Waste Isolation Pilot Plant Environmental Reporting Implementation Plan

Revision 4

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ABBREVIATIONS AND ACRONYMS

AOC	area of concern
ASER	annual site environmental report
CASC	Corrective Action Schedule of Compliance
CBFO	Carlsbad Field Office
CCA	Compliance Certification Application
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFR	<i>Code of Federal Regulations</i>
CRA	Compliance Recertification Application
CTAC	CBFO Technical Assistance Contractor
DMP	detection monitoring program
DMW	detection monitoring well
DOE	U.S. Department of Energy
EH	DOE Office of Environment, Safety, and Health
EPA	U.S. Environmental Protection Agency
HWFP	Hazardous Waste Facility Permit
HWDU	hazardous waste disposal unit
LANL	Los Alamos National Laboratory
LEPC	Local Emergency Planning Committee
LWA	Land Withdrawal Act
MOC	Management and Operating Contractor
MSDS	material safety data sheet
NEPA	National Environmental Policy Act
NESHAP	National Emission Standards for Hazardous Air Pollutants
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
NMHWA	New Mexico Hazardous Waste Act
PCB	polychlorinated biphenyl
RCRA	Resource Conservation and Recovery Act
RFA	RCRA facility assessment
RQ	reportable quantity

SA	Scientific Advisor
SERC	State Emergency Response Commission
TSCA	Toxic Substance Control Act
TRU	transuranic
UST	underground storage tank
VOC	volatile organic compound
WAP	Waste Analysis Plan (WAP)
WIPP	Waste Isolation Pilot Plant

1.0 INTRODUCTION

Environmental protection programs that apply to the Waste Isolation Pilot Plant (WIPP) include many requirements related to reporting. In addition, the U.S. Department of Energy (DOE) has entered into agreements and is subject to DOE Orders that include reporting requirements. The DOE is obligated to report on various aspects of the project on a routine basis and non-routinely in the event that thresholds for unexpected or "off- normal" conditions are exceeded.

This reporting implementation plan is a management tool designed to assist the DOE Carlsbad Field Office (CBFO) in satisfying that relevant reporting requirements originating from environmental compliance programs are satisfied. Reporting requirements addressed in this plan are specified in the following:

- The WIPP Land Withdrawal Act (LWA)
- The Nuclear Waste Policy Act
- The Resource Conservation and Recovery Act (RCRA), as implemented by state of New Mexico regulations
- The Toxic Substances Control Act (TSCA)
- The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)
- The Clean Air Act
- The Clean Water Act
- The Safe Drinking Water Act
- Relevant DOE Orders
- The Consultation and Cooperation Agreement with the state of New Mexico

This plan has several objectives:

• To identify reporting requirements necessary to comply with applicable laws, regulations, DOE Orders, agreements, and commitments (provided in Appendix A).

- To identify the WIPP Project organization responsible for the preparation, review, and publication of reports to meet the reporting requirement or commitment (provided in Appendix A).
- To provide information on report due dates and recurrence cycles (provided in Appendix A).
- To describe a process for managing the reporting function (provided in Section 3.0).

The relevant reporting requirements and commitments are summarized in Section 2.0. The process for managing the reporting function is described in Section 3.0.

2.0 REPORTING REQUIREMENTS AND COMMITMENTS

The reporting requirements applicable to WIPP and originating in the regulatory programs and agreements listed in Section 1.0 are briefly summarized below.

- The WIPP LWA specifies requirements related to reporting, primarily focused on DOE demonstrations that the project continues to comply with environmental laws, regulations, and permit conditions.
- Consistent with provisions of the Nuclear Waste Policy Act and the WIPP LWA, the U.S. Environmental Protection Agency (EPA) has promulgated one set of standards and one set of certification criteria that apply to WIPP. These are Title 40 *Code of Federal Regulations* (CFR) Part 191, "Environmental Radiation Protection Standards for the Management and Disposal of Spent Nuclear Fuel, High-Level and Transuranic Radioactive Wastes," and 40 CFR Part 194, "Criteria for the Certification and Re-Certification of the Waste Isolation Pilot Plant's Compliance with the 40 CFR Part 191 Disposal Regulations." The Part 194 compliance certification criteria include criteria related to reporting. Also, the DOE has included commitments related to reporting in the Compliance Certification/Recertification Application (CCA) (DOE/CAO-1996-2184, *40 CFR 191 Compliance Certification Application for the Waste Isolation Pilot Plant*) and the subsequent Compliance Recertification Application (CRA), hereafter referred to as the compliance baseline.
- RCRA, as implemented by State of New Mexico regulations at 20.4.1 New Mexico Administrative Code (NMAC) through 20.5.7 NMAC, applies to WIPP because the waste disposed in the repository includes regulated hazardous constituents. Also, the management and operation of underground storage tanks (USTs) for petroleum products is addressed under the New Mexico Environment Department (NMED) UST program. Petroleum storage tanks located at WIPP are subject to these requirements. The New Mexico Hazardous Waste Act (NMHWA), including provisions of the Hazardous

Waste Facility Permit (HWFP) granted by the State, specifies many requirements related to reporting.

- TSCA provides for the regulation of the management of polychlorinated biphenyls (PCBs). Some of the waste emplaced in WIPP includes PCBs; the EPA has issued the DOE an approval for the disposal of PCB transuranic (TRU) waste and PCB/TRU mixed waste at WIPP. The PCB approval includes reporting requirements.
- Regulations implementing CERCLA include requirements applicable to facility operators who use or manage toxic substances. Several reporting requirements apply to WIPP under the CERCLA program; these are primarily related to reporting inventories of hazardous materials managed at the facility and spills or accidental environmental releases.
- Regulations implementing the Clean Air Act require the CBFO to report emissions of hazardous air pollutants from WIPP. Diesel-fueled generators are located at the WIPP site to provide backup electrical power supply. These generators have an air quality permit that has been granted by the state. This permit includes reporting requirements.
- Under the New Mexico program implementing provisions of the Clean Water Act, the DOE is obligated to report any proposal to construct or modify a sewage system. Also, the DOE has constructed and is operating a sewage treatment facility for WIPP that obligates the DOE to meet reporting requirements.
- Under the New Mexico Groundwater Protection Program, the DOE has obtained Discharge Permit (DP) 831. This permit contains reporting requirements.
- Under provisions of the state program implementing the Safe Drinking Water Act, the DOE must report information pertaining to the quality of tap water supplied to the WIPP site.
- Two DOE Orders, DOE O 231.1A, *Environment, Safety, and Health Reporting*; and DOE O 451.1B, *National Environmental Policy Act Compliance Program*, include reporting requirements that pertain to WIPP. These focus on reporting occupational radiation exposures, environmental conditions, and environmental impact assessment and mitigation activities.
- The Consultation and Cooperation Agreement with the state of New Mexico includes DOE commitments to report on several aspects of the project, including environmental data.

3.0 MANAGEMENT OF THE REPORTING FUNCTION

Routine or regularly scheduled reporting is required throughout the operating period of the project. In addition, when warranted by project changes, off-normal conditions, or emergency or unexpected events, it is necessary to prepare and submit unscheduled notifications and reports.

3.1 Reporting Database

Information related to WIPP environmental reporting is provided in Appendix A, WIPP Environmental Reporting Requirements. The appendix lists both scheduled and unscheduled reports. The following information is provided for each report:

- Name of the report
- Type of report, whether it is scheduled or unscheduled
- The frequency of report preparation and submittal
- The report due date, or period allowed for reporting
- The origin of the report (e.g., the regulatory "driver," agency agreement, DOE Order)
- A statement of the reporting requirement, often a specific regulation or permit condition
- The project organization responsible for preparing the report
- The project reviewing organization
- The recipient (or recipients) of the report

The data presented in Appendix A contribute to managing the environmental reporting function for the project. The Appendix A table is an MS Excel spreadsheet; it is available to project users on the Internet at www.wipp.energy.gov/library/WRES/implementationPlan.html.

3.2 Scheduled Reports

Regularly scheduled reports will be submitted by the originating Management and Operating Contractor (MOC) and the Scientific Advisor (SA) organizations to the pertinent CBFO staff. The appropriate CBFO staff will review the submitted reports, provide any review comments to the originating group, and forward final reports to the CBFO Manager for submittal to the appropriate external entity.

3.3 Unscheduled Reports

Unscheduled reporting will be nonroutine and will involve decision making regarding the significance of planned or unplanned changes or new information. In addition, when changes occur or new information is developed, it will be necessary to determine the urgency for reporting the change or new information. Potential unscheduled reports are listed in Appendix A.

3.3.1 Internal Reporting and Assessment

Information flow within the project will be managed to ensure that proposals for changes and important new information is communicated to the appropriate individuals and groups. The CBFO will designate a central point of contact (currently the Assistant Manager for Operations) for internal communication of planned and unplanned changes or new information, the assessment of the significance of the change or new information, and the communication of relevant information to external parties. The CBFO point of contact is responsible for the following activities:

- Information Exchange Facilitate the exchange of information regarding planned or unplanned changes and new information between the MOC, the SA, and other project participants including the Los Alamos National Laboratory (LANL) and the CBFO Technical Assistance Contractor (CTAC).
- **Review and Assessment of Planned and Unplanned Changes** Decide whether to approve or disapprove a change and determine if outside approval is necessary (such as the EPA). If a proposed change is approved, the EPA will determine whether the change is significant or nonsignificant. Likewise, if an unplanned change occurs, the CBFO point of contact will assess the significance of the change.
- **Review and Assessment of New Information** Review new data and associated interpretations to determine whether results are significant and warrant reporting.
- **Internal Reporting** Report planned and unplanned changes and new information to the CBFO Manager and recommend appropriate external reporting.

3.3.2 Management and Operating Contractor

It is the responsibility of the MOC to develop and implement programs and plans to ensure that the CBFO is fully informed regarding any occurrences or new information warranting reporting.

3.3.3 Scientific Advisor

The SA is also responsible for developing and implementing programs and plans to ensure that the CBFO is fully informed of any planned or unplanned change or new information developed through the activities of the SA organization and warranting reporting

4.0 RECORDS

Reports and supporting documentation generated through the reporting processes discussed in this plan will be handled, stored, and dispositioned in accordance with applicable permit conditions and the responsible organization's records inventory and disposition schedule and applicable procedures.

5.0 REFERENCES

- DOE O 231.1A, *Environment, Safety, and Health Reporting*. U.S. Department of Energy, Washington, D.C.
- DOE O 451.1B, National Environmental Policy Act Compliance Program. U.S. Department of Energy, Washington, D.C.
- DOE M 231.1-1A, *Environment, Safety, and Health Reporting Manual.* U.S. Department of Energy, Washington, D.C.
- DOE/CAO1996-2184. 1996. 40 CFR 191 Compliance Certification Application for the Waste Isolation Pilot Plant. U.S. Department of Energy, Carlsbad Field Office, Carlsbad, NM.
- 40 CFR Part 191, "Environmental Radiation Protection Standards for the Management and Disposal of Spent Nuclear Fuel, High-Level and Transuranic Radioactive Wastes"; Final Rule. *Code of Federal Regulations*. Office of the Federal Register, National Archives and Records Administration, Washington, D.C.
- 40 CFR Part 194, "Criteria for the Certification and Re-Certification of the Waste Isolation Pilot Plant's Compliance with the 40 CFR Part 191 Disposal Regulations"; Final Rule. *Code of Federal Regulations*. Office of the Federal Register, National Archives and Records Administration, Washington, D.C.
- 40 CFR Part 761, "Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions." *Code of Federal Regulations*. Office of the Federal Register, National Archives and Records Administration, Washington, D.C.

40 CFR §761.180, "Records and Monitoring." *Code of Federal Regulations*. Office of the Federal Register, National Archives and Records Administration, Washington, D.C.

- DOE/WIPP 2004-3231 Title 40 CFR Part 191 Compliance Recertification Application for the Waste Isolation Pilot Plant (March). 10 Vols. Carlsbad, NM. Carlsbad Field Office. U.S. Department of Energy, Carlsbad Field Office, Carlsbad, NM.
- Public Law 102-579. Waste Isolation Pilot Plant Land Withdrawal Act. October 1992, as amended October 1996 by Public Law 104-201.
- DOE (U.S. Department of Energy) and State of New Mexico. 1981. Consultation and Cooperation Agreement.

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