for taxpayers and the involved citizen groups, with no apparent improvements in operational efficiency or protection for workers, the public, and the environment. At the same time, DOE has not provided details and justifications for how it will spend an additional \$172 million at WIPP from the American Reinvestment and Recovery Act (ARRA), the economic stimulus bill signed by President Obama on February 17, 2009. Meanwhile, 2009 and 2010 will again have hundreds of fewer shipments of transuranic (TRU) nuclear waste to WIPP compared with previous years.

March 26, 2009, marked ten years of waste operations at WIPP and triggered two regulatory actions — submittal on March 24 of a recertification application (RCA) to the Environmental Protection Agency (EPA) and submittal on May 29 of a renewal application for the operating permit to the New Mexico Environment Department (NMED). In discussions prior to the submissions, regulators and citizen organizations had stressed that if DOE submitted applications with no major changes to WIPP operations that the regulatory approvals could be much quicker and less contentious than previous ones.

EPA RECERTIFICATION

The WIPP Land Withdrawal Act of 1992 (LWA, Public Law 102-579) established the regulatory process for the underground disposal site for TRU waste from nuclear weapons that differs from that for any other repository, which would be licensed by the Nuclear Regulatory Commission (NRC). The LWA provided that before WIPP could open that EPA would certify that WIPP met standards to limit projected radioactive releases over the 10,000 years after all waste was disposed and that every five years during its operations DOE must submit a recertification application that shows that WIPP continues to comply with the standards. The law also provided that EPA's recertification review would take six months.

However, the first recertification in 2004 took two years and was highly contentious because DOE submitted an application that included high-level wastes at the Hanford, WA site that LWA clearly prohibits at WIPP. Strong public objections to such wastes resulted in EPA requiring additional information and changes to the application. EPA's April 10, 2006, recertification decision reiterated that it "will not allow high-level waste or spent nuclear fuel to be shipped to WIPP."

As a result of the difficulties with the first RCA, DOE, EPA, and citizen organizations discussed how to make the 2009 recertification a faster, and potentially less contentious, process. To make the application easier for EPA and the public to review, DOE changed to an electronic format so that information on the regulatory requirements, the original certification decision, the 2006 recertification decision, and any changes for the 2009 application would be clearly stated and all references would be hyper-linked so that they were readily available. The new format has allowed quicker initial reviews of the 1,548-page RCA and the hundreds of references.

However, major substantive provisions may again prove contentious because the RCA inventory again includes wastes that are not allowed by the LWA and

DOE wants to dramatically change how the more highly radioactive remote-handled (RH) TRU waste is handled. The 2008 Inventory that DOE intends to use for the RCA does not include new waste streams from Argonne, IL that are to come to WIPP because of Recovery Funds. Further, the inventory includes more than a dozen waste streams from several sites that are prohibited by the LWA, including commercial wastes, non-TRU wastes, and RH wastes that are too highly radioactive.

WIPP's plans have always provided that RH waste be shipped in more robust containers, handled separately upon arrival at the site, and disposed underground in the walls of waste rooms before the contact-handled (CH) waste is stacked in the rooms. In November 2007, DOE proposed using "lead shielded containers" for RH waste so that it could be shipped, handled, and disposed with CH waste. The new shipping containers have not been approved by the NRC, the required safety analysis has not been done, and other technical questions have not been



Demonstration model of the TRUPACT-III shipping container.

answered, so EPA told DOE to not include shielded containers in the RCA. However, because the inventory and other aspects of the 2009 RCA are incomplete, DOE may maintain its insistence on shielded containers when it submits additional information.

OPERATING PERMIT RENEWAL

The LWA also provides that NMED issues the operating permit for WIPP, under the Resource Conservation and Recovery Act (RCRA), which provides "cradle to grave" controls for hazardous wastes. The original permitting process took more than four years because of public support for more stringent measures to protect public health and the environment that required numerous revisions to the application. As a result, the permit for the first ten years of operations was still in process when WIPP opened in 1999

Since the permit was issued, numerous modifications have been approved (and others requested by DOE and WTS have been denied). During discussions in late 2008 and early 2009 about the renewal application, DOE and WTS indicated that they intended to ask for no significant changes in the permit, and the January 2009 draft did not raise major concerns with citizen groups or NMED. But in April, DOE and WTS provided a very different draft that included hundreds of changes to the permit. A major change would be to eliminate the term "generator/storage site" that is standard in RCRA permits (and also used in the RCA) and replace it with WTS's

"Centralized Characterization Program" (CCP) which conducts some waste characterization activities at some sites. The reasons for the change and its implications for the sites and WIPP have not been explained. What is clear is that the renewal process will take months longer than planned because much additional information must be provided about the proposed changes, many of which will likely be opposed by citizen groups.

RECOVERY FUNDS

The ARRA included \$5.127 billion for DOE Environmental Management (EM) sites, but did not further allocate the funds. EM officials stated that they would give priority to "shovel ready" projects, including those with baseline cost and schedules and regulatory approvals so that funds could be spent within two years. The law also requires that detailed information about the specific projects and contractors be made publicly available to ensure openness and transparency about how money is spent.

In March, EM indicated that \$172 million in ARRA funds would be provided to WIPP. Initial WIPP plans included funds for RH shielded containers, money to pay for the regulatory approvals for a new shipping container (TRUPACT-III), tens of millions of dollars for CCP, additional payments to one of the shipping contractors, among other activities.

There were public objections to funding shielded containers and the TRUPACT-III, since they did not meet the criteria for regulatory approval. There were also questions about why more money should be spent for the Visionary Solutions shipping contract when there have been hundreds of fewer shipments than planned when the contract was signed in 2007. Further, citizen groups noted that ARRA funds were being provided to CCP for several DOE sites, including Argonne, IL; Hanford; Idaho National Lab; Oak Ridge, TN; and Savannah River Site, SC that are also receiving Recovery funds for preparing and shipping waste to WIPP. DOE was asked to detail how those funds would be spent to ensure that "double funding" was not being provided.

While WIPP and EM officials now have stated that Recovery funds will not be used for shielded containers and TRUPACT-III, they have not reduced the allocation to WIPP. While the detailed project plans were to have been publicly available in early May, they have still not been provided by late June and some sites are unresponsive to specific requests for additional information about how funds would be spent on TRU waste activities.

The interrelated aspects of the RCA, RCRA permit application, and ARRA funds require further information from DOE and WTS, but also can have substantial impacts on health and safety aspects of future WIPP operations. ✈

FOR MORE INFORMATION

WIPP website: www.wipp.energy.gov/

EPA WIPP website: www.epa.gov/radiation/wipp/index.html

NMED WIPP website: www.nmenv.state.nm.us/wipp/index.html

SRIC website: www.sric.org

Recovery Fund website: www.recovery.gov

EM Recovery fund website: www.em.doe.gov/emrecovery