



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

ENTERED



OCT 25 2016

OFFICE OF  
AIR AND RADIATION

Mr. Todd Shrader, Manager  
Carlsbad Field Office  
U.S. Department of Energy  
P.O. Box 3090  
Carlsbad, New Mexico 88221-3090

Dear Mr. Shrader:

The U.S. Environmental Protection Agency (EPA) will conduct its next inspections at the Waste Isolation Pilot Plant (WIPP) site from November 7-9, 2016. These inspections are performed under the authority of 40 C.F.R. 194.21 and 40 C.F.R. Part 191, subpart A. The inspections will address the state of the WIPP's relevant programs and procedures following facility recovery activities and prior to the resumption of active waste emplacement. The EPA will inspect both WIPP surface and underground facilities, and will follow the annual inspection checklists for waste emplacement, parameter monitoring, and 40 C.F.R. Part 191, subpart A compliance. Inspection plans for each of these areas are enclosed.

Staff interactions to plan and coordinate these inspections have been highly positive, and we appreciate your continued support. The Agency asks that you expedite the release of photographs and documentation requested by the inspection team, so that the EPA may complete this effort and issue final inspection reports in a timely manner. If you have any questions, please contact Jonathan Walsh at (202) 343-9238 or [walsh.jonathan@epa.gov](mailto:walsh.jonathan@epa.gov).

Sincerely,

Jaqueline Robles Werner  
Acting Director  
Radiation Protection Division

Enclosures (3)

cc: Sean Dunagan, DOE/CBFO  
Russ Patterson, DOE/CBFO  
George Basabilvaso, DOE/WIPP  
Betsy Forinash, DOE/HQ  
Alton Harris, DOE/HQ  
Paul Shoemaker, SNL  
Ricardo Maestas, NMED



**Susan Lucas-Kamat, NMED**  
**EPA WIPP Team**  
**EPA Docket**

## **EPA WIPP Emplacement Inspection Plan – 2016 Restart Inspection**

### **Purpose**

The purpose of this inspection is to verify that upon resumption of disposal activities, waste will be emplaced in the Waste Isolation Pilot Plant (WIPP) underground facility in the manner specified in the DOE's Compliance Certification Application (EPA Air Docket A-93-02, Item II-G-01) and other approvals.

The EPA is performing this inspection under the authority of 40 CFR 194.21, which authorizes the Agency to inspect the WIPP during its operational period to verify continued compliance with the EPA's WIPP Compliance Criteria and the certification decision of May 18, 1998.

### **Scope**

The scope of this inspection traditionally has included: a demonstration of the site's ability to receive, process and emplace contact-handled and remote-handled TRU wastes within the repository; the use of magnesium oxide (MgO) backfill in appropriate amounts to fulfill DOE commitments and requirements; maintenance of relevant waste packaging records, including the electronic WIPP Waste Data System (WDS) and the verification of appropriately implemented quality assurance practices. The availability of documentation related to these processes and activities will be a major source of review.

### **Focal Areas for this Year's Inspection**

This inspection is being conducted in anticipation of the resumption of waste handling operations. The EPA expects the DOE to explain plans for resuming waste emplacement, and any changes made to the emplacement process as a result of facility recovery. The EPA will inspect waste that is being stored aboveground in the Waste Handling Building, and waste tracking in the WDS. The EPA will additionally use the underground portion of the inspection to observe facility recovery activities and the current state of the repository.

### **Location**

The inspection will be held at the DOE's WIPP facility located twenty-six miles southeast of Carlsbad, New Mexico and at the Carlsbad Field Office (CBFO) in Carlsbad. Inspection activities will include examination of the underground facilities, records related to waste emplacement, and other information as needed.

### **Duration**

The EPA expects to complete its inspection in three days. Each full day will begin with an opening meeting at 8:00 a.m. and end with a closeout session no later than 5:00 p.m.

### **Expected Dates**

November 7-9, 2016.

### **Documents for Review**

Electronically provide the latest version of pertinent procedures and documentation related to contact-handled and remote-handled waste emplacement, MgO handling, management of the WDS, and recent training or exercises related to waste handling and emplacement.

## **EPA WIPP Monitoring Inspection Plan – 2016 Restart Inspection**

### **Purpose**

The purpose of this inspection is to verify that the Waste Isolation Pilot Plant (WIPP) is collecting monitoring data in accordance with commitments made in the documentation to support the EPA's certification decision, in particular CCA, Volume 1, Section 7.2, Table 7.7 and Appendix MON. This inspection is part of the EPA's continued oversight to ensure that the DOE appropriately and accurately monitors the performance of significant parameters of the disposal system; the inspection is conducted under the authority of 40 CFR 194, Sections 21, Inspections, and 42, Monitoring.

### **Scope**

Inspection activities will include an examination of monitoring and sampling equipment both on and off site, and in the underground. A review of sampling procedures and measurement techniques may be conducted. Quality assurance procedures and documentation for each of these activities will also be reviewed.

The EPA will meet with staff from the WIPP Geotechnical Engineering Program, the WIPP Groundwater Monitoring Program, the WIPP Underground and Surface Surveying Program, the Delaware Basin Drilling Surveillance Program, and WDS database administrators. The EPA will review procedures used and data and reports produced by each of these groups, as they relate to monitored parameters at the WIPP.

### **Focal Areas of This Year's Inspection**

As with the 2015 inspection, the EPA is interested in changes made the monitoring program as a result of the 2014 incidents and restricted access to the underground. This will include a discussion of which areas of the mine are no longer monitored, either due to radioactive contamination or the discontinuation of ground control. The EPA is particularly interested in whether recent data can refine our understanding of salt behavior and creep closure. The inspection team will meet with Sandia National Labs staff to discuss the analysis of monitoring data.

### **Location**

This inspection will be held at the WIPP facility location twenty-six miles south east of Carlsbad, New Mexico, and the surrounding vicinity as needed.

### **Duration**

The EPA expects to complete its inspection in three days. Each day will begin with an opening meeting at 8:00 a.m. and end with a closeout session no later than 5:00 p.m.

### **Expected Dates**

November 7-9, 2016.

### **Documents for Review**

Electronically provide the latest versions of procedures and reports related to parameter monitoring. Please identify any procedures that have changed as a result of facility recovery.

## **EPA WIPP 40 CFR 191, Subpart A Inspection Plan – 2016 Restart Inspection**

### **Purpose**

The EPA will verify that the DOE accurately monitors and calculates potential radiation doses to members of the public, due to both normal operations and accidental releases. This inspection is conducted under the authority of 40 CFR 191, subpart A. This inspection is part of the EPA's continued oversight to ensure that the WIPP can comply with the limits expressed in 40 CFR 191.03 during the operational phase of management and storage of radioactive waste.

### **Scope**

The scope of this inspection includes all activities performed by the DOE at the WIPP to measure and calculate any actual or potential radiation dose to members of the public during management and storage of radioactive waste, specifically during the past year of site operation. Inspection activities will include an examination of monitoring procedures and sampling equipment both on and off site, and in the underground.

The purpose of this inspection is to verify and confirm that the DOE has complied with the "Compliance reporting" expectations of the EPA's Guidance for the Implementation of the EPA's Standards for Management and Storage of Transuranic Waste (40 CFR Part 191, subpart A) at the Waste Isolation Pilot Plant (402-R-97-001), Section 4.2, Page 15.

### **Focal Areas for this Year's Inspection**

This inspection is being conducted in anticipation of the resumption of waste handling operations. The team will inspect the Interim Ventilation System (IVS), which has become operational since the EPA's last facility visit. The EPA is interested in seeing the DOE's progress towards reestablishing continuous air monitoring of the underground, the site's ability to perform consequence assessment calculations, the status of confirmatory environmental air samplers and any other action items identified in its October 2014 *U.S. Department of Energy Plan for Addressing the Areas for Improvement Identified by the U.S. Environmental Protection Agency*. As in past years, sampling equipment, lab procedures, and consequence assessment will be reviewed, with the goal of demonstrating that the DOE continues to capture representative samples of facility effluent.

### **Location**

This inspection will be held at the WIPP facility located twenty-six miles south east of Carlsbad, New Mexico, and the surrounding vicinity as needed.

### **Duration**

The EPA expects to complete its inspection in three days. Each day will begin with an opening meeting at 8:00 a.m. and end with a closeout session no later than 5:00 p.m.

### **Expected Dates**

November 7-9, 2015.

### **Information Requested**

Provide documentation and procedures related to subpart A compliance activities as in past years. Please identify those procedures that have changed as a result of facility recovery.