



6560-50-P

## **ENVIRONMENTAL PROTECTION AGENCY**

### **40 CFR Parts 191 and 194**

**[EPA-HQ-OAR-2019-0534; FRL-10000-12-OAR]**

### **Review Process to Determine Whether the Waste Isolation Pilot Plant Continues to Comply with the Disposal Regulations and Compliance Criteria**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Notice of availability; official opening of public comment period.

**SUMMARY:** The Environmental Protection Agency (EPA, or the Agency) intends to evaluate whether the Waste Isolation Pilot Plant (WIPP) continues to comply with the Agency's environmental radiation protection standards for the disposal of radioactive waste. Pursuant to the 1992 WIPP Land Withdrawal Act (LWA), as amended, the U.S. Department of Energy (DOE, or the Department) must submit documentation of continued compliance with the EPA's standards for disposal and other statutory requirements every five years after the initial receipt of transuranic waste at WIPP. The Agency requests public comment on all aspects of the DOE's application.

**DATES:** The comment period opened on [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER], and will remain open beyond the time when the EPA notifies the DOE that the recertification application is complete, which will be specified in a future **Federal Register** document. Announcements will be published in the **Federal Register** to provide information on the Agency's completeness determination and final recertification decision.

**ADDRESSES:** You may send comments, identified by Docket ID No. EPA-HQ-OAR-2019-0534, by any of the following methods:

- Federal eRulemaking Portal: <https://www.regulations.gov/> (our preferred method).  
Follow the online instructions for submitting comments.
- E-mail: [a-and-r-Docket@epa.gov](mailto:a-and-r-Docket@epa.gov). Include Docket ID No. EPA-HQ-OAR-2019-0534 in the subject line of the message.
- Mail: U.S. Environmental Protection Agency, Air and Radiation Docket, EPA Docket Center, Mail Code 28221T, 1200 Pennsylvania Ave., NW, Washington, DC 20460.
- Hand Delivery / Courier: EPA Docket Center, WJC West Building, Room 3334, 1301 Constitution Avenue, NW, Washington, DC 20004. The Docket Center's hours of operations are 8:30 a.m. – 4:30 p.m., Monday – Friday (except Federal Holidays).

*Instructions:* All submissions received must include the Docket ID No. for this notice of availability. Comments received may be posted without change to <https://www.regulations.gov/>, including any personal information provided. For detailed instructions and additional information on submitting comments, see the **SUPPLEMENTARY INFORMATION** section of this document.

A copy of the DOE's 2019 Compliance Recertification Application (CRA) is linked on the EPA's WIPP website (<https://www.epa.gov/radiation/certification-and-recertification-wipp#2019>).

**FOR FURTHER INFORMATION CONTACT:** Ray Lee, Office of Radiation and Indoor Air, Radiation Protection Division, Center for Radiation Information and Outreach, Mail Code 6608T, U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, Washington, DC, 20460; telephone number: 202-343-9463; fax number: 202-343-2305; e-mail address: [lee.raymond@epa.gov](mailto:lee.raymond@epa.gov).

**SUPPLEMENTARY INFORMATION:** The DOE’s 2019 CRA was received by the EPA on March 19, 2019, and a copy is linked on the EPA’s WIPP website in **ADDRESSES**. The EPA will determine when the DOE has provided a complete application; the Agency’s completeness determination will be conveyed to the DOE and published in the Federal Register. The EPA will evaluate the “complete” application in determining whether the WIPP facility continues to comply with the radiation protection standards for disposal. The Agency requests public comment on all aspects of the DOE’s application.

## **I. Public Participation**

### *Written Comments*

Submit your comments, identified by Docket ID No. EPA-HQ-OAR-2019-0534, at <https://www.regulations.gov> (our preferred method), or the other methods identified in the **ADDRESSES** section. Once submitted, comments cannot be edited or removed from the docket. The EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (i.e. on the web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <https://www.epa.gov/dockets/commenting-epa-dockets>.

## **II. Background**

The WIPP was authorized in 1980, under section 213 of the DOE National Security and Military Applications of Nuclear Energy Authorization Act of 1980 (Pub. L. 96-164, 93 Stat. 1259, 1265), "for the express purpose of providing a research and development facility to demonstrate the safe disposal of radioactive wastes resulting from the defense activities and programs of the United States." The WIPP is a disposal system for transuranic (TRU) radioactive waste. Developed by the DOE, the facility is located near Carlsbad in southeastern New Mexico. TRU waste is emplaced 2,150 feet underground in an ancient layer of salt that will eventually "creep" and encapsulate the waste containers.

The 1992 WIPP LWA (Pub. L. 102-579)<sup>1</sup> limits radioactive waste disposal in the WIPP to TRU radioactive wastes generated by defense-related activities. TRU waste is defined as waste containing more than 100 nano-curies per gram of alpha-emitting radioactive isotopes, with half-lives greater than twenty years and atomic numbers greater than 92. The Act further stipulates that radioactive waste shall not be TRU waste if such waste also meets the definition of high-level radioactive waste, has been specifically exempted from regulation with the concurrence of the Administrator, or has been approved for an alternate method of disposal by the Nuclear Regulatory Commission. The TRU radioactive waste proposed for disposal in the WIPP consists of materials such as rags, equipment, tools, protective gear and sludges that have become contaminated during atomic energy defense activities. The radioactive component of TRU waste consists of man-made elements created during the process of nuclear fission, chiefly isotopes of plutonium. Some TRU waste is contaminated with hazardous wastes regulated under

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<sup>1</sup> The 1992 WIPP Land Withdrawal Act was amended by the "Waste Isolation Pilot Plant Land Withdrawal Act Amendments," which were part of the National Defense Authorization Act for Fiscal Year 1997 (Pub. L. 104-201).

the Resource Conservation and Recovery Act (RCRA; 42 U.S.C. 6901-6992k). The waste proposed for disposal at the WIPP derives from Federal facilities across the United States, including locations in Colorado, Idaho, New Mexico, Nevada, Ohio, South Carolina, Tennessee and Washington.

The WIPP must meet the EPA's generic disposal standards at 40 CFR part 191, subparts B and C, for high-level and TRU radioactive waste. These standards limit releases of radioactive materials from disposal systems for radioactive waste and require implementation of measures to provide confidence for compliance with the radiation release limits. Additionally, the regulations limit radiation doses to members of the public and protect ground water resources by establishing maximum concentrations for radionuclides in ground water. To help in determining whether the WIPP facility meets these disposal standards, the Agency issued the 1997 WIPP Compliance Criteria (40 CFR part 194), which provides guidance for interpretation and implementation of the disposal standards specifically for the WIPP site. The Compliance Criteria—along with its accompanying preamble and supporting documents—describe what information the DOE must provide and how the EPA evaluates WIPP's performance and provides ongoing independent oversight. The Agency implements its environmental radiation protection standards, 40 CFR part 191, by applying the WIPP Compliance Criteria, 40 CFR part 194, to the disposal of TRU radioactive waste at the WIPP. For more information about 40 CFR part 191, refer to **Federal Register** documents published in 1985 (50 FR 38066, Sep. 19, 1985) and 1993 (58 FR 66398, Dec. 20, 1993). For more information about 40 CFR part 194, refer to **Federal Register** documents published in 1996 (61 FR 5224, Feb. 9, 1996) and 1995 (60 FR 5766, Jan. 30, 1995).

Using the process outlined in the WIPP Compliance Criteria, the EPA determined on May 18, 1998 (63 FR 27354), that the DOE had demonstrated that the WIPP complied with the Agency's radioactive waste disposal regulations at subparts B and C of 40 CFR part 191. The EPA's certification determination permitted the WIPP to begin accepting TRU waste for disposal, provided that other applicable conditions and environmental regulations were met.

Since the 1998 certification decision, the EPA has conducted ongoing independent technical review and inspections of all WIPP activities related to compliance with the Agency's disposal regulations. The initial certification decision identified the starting (baseline) conditions for the WIPP site and established the waste and facility characteristics necessary to ensure proper disposal in accordance with the regulations. At that time, the EPA and the DOE understood that future information and knowledge gained from the actual operations of the WIPP would result in changes to best practices and procedures for the facility.

In recognition of this, section 8(f) of the amended WIPP LWA requires the EPA to evaluate all changes in conditions or activities at the WIPP every five years to determine if the facility continues to comply with the Agency's disposal regulations. This determination is not subject to standard rulemaking procedures or judicial review, as stated in the aforementioned section of the WIPP LWA.

The first recertification process began with the DOE's submittal of the initial CRA, which was received by the Agency on March 26, 2004. The EPA deemed the CRA-2004 to be complete on September 29, 2005, and published its first WIPP recertification decision on March 29, 2006 (71 FR 18010).

The EPA received the DOE's second CRA on March 24, 2009. The Agency deemed the CRA-2009 to be complete on June 29, 2010, and published the second WIPP recertification decision on November 18, 2010 (75 FR 70584).

The EPA received the Department's third CRA on March 26, 2014. The Agency deemed the CRA-2014 to be complete on March 10, 2017, and published the third WIPP recertification decision on July 10, 2017 (82 FR 33106).

The EPA received the Department's fourth CRA on March 19, 2019. After the EPA has determined that the application is complete, the Agency will review the CRA-2019 to ensure that all of the changes made at the WIPP since the third recertification process have been accurately reflected and that the facility will continue to safely contain TRU radioactive waste. An approved CRA-2019 (along with any supplemental completeness information submitted by the DOE) would serve as the baseline for the next recertification that will occur starting in 2024.

With today's notice, the Agency solicits public comment on the DOE's documentation of whether the WIPP facility continues to comply with the disposal regulations. An electronic copy of the application is available for review and linked on the EPA's WIPP website (<https://www.epa.gov/radiation/certification-and-recertification-wipp#2019>). Additional background information related to the Agency's recertification activities is available in the public docket and on this website. The EPA will evaluate DOE's complete application and make a determination whether the WIPP continues to comply with the radiation protection standards for disposal. The EPA will consider public comment and other information relevant to the WIPP's compliance. The Agency is most interested in public comment on issues where changes to the disposal system have occurred that may potentially impact the WIPP's ability to remain in

compliance with requirements in the EPA's disposal regulations, as well as any areas where the public believes that changes have occurred that have not been identified by the DOE.

The EPA's first step in the recertification process is a "completeness" determination of DOE's application. The EPA will make this completeness determination as a first step in its more extensive technical review of the application. This determination is based on a number of the Agency's WIPP-specific guidances, most notably, the "Compliance Application Guidance" (CAG; EPA Pub. 402-R-95-014) and "Guidance to the U.S. Department of Energy on Preparation for Recertification of the Waste Isolation Pilot Plant with 40 CFR Parts 191 and 194" (Docket A-98-49, Item II-B3-14; December 12, 2000). Both guidance documents include guidelines regarding: (1) content of certification/recertification applications; (2) documentation and format requirements; (3) time frame and evaluation process; and (4) change reporting and modification. The Agency developed these guidance documents to assist the DOE with the preparation of any compliance application for the WIPP. It is the EPA's intent that these guidance documents give the DOE and the public a general understanding of the information that is expected to be included in a "complete" application of compliance. However, the DOE does not have to resubmit information already supplied to the EPA in prior recertification applications. The focus of each recertification is on any changes to the disposal system since the previous recertification decision. The EPA may request additional information as necessary from the DOE to ensure the completeness of the CRA.

Once the 2019 recertification application is deemed complete, the EPA will provide the DOE with written notification of its completeness determination and publish a Federal Register document announcing this determination. All correspondence between the EPA and the DOE

regarding the completeness of the CRA-2019, and any additional information sent by the DOE, such as the supplementary results and calculations planned for submittal in December 2019, will be placed in the public docket (via [www.regulations.gov](http://www.regulations.gov)) and linked on the Agency's WIPP website (<https://www.epa.gov/radiation/certification-and-recertification-wipp#2019>).

The EPA will make a final decision as to whether the WIPP continues to meet the disposal regulations after each of the aforementioned steps (i.e., technical analysis of the application, issuance of a notice on the CRA-2019's completeness in the Federal Register, and analyses of public comment) have been completed. As required by the LWA, the Agency will make a final recertification decision within six months of issuing its completeness determination.

#### **List of Subjects in 40 CFR Parts 191 and 194**

Environmental protection, Radiation protection, Transuranic radioactive waste, Waste isolation pilot plant, Waste treatment and disposal.

Dated: September 12, 2019.

Jonathan D. Edwards,

Director, Office of Radiation and Indoor Air.

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