

**Waste Isolation Pilot Plant**

**Land Management Plan**

**DOE/WIPP-93-004**

**United States Department of Energy  
Carlsbad Field Office**

**Reprint G, November 2019**



**This document supersedes DOE/WIPP-93-004, Reprint F,  
November 2017**

# **Waste Isolation Pilot Plant Land Management Plan DOE/WIPP-93-004**

United States Department of Energy

Carlsbad Field Office

Reprint G, November 2019

Approved by: /signature on file/ Date: 11/20/2019  
Michael R. Brown  
Director, Office of Environmental Protection  
Carlsbad Field Office

**CHANGE HISTORY SUMMARY**

<b>REVISION NUMBER</b>	<b>DATE ISSUED</b>	<b>DESCRIPTION OF CHANGES</b>
Reprint E	09/21/15	<ul style="list-style-type: none"> <li>The changes in DOE/WIPP-93-004, Reprint E, are mostly administrative in nature. These Plan maintenance changes include updating information in the foreword, preface, and all chapters and appendices as needed for clarity. This reprint specifically reflects minor changes in the WIPP operations after the underground fire and radiological emissions events in February 2014. The WLWA property outside the Exclusive Use Area was not materially affected by the event; however, some improved practice changes may affect the Land Withdrawal Area and related activities outside the facility. These changes include updating the acronym and abbreviations list; and updating implementing procedures. A note indicating pending revisions to Memoranda of Understanding with local agencies regarding mutual emergency response, and a revision to Chapter 11 to reflect an upgraded Emergency Response Organization status were added. An update of threatened and endangered species listings, and updated technical descriptions to reflect current practices and nomenclature were also included.</li> </ul>
Reprint F	11/16/17	<ul style="list-style-type: none"> <li>The changes in DOE/WIPP-93-004, Reprint F, are mostly administrative in nature. These Plan maintenance changes include updating information in the several chapters and appendices as needed to reflect changed facility conditions. This reprint specifically includes minor changes in the WIPP operations made in preparation for re-start of waste emplacement.</li> <li>The WLWA property outside the Exclusive Use Area was not materially affected by the pre-restart actions; however, some improved practice changes are identified that affect the Land Withdrawal Area access controls and related activities outside the facility.</li> <li>Revisions to a Memorandum of Understanding with local agencies regarding mutual emergency response, Appendix E, and a revision to Chapter 11 to reflect an upgraded Emergency Response Organization status were added.</li> <li>A verification of the recent update of threatened and endangered species listings, and of updated technical descriptions to reflect current practices and nomenclature were also performed during preparation of this update. Other changes include updating the acronym and abbreviations list; and updating implementing procedures.</li> </ul>

<b>REVISION NUMBER</b>	<b>DATE ISSUED</b>	<b>DESCRIPTION OF CHANGES</b>
Reprint G	11/20/19	<ul style="list-style-type: none"> <li>• Clarification on grazing allotments provided in Section 5.</li> <li>• Clarification on access and restrictions provided in Section 6.</li> <li>• Noxious Weed Management plan added to Section 8.</li> <li>• Information on WIPP bypass road added to Section 8.</li> <li>• Section 10, "Section for Exclusive Use Area" updated for other areas that are restricted to the DOE, its contractors, and subcontractors.</li> <li>• Figures showing groundwater well pads and certain WIPP right-of-ways removed for security reasons.</li> <li>• Most contact info deleted from Appendix H for privacy reasons.</li> <li>• General editorial changes to improve clarity.</li> </ul>

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## **FOREWORD**

A prospective land user who has questions regarding elements of land management contained in this plan (see Table of Contents) or wishes to request access to Waste Isolation Pilot Plant (WIPP) lands should contact the United States Department of Energy (DOE) at 575-234-7335 or write the Carlsbad Field Office (CBFO), P.O. Box 3090, Carlsbad, NM 88221. WIPP contact information can also be found at <http://www.wipp.energy.gov/>.

In the event of an emergency on the WIPP Land Withdrawal Area (WLWA), call the WIPP Central Monitoring Room (CMR) at 575-234-8111, or at 575-234-8125, or 575-234-8457.

Prior to submitting requests for land use, the requestor should examine the content of this document to identify those chapters that apply to the components of the respective activity, and provide for compliance with WIPP land management requirements provided in this plan. For example, a potential user should read Chapter 2, "Environmental Compliance," to become familiar with the required permitting procedures and corresponding documentation.

It is the goal of the DOE to develop a "user-friendly" document that achieves management goals and objectives required to maintain site integrity, environmental quality and to sustain multiple-land use objectives where appropriate.

Through continual information sharing and timely updates of the Land Management Plan (LMP), DOE seeks to encourage improved land management practices based upon sound professional standards. Guidance prescribed by the LMP is useful for proposed activities, external as well as WIPP-related, which could impact lands used in the operation of the WIPP.

The WIPP LMP is updated as needed and the current revision is available at <http://www.wipp.energy.gov/>

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## ACRONYMS AND ABBREVIATIONS

ACA	Agency for Conservation Archaeology
APD	Application for Permit to Drill
API	American Petroleum Institute
ASER	Annual Site Environmental Report
AUM	Animal Unit Month
BECR	Biennial Environmental Compliance Report
BLM	Bureau of Land Management (DOI)
BNSF	Burlington Northern Santa Fe
CBFO	Carlsbad Field Office (DOE)
CFR	Code of Federal Regulations
CMR	Central Monitoring Room
CMRO	Central Monitoring Room Operator
CPD	Carlsbad Potash District
CWMA	Coordinated Weed Management Area (Eddy County)
DCA	New Mexico Department of Cultural Affairs
DFA	New Mexico Department of Finance & Administration
DGF	see NMDGF
DOE	United States Department of Energy
DOI	United States Department of the Interior
DP	Discharge Permit
DSA	Documented Safety Analysis
EA	Environmental Assessment
EIS	Environmental Impact Statement
EMNRD	(New Mexico) Energy, Minerals, and Natural Resources Department
EMS	Environmental Management System
EOC	Emergency Operations Center
ERO	Emergency Response Organization/Emergency Response Officer
EPA	United States Environmental Protection Agency
ER	Environmental Review
EUA	Exclusive Use Area
FEIS	Final Environmental Impact Statement for the Waste Isolation Pilot Plant
FIMS	Facilities Information Management System
FLPMA	Federal Land Policy and Management Act (of 1976)
FSM	Facility Shift Manager
HAZMAT	Hazardous Materials
IC	Incident Commander
ICS	Incident Command System
ISMS	Integrated Safety Management System

JHA	Job Hazard Analysis
JPA	Joint Powers Agreement
KPLA	Known Potash Leasing Area
LMP	Land Management Plan
LUC	Land Use Coordinator
LUR	Land Use Request
LWA	Land Withdrawal Act (P.L.102-579)
MOU	Memorandum of Understanding
MSHA	Mine Safety and Health Administration of the U.S. Department of Labor
NAGPRA	North American Graves Protection and Repatriation Act
NEPA	National Environmental Policy Act
NIMS	National Incident Management System
NM	New Mexico
NMDGF	New Mexico Department of Game and Fish
NMED	New Mexico Environment Department
NMOCD	see OCD
NMSA	New Mexico Statutes Annotated
NMSLO	New Mexico State Land Office
NWP	Nuclear Waste Partnership LLC
OCA	see DCA
OCD	New Mexico Oil Conservation Division
OHV	Off-highway Motor Vehicle
OSHA	Occupational Safety and Health Administration
P.L.	Public Law
PPA	Property Protection Area
PPE	Personal Protective Equipment
RCRA	Resource Conservation and Recovery Act
RMP	Resource Management Plan
SGCN	Species of Greatest Conservation Need
SDS	Safety Data Sheet
SEIS-I	Final Supplement Environmental Impact Statement for the Waste Isolation Pilot Plant
SEIS-II	Waste Isolation Pilot Plant Disposal Phase Final Supplemental Environmental Impact Statement
SG	Short-grass Prairie Grassland
SHPO	State Historic Preservation Officer
SLO	see NMSLO
SMA	Special Management Area

SNL	Sandia National Laboratories
SOD	Shinnery Oak Dune Habitat
SOW	Statement of Work
SPDV	Site and Preliminary Design Validation
STR	Subcontract Technical Representative
T&E	Threatened and Endangered (species)
TRU	Transuranic (waste)
U.S.	United States
U.S.C.	United States Code
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WLWA	WIPP Land Withdrawal Area
WIPP	Waste Isolation Pilot Plant
WP	WIPP procedure

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## PREFACE

In accordance with Section 4 of the WIPP Land Withdrawal Act (LWA) (Public Law [P.L.] 102-579), as amended by P.L. 104-201, the United States DOE has prepared this LMP. This plan was developed in cooperation with the United States Department of the Interior's (DOI) Bureau of Land Management (BLM) and the State of New Mexico. Changes or amendments to this plan shall be done in consultation with the BLM, the State of New Mexico, and affected stakeholders, as appropriate.

This LMP, as required by the LWA, has been prepared to identify resource values, promote the concept of multiple-use management, and identify long-term goals for the management of WIPP lands until the culmination of the decommissioning phase. This plan also provides the opportunity for participation in the land use planning process by the public, as well as local, state, and federal agencies.

This plan integrates applicable land management provisions of the LWA; BLM planning regulations (Title 43 *Code of Federal Regulations* [CFR] Part 1600) issued under the authority of the Federal Land Policy and Management Act (FLPMA) of 1976; the National Environmental Policy Act (NEPA) of 1969, as amended; DOE NEPA regulations (10 CFR Part 1021); and existing Memoranda of Understanding (MOUs) among the DOE and local, state and/or federal agencies. The LMP is designed to provide a comprehensive framework for the management and coordination of WIPP land use. The LMP, and any subsequent amendments, will continue to apply to the use of WIPP lands through the decommissioning phase.

The guidelines in the LMP provide for the management and oversight of WIPP lands under the jurisdiction of the DOE and lands outside the WIPP boundary that are used in the operation of the WIPP facility (e.g., groundwater surveillance well pads outside the withdrawal area). Furthermore, this plan provides for multi-agency involvement in the administration of DOE land management actions. Documents referenced in the LMP are available to any person and/or organization desiring to conduct activities on WIPP lands under the purview of the DOE and those involved in development and/or amending existing land management actions. Documents can be obtained from the U.S. DOE, Carlsbad Field Office, P.O. Box 3090, Carlsbad, NM 88221.

This LMP envisions and encourages direct communication among stakeholders, including federal and state agencies involved in managing the resources within, or activities impacting the areas adjacent to, the WLWA. It sets forth cooperative arrangements and protocols for addressing WIPP-related land management actions. The DOE recognizes the guidelines for contemporary land management practices that apply to the WLWA and all applicable regulatory requirements contained therein. Commitments contained in current permits, agreements, or concurrent MOUs with other agencies (e.g., State of New Mexico, DOI), shall be adhered to when addressing/evaluating land use management activities and future amendments that affect the management of WIPP lands.

This LMP will be reviewed biennially to assess the adequacy and effectiveness of the document, or as necessary to address emerging issues affecting WIPP lands. Affected agencies, groups, and/or individuals may be involved in the review process.

The contents of this LMP focus on management protocols for the following topics: administration of the plan; environmental compliance; wildlife; cultural resources; grazing; recreation; energy and mineral resources; lands/realty; reclamation/environmental restoration; security; industrial safety; emergency management; and maintenance and work control. Each topic and its complementary planning/management criteria are described in the respective chapters.

## **CHAPTER 1 ADMINISTRATION OF THE WIPP LAND MANAGEMENT PLAN**

### **1.0 INTRODUCTION**

On October 30, 1992, the *Waste Isolation Pilot Plant Land Withdrawal Act* (P.L. 102-579) became law, later amended by P.L. 104-201 in 1996. This Act transferred the responsibility for the management of the WLWA (see Figure 10.1) from the Secretary of the Interior to the Secretary of Energy. In accordance with sections 3(a)(1) and (3) of the LWA, these lands: ". . . are withdrawn from all forms of entry, appropriation, and disposal under the public land laws . . ." and are reserved for the use of the Secretary of Energy ". . . for the construction, experimentation, operation, repair and maintenance, disposal, shutdown, monitoring, decommissioning, and other authorized activities associated with the purposes of WIPP as set forth in Section 213 of the Department of Energy National Security and Military Applications of Nuclear Energy Authorization Act of 1980 (P.L. 96-164; 93 Stat. 1259, 1265) and this Act."

As a complement to this LMP, a MOU has been executed between the DOE and the BLM, as required by section 4(d) of the LWA (Appendix C). The State of New Mexico was consulted in the development of the MOU and the associated Statement of Work (SOW) (Appendix D). In addition, a Joint Powers Agreement (JPA) (Appendix G) for the management of the withdrawal area was promulgated.

#### **1.0.1 Affected Environment**

The WIPP facility, a project of the DOE, was authorized in 1979 by P.L. 96-164 to provide a research and development facility to demonstrate the safe disposal of transuranic (TRU) radioactive wastes resulting from the defense activities and programs of the United States.

The WIPP site is located in Eddy County in Southeastern New Mexico. The site is 26 miles east of Carlsbad, New Mexico, in a region known as the Los Medaños, which represents the initial intergradation between the Llano Estacado and the Chihuahuan Desert. This region displays an exceptional diversity of plant and animal inhabitants.

Geographically, the region is regarded as a relatively flat, sparsely inhabited plateau with little surface water. Demographically, there are less than 30 residents at various locations within 10 miles of the central point of the WIPP site. The majority of the local population within 50 miles of WIPP is concentrated in and around the communities of Carlsbad, Lovington, Hobbs, Eunice, Jal, Loving, and Artesia, New Mexico. The nearest community is the village of Loving, New Mexico, 18 miles west-southwest of WIPP.

The population of Loving increased from an estimated 1,326 in 2000 to 1,413 in 2010. The nearest major population center is the city of Carlsbad, New Mexico, 26 miles west

of the WIPP site. The population of Carlsbad has increased from an estimated 25,625 in 2000 to an estimated 26,138 in 2010. The permanent population within 10 miles of the WIPP site is associated with ranching. The transient population within 10 miles of WIPP is associated with ranching, oil and gas exploration/production, and potash mining. The region is popular for recreation, providing opportunities for hunting, camping, hiking, and bird watching.

### **1.0.2 Implementation of the WIPP Land Management Plan**

WIPP land management authorizations and actions, including budget proposals, will not create conflict with this LMP. Valid existing rights, operations, and activities under existing permits, contracts, cooperative agreements, MOUs, or other instruments for land use are evaluated to assure that the Land Use Request (LUR) process complies with the intent of existing permits, regulatory requirements, and/or agreements.

Actions in the LMP shall be implemented over a period extending through the decommissioning phase of the WIPP facility. In some cases, site-specific planning and environmental analyses more detailed than those required by this LMP may be required before an action can be taken.

This LMP will be reviewed biennially and updated as needed to reflect new management direction, program policy, and monitoring results, or to respond to changes in the law, when appropriate. Amendments or revisions to this plan will be developed in consultation with the BLM and the State of New Mexico and promptly submitted to the Congress and the State of New Mexico as required by section 4(e) of the LWA. The DOE may consider additional missions for the WLWA as determined by the Secretary of Energy within the scope of authorizing legislation. The LMP will be revised, as appropriate, to accommodate any additional missions.

As implementation of the LMP proceeds, proposed land use projects not addressed in this plan will be evaluated to determine conformance with LMP objectives. The WIPP Land Use Coordinator (LUC), in conjunction with the CBFO NEPA Compliance Officer (Appendix A), shall review proposals through the LUR process for this purpose, as defined in Chapter 2 of this LMP. The LUC and the CBFO NEPA Compliance Officer also will determine if management actions contained in the LUR are provided for specifically in the LMP or, if not, that they are clearly consistent with the terms, conditions, and decisions of the approved Land Management Plan.

The goal of the DOE is to manage the surface of the WLWA using traditional multiple land use concepts. Accordingly, land-use restrictions will be minimized to the extent practicable.

The subsurface of the WLWA is restricted to exclusive use by DOE with the exception of two 320-acre tracts that are leased for oil and gas development below 6,000 feet. These subject tracts are identified as Federal Oil and Gas Leases No. NMNM02953 and NMNM02953C of Section 31, Township 22 South, Range 31 East. The United States

Environmental Protection Agency (EPA) has determined that potential activities at the existing oil and gas leases, NMNM02953 and NMNM02953C, referred to in Section 4(b)(5)(B) of the LWA, have an insignificant effect on releases of radioactive material from the WIPP disposal system and will not impact DOE's ability to comply with EPA disposal standards. As a result, acquisition of existing oil and gas leases below 6,000 feet is not required to ensure the integrity of the repository.

In accordance with section 4(c) of the LWA, "if the Secretary (i.e., Secretary of Energy) determines, in consultation with the Secretary of the Interior, that the health and safety of the public or the common defense and security require the closure to the public use of any road, trail, or other portion of the Withdrawal, the Secretary may take whatever action the Secretary determines to be necessary to effect and maintain the closure and shall provide notice to the public of such closure."

## **1.1 OBJECTIVE**

The objective of this LMP is to provide land management guidelines and to establish criteria for review and implementation of land management decisions. These allow the DOE to evaluate the effectiveness of multiple-use decisions, and provide guidance for the evaluation of productivity, condition, quality, or other issues related to land-management actions. These guidelines also assure protection of the public and environment with regard to the operation of the WIPP facility. Implementation and monitoring plans for each respective land resource are discussed in subsequent chapters of this document.

## **1.2 PLANNED ACTIONS**

Planned actions are those associated with the review and update of this LMP. These are presented to assure timely review and update of the LMP and to establish consistency with current regional land management practices, DOE policy, and congressional directives.

### **1.2.1 Maintaining the Land Management Plan**

The LMP shall be effectively maintained through timely modifications which document new data, minor changes (e.g., amendments to existing regulations), or corrections, and which have undergone appropriate DOE document review procedures.

### **1.2.2 Updating, Amending, or Revising the Land Management Plan**

The LMP may be updated, amended, or revised when considering a proposal or an action that is not addressed by the LMP. Categories of plan changes are discussed below.

#### **1.2.2.1 Updates**

This category is used to define activities designated as "low impact" by the LUC. The purpose of this category is to designate proposal(s) that the LUC, in consultation with cognizant regulatory personnel, has identified as not being addressed specifically in the LMP and as not having significant environmental impact. An LUR shall be submitted to the LUC for status determination. The CBFO NEPA Compliance Officer will assess the project for a NEPA determination (e.g., DOE/NEPA categorical exclusion). Updates do not require alteration to the LMP.

#### **1.2.2.2 Amendments**

This category is used when preliminary analysis by the LUC indicates that proposal(s) not specifically addressed in the LMP have, or are likely to have, significant environmental impacts that would necessitate the development of new NEPA documentation. In this case the LUC and/or cognizant regulatory personnel will evaluate regulatory impacts and possible permit requirements and request a NEPA determination from the CBFO. Actions (e.g., document modifications) that are determined by the LUC to be amendments will require stakeholder notification and subsequent submittal to Congress and the State of New Mexico.

#### **1.2.2.3 Revisions**

This category is used when a proposal(s) not specifically addressed in the LMP will have a significant impact. A revision of the LMP may involve the preparation of a new LMP when updates or amendments can no longer keep the existing plan current with existing NEPA documentation, changing management needs, resource conditions, policies, or regulatory laws. Land Management Plan revisions will be considered only after a comprehensive review by the LUC and cognizant regulatory personnel. Revisions will be submitted to Congress and the State of New Mexico, and may include formal public involvement.

## **CHAPTER 2 ENVIRONMENTAL COMPLIANCE**

### **2.0 INTRODUCTION**

Parties who desire to conduct activities that have the potential to impact the WLWA, outside the perimeter of the Property Protection Area (PPA), (see Figure 10.1), must prepare an LUR (Appendix B). This includes activities that originate outside the WLWA but will directly affect properties within the WLWA, or on lands used for the operation of the WIPP facility outside the WLWA boundary, managed under land use permits issued to the DOE. An LUR consists of a narrative description or an abstract of the project, a completed Environmental Compliance Review Form and a map depicting the location of the proposed activity. The LUR and Environmental Compliance Review Form are used to determine if applicable regulatory requirements have been met prior to approval of a proposed project. The Environmental Compliance Review is an evaluation tool that may be used to determine whether new environmental documentation must be prepared. An LUR is submitted by any WIPP project organization or outside entity wishing to complete any construction rights-of-way, pipeline easements, or other land use projects within the WLWA and on lands used in the operation of the WIPP facility, under the purview of the DOE.

### **2.1 OBJECTIVE**

The objective of this chapter is to describe the method that the CBFO, working in cooperation with the WIPP LUC, will use to review and implement regulatory guidelines that govern land use activities related to the WIPP facility. The CBFO is required by various DOE Orders, the JPA between the DOE and the State of New Mexico, MOUs, and regulations to evaluate activities that could impact human health or the environment prior to implementation.

### **2.2 PLANNED ACTIONS**

The environmental review (ER) and implementation of activity-specific regulatory requirements is initiated by an Environmental Compliance Review of the activity using the screening tools described above. The Environmental Compliance Review Form is used to initiate regulatory reviews. Through the submittal of an LUR (to include an Environmental Compliance Review Form), the WIPP NEPA/ER Coordinator evaluates potential environmental impacts, mitigating actions for the impacts, and potential permit requirements and prepares a NEPA checklist for the proposal. Environmental Compliance Reviews are evaluated to determine if air, water, hazardous waste, or land use permits are required for the activity as well as potential impacts to wildlife, vegetation, and cultural resources.

Discussions of environmental regulations that pertain to the WIPP Project are provided in the WIPP Biennial Environmental Compliance Report (BECR), and the WIPP Annual Site Environmental Report (ASER). Both documents, available from the LUC upon

request, provide regulatory compliance applicability and status for federal, state, and local environmental regulations. The BECR and the ASER serve as reference documents for use in better understanding regulatory requirements at the WIPP site. Both documents will assist the requestor in identifying regulations that could affect the development of project schedules prior to submittal of the LUR package (to include the Environmental Compliance Review Form).

## **2.2.1 National Environmental Policy Act and Land Use within the Waste Isolation Pilot Plant Land Withdrawal Area**

### **2.2.1.1 Waste Isolation Pilot Plant Project Requests**

Land use requests associated with WIPP-specific activities are addressed as follows, in no specific order:

1. The requestor will submit to the LUC an LUR (Appendix B) identifying the proposed project.
2. The LUC will provide the requestor with a guide for the proper completion of an LUR (Appendix B). The submittal of a properly completed LUR (including a completed Environmental Compliance Review Form) is mandatory for obtaining authorization for use of lands contained within the WLWA (excluding the inner PPA), or lands outside the WLWA boundary used for the operation of the WIPP facility, managed under land use permits issued to the DOE (e.g., groundwater surveillance pads, access corridor rights-of-way). The WIPP NEPA/ER Coordinator will provide assistance in completing the Environmental Compliance Review Form for the LUR package.

### **2.2.1.2 Land Use Request Review Process**

Reviews are addressed as follows, in no specific order:

1. The WIPP NEPA/ER Coordinator will provide the complete LUR containing all items described in this chapter to the LUC.
2. The LUC will assign a unique number to the LUR and enter the LUR into a tracking system.
3. The LUC will review the LUR and transmit it, along with any supporting documentation, to the WIPP NEPA/ER Coordinator. The WIPP NEPA/ER Coordinator or designee will enter the LUR number into the computerized NEPA tracking log.

4. In consultation with appropriate cognizant regulatory personnel, the WIPP NEPA/ER Coordinator will complete a technical review, as required, to address any concerns not completely addressed in the LUR. Items that need to be resolved prior to project initiation will be added to the review in order to comply with regulatory considerations such as waste minimization, water and air permit requirements, waste management, reclamation requirements, and rights-of-way, in addition to other concerns pertaining to the protection of human health and the environment.
5. The WIPP LUC will provide a copy of the LUR and supporting documentation to the CBFO.
6. If the proposed action is addressed by existing environmental documentation and other pertinent regulatory approvals have been obtained, the CBFO NEPA Compliance Officer will indicate approval of the proposal. Once the CBFO's approval has been obtained, the WIPP NEPA/ER Coordinator will indicate approval and return the package, including the LUR, to the LUC. Subsequently, the LUC may have the proposal scope reviewed by a Hazardous Waste Facility Permit (Permit) screener and have a WIPP Permit Screen Sheet completed. A review of the impact of the project on the Compliance Recertification Application may also be required. The New Mexico Discharge Permit (DP-831) and the New Mexico Air Quality Permit may also require review. The LUC will advise the requestor of regulatory concerns.
7. If the Environmental Compliance Review is outside the scope of actions previously assessed within WIPP Project NEPA documentation, the CBFO NEPA Compliance Officer will determine whether the proposal is categorically excluded or whether further environmental analysis must be performed.
8. The WIPP NEPA/ER Coordinator will inform the requestor of the action of additional requirements for NEPA review and an estimated time frame for completion.
9. After the WIPP NEPA/ER Coordinator has released the LUR (including the completed Environmental Compliance Review Form) back to the LUC with the appropriate level of environmental approval, the LUC will log out the LUR and sign the Environmental Compliance Review Form, signifying approval of the project.
10. The LUC's final approval of the proposal may contain contingencies for the implementation of the action, such as avoidance measures for cultural resource sites, etc.

### **2.2.1.3 Project Requests Through the Bureau of Land Management or State Land Office**

Proposed actions that involve land uses on BLM, State of New Mexico, and DOE lands which may have a significant impact on human health or the environment will require a "lead agency" determination. Lead agency status regarding projects involving multiple agencies will be determined by existing agreements (e.g., MOU, JPA) or 40 CFR §1501.5. To this extent the following criteria are used to determine "lead agency" designation:

- Magnitude of agency's involvement
- Project approval/disapproval authority
- Expertise concerning the action's environmental effects
- Duration of agency's involvement
- Sequence of agency's involvement

In the event the DOE receives lead agency designation, guidelines contained in section 2.2.1 of this document apply.

If either the BLM or the New Mexico State Land Office (NMSLO) is determined to be the lead agency, the LUR review process will be as follows, in no specific order:

1. The BLM or the NMSLO will direct the requestor to notify the WIPP LUC prior to initiating subject land use activities.
2. The BLM or NMSLO will oversee the submittal of the requisite environmental assessment (EA), as appropriate, and advise the requestor to notify the Nuclear Waste Partnership LLC (NWP) LUC for guidance in the development and submittal of an LUR.
3. An LUR (Appendix B) will be submitted in writing to the LUC for use of the land within the WLWA (excluding the inner PPA), or on lands outside the WLWA under the purview of the DOE.
4. The requestor will contact the BLM or the NMSLO regarding their proposed action.
5. The requestor will provide information to the lead agency to allow the appropriate NEPA documentation to be prepared for the proposed project.
6. Upon completion of the draft NEPA documents, the BLM or NMSLO will transmit the document, along with any supporting documentation, to the LUC and CBFO NEPA Compliance Officer for review and comment.

7. The LUC will assign a unique number to the LUR and enter the request for land use into the tracking system. The LUR process is tracked to approval and completion of the action requested.
8. The LUC will review the NEPA documentation and consult the cognizant WIPP NEPA/ER Coordinator for environmental regulatory considerations. Subsequently, the LUC may have the proposal scope reviewed by a Permit screener and have a WIPP Permit Screen Sheet completed. A review of the impact of the project on the Compliance Recertification Application may also be required. DP-831 and the New Mexico Air Quality Permit may also require review. The LUC will advise the requestor of regulatory concerns.
9. The WIPP NEPA/ER Coordinator will convey any regulatory consideration regarding the proposed action to the LUC by way of a technical review.
10. The LUC will append the technical review with any other appropriate land use considerations.
11. If the regulatory considerations detailed in the technical review are significant, the BLM or NMSLO will arrange a meeting with the affected requestor. The requestor(s) will be advised of the regulatory concerns of the proposed action.
12. When all regulatory considerations are addressed to the satisfaction of all affected participants, the project may be approved by the CBFO.
13. The CBFO NEPA Compliance Officer will transmit a letter to the BLM or NMSLO, approving the proposed project, and will send a courtesy copy to the WIPP LUC.

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## CHAPTER 3 WILDLIFE

### 3.0 INTRODUCTION

Consideration shall be given during planning stages of projects involving the disturbance or encroachment of wildlife habitat within the WLWA. Monitoring and research of specific wildlife populations will occur in accordance with applicable laws, agreements, and regulations. When wildlife management activities occur, each activity is mandated and/or supported by state and federal guidelines or by way of commitments created through interagency agreements and/or MOUs (Appendix C).

#### 3.0.1 Affected Biological and Wildlife Environment

The wildlife habitat around the WLWA is categorized in accordance with the BLM National Vegetation Classification System. WIPP lands comprise a small part of those lands grouped into major habitat types as described in Appendix L-2 of the East Roswell Grazing Environmental Impact Statement (EIS). Moreover, habitat types and species inventories were conducted for the DOE during initial site characterization studies and the Site and Preliminary Design Validation studies. Details can be found in the *Final Environmental Impact Statement for the Waste Isolation Pilot Plant* (FEIS) (DOE/EIS-0026). Wildlife in the vicinity of WIPP includes a wide variety of arthropods, amphibians, reptiles, birds, and mammals.

The Chihuahuan Desert has long been regarded for its extraordinary diversity of plant and animal communities. The location of the WLWA, situated in the Los Medaños region of the Chihuahuan Desert, exemplifies this unusual array of biotic factors. The Los Medaños is located in an area of intergradation between the northern region of the Chihuahuan Desert and the Llano Estacado or Staked Plains. The region includes aeolian and alluvial sedimentation on upland plains that form hummocks, dunes, sand ridges, and swales with the presence of Havard oak (or shinnery oak) as a prominent foliar factor. Although the abundance of shinnery oak has aided in the stabilization of the dunes, a number of them remain unstable and exhibit distinct signs of shifting. An additional predominant shrub is honey mesquite which has invaded what historically was a short-grass, shinnery oak-dominated landscape.

The shinnery oak community has shifted from a dominant bluestem/grama grassland with varying amounts of shinnery oak, sand sagebrush, and yucca to a composition dominated by dropseeds, purple threeawn, and gramas, with high densities of plains yucca, annual forbs, and mesquite.

According to the BLM's Carlsbad Resource Management Plan (RMP), 15 percent of the wildlife species identified in the resource area utilize the shinnery oak habitat with 30 percent occupying areas consisting primarily of grass compositions with greater than 75 percent grasses. The subtle blend of plant communities with shinnery oak dune habitat (SOD) that somewhat dominates short-grass prairie grassland (SG) affords a composition of factors that results in the diverse wildlife population of the Los Medaños.

Wildlife populations are characterized by numerous species of arthropods, amphibians, reptiles, birds, and mammals. Now and then, aquatic mollusks, inhabitants of local stock ponds and livestock drinking units, are observed.

Red-spotted toads and the New Mexico spadefoot are two examples of no fewer than ten different species of indigenous amphibians. Their significance is seldom recognized until spring or summer rains, at which time they appear in exceptional numbers.

Reptiles comprise more conspicuous inhabitants due to the diurnal nature of numerous species. Ornate box turtles, common side-blotched lizards, and Texas horned lizards represent 3 of approximately 35 distinct species of indigenous reptiles. Moreover, three species of rattlesnake (western diamond-backed, prairie, and desert massasauga) can be encountered in the area.

Bird densities vary according to preferable food and habitat availability. The habitat heterogeneity of the Los Medaños accounts for a wide assortment of bird species that inhabit the area either as seasonal transients or permanent residents. Large numbers of mourning dove, pyrrhuloxias, and black-throated sparrows are frequently observed. A unique desert subspecies of the Northern bobwhite quail, scaled quail, and an occasional lesser prairie chicken depict the gallinaceous inhabitants. Due to a scarcity of surface waters in the immediate vicinity of WIPP, migrating or breeding waterfowl are not common.

The area supports a particularly abundant and diverse population of raptors, or birds of prey. Harris's hawks, Swainson's hawks, and great horned owls illustrate species commonly found nesting in the area. The density of large avian-predator nests has been documented as high as 16 nests per 10 square kilometers.

Black-tailed jackrabbits and desert cottontail rabbits are the most conspicuous mammals. Several species of ground squirrel, such as the spotted ground squirrel, and numerous other rodents such as kangaroo rats and cactus mice also occupy the area. Large piles of debris, which may consist of aluminum cans, cow dung and other rubbish (sometimes to a height of nearly five feet), clustered at the base of cactus or large mesquites characterize the houses (or "middens") of the southern plains wood rat. Other species, such as mule deer and carnivores such as coyotes and American badgers also frequent the area. All of the species described above are listed in Table 3-1.

Table 3-1. Summary – Aforementioned Species

Biota Type <sup>1</sup>	Common Name	Scientific Name
Flowering Plants	Havard Oak (or shinnery oak)	<i>Quercus havardii</i>
Flowering Plants	Honey Mesquite	<i>Prosopis glandulosa</i>
Flowering Plants	Bluestem (grass)	<i>Andropogon spp.</i>
Flowering Plants	Grama (grass)	<i>Bouteloua spp.</i>
Flowering Plants	Sand Sagebrush	<i>Artemisia filifolia</i>
Flowering Plants	Yucca	<i>Yucca spp.</i>
Flowering Plants	Dropseed	<i>Sporobolus spp.</i>
Flowering Plants	Purple Threeawn	<i>Aristida purpurea</i>
Flowering Plants	Plains Yucca	<i>Yucca campestris</i>
Flowering Plants	Mesquite	<i>Prosopis spp.</i>
Amphibians	Red-spotted Toad	<i>Anaxyrus punctatus</i>
Amphibians	New Mexico Spadefoot	<i>Spea multiplicata</i>
Reptiles	Ornate Box Turtle	<i>Terrapene ornata</i>
Reptiles	Common Side-blotched Lizard	<i>Uta stansburiana</i>
Reptiles	Texas Horned Lizard	<i>Phrynosoma cornutum</i>
Reptiles	Western Diamond-backed Rattlesnake	<i>Crotalus atrox</i>
Reptiles	Prairie Rattlesnake	<i>Crotalus viridis</i>
Reptiles	Desert Massasauga	<i>Sistrurus catenatus</i>
Birds	Mourning Dove	<i>Zenaidura macroura</i>
Birds	Pyrrhuloxia	<i>Cardinalis sinuatus</i>
Birds	Black-throated Sparrow	<i>Amphispiza bilineata</i>
Birds	Northern Bobwhite Quail	<i>Colinus virginianus</i>
Birds	Scaled Quail	<i>Callipepla squamata</i>
Birds	Lesser Prairie-Chicken	<i>Tympanuchus pallidicinctus</i>
Birds	Harris's Hawk	<i>Parabuteo unicinctus</i>
Birds	Swainson's Hawk	<i>Buteo swainsoni</i>
Birds	Great Horned Owl	<i>Bubo virginianus</i>
Mammals	Black-tailed Jackrabbit	<i>Lepus californicus</i>
Mammals	Desert Cottontail Rabbit	<i>Sylvilagus audubonii</i>
Mammals	Spotted Ground Squirrel	<i>Xerospermophilus spilosoma</i>
Mammals	Kangaroo Rat	<i>Dipodomys spp.</i>
Mammals	Cactus Mouse	<i>Peromyscus eremicus anthonyi</i>
Mammals	Southern Plains Wood Rat	<i>Neotoma micropus canescens</i>
Mammals	Mule Deer	<i>Odocoileus hemionus</i>
Mammals	Coyote	<i>Canis latrans</i>
Mammals	American Badger	<i>Taxidea taxus</i>

<sup>1</sup> Vegetation naming conventions per U.S. Dept. of Agriculture, vertebrate naming conventions per Biota Information System of New Mexico (BISON-M)

The DOE consulted with the United States Fish and Wildlife Service (USFWS) in 1979 to determine the presence of threatened or endangered species at or near the WIPP site. At that time, the USFWS listed the Lee pincushion cactus, the black-footed ferret, the American peregrine falcon, and the bald eagle as threatened or endangered species that could occur on lands within or outlying the WIPP site. However, no critical habitat for endangered species was identified at the WIPP site. In 1989, the DOE again consulted with the USFWS to update the list of threatened and endangered species.

During 1989, the DOE consulted with the New Mexico Department of Game and Fish (NMDGF) regarding the state-listed endangered species in the vicinity of the WIPP site.

Based on NMDGF Regulation 657, dated January 9, 1988, the NMDGF listed seven birds and one reptile in one of two endangerment categories that occur or are likely to occur at the site.

An updated list of threatened and endangered species for Eddy and Lea Counties, New Mexico was compiled from multiple sources in June 2019 and is shown in Table 3 2. Additional details and updated lists of all threatened and endangered species of New Mexico can be found on the NMDGF, BLM, and USFWS websites. These websites will also include species of greatest conservation need (SGCN). Species determined to be declining or rare but not afforded legal protection are SGCN. The DOE NEPA EIS documentation (e.g., FEIS, *Final Supplement Environmental Impact Statement for the Waste Isolation Pilot Plant* [SEIS-I], and *Waste Isolation Pilot Plant Disposal Phase Final Supplemental Environmental Impact Statement* [SEIS-II]) currently show that operation of the WIPP facility will have no impact on any threatened or endangered species. Considerations pertaining to protected species and SGCN are implemented in accordance with this LMP, during the deliberation and administration of projects conducted on WIPP lands.

#### Definitions:

Candidate – Candidate species (species for which USFWS has sufficient information to propose that they be added to the list of endangered and threatened species, but the listing action has been precluded by other higher priority listing activities).

Threatened – Any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

Endangered – Any species which is in danger of extinction throughout all or a significant portion of its range.

Table 3-2. Threatened and Endangered Species List for Eddy and Lea Counties, New Mexico - June 2019

Common Name	Scientific Name	Species Group	Federal Listed	State Listed
Western Narrow-mouthed Toad	<i>Gastrophryne olivacea</i>	Amphibians		Endangered
Baird's Sparrow	<i>Centronyx bairdii</i>	Birds		Threatened <sup>1</sup>
Bald Eagle	<i>Haliaeetus leucocephalus</i>	Birds	Delisted	Threatened <sup>1</sup>
Bell's Vireo	<i>Vireo bellii</i>	Birds		Threatened <sup>1</sup>
Broad-billed Hummingbird	<i>Cynanthus latirostris</i>	Birds		Threatened <sup>1</sup>
Brown Pelican	<i>Pelecanus occidentalis</i>	Birds	Delisted	Endangered
Common Black Hawk	<i>Buteogallus anthracinus</i>	Birds		Threatened
Common Ground-dove	<i>Columbina passerina</i>	Birds		Endangered
Gray Vireo	<i>Vireo vicinior</i>	Birds		Threatened
Least Tern	<i>Sternula antillarum</i>	Birds	Endangered	Endangered <sup>1</sup>
Lesser Prairie-chicken	<i>Tympanuchus pallidicinctus</i>	Birds	Under Review <sup>1</sup>	
Lucifer Hummingbird	<i>Calothorax lucifer</i>	Birds		Threatened
Mexican Spotted Owl	<i>Strix occidentalis lucida</i>	Birds	Threatened	
Neotropic Cormorant	<i>Phalacrocorax brasilianus</i>	Birds		Threatened
Northern Aplomado Falcon	<i>Falco femoralis septentrionalis</i>	Birds	Experimental Population, Non-Essential <sup>1</sup>	Endangered <sup>1</sup>
Northern Beardless-Tyrannulet	<i>Camptostoma imberbe</i>	Birds		Endangered
Peregrine Falcon	<i>Falco peregrinus</i>	Birds	Delisted	Threatened <sup>1</sup>
Piping Plover	<i>Charadrius melodus</i>	Birds	Threatened	Threatened
Southwestern Willow Flycatcher	<i>Empidonax traillii extimus</i>	Birds	Endangered	Endangered
Thick-billed Kingbird	<i>Tyrannus crassirostris</i>	Birds		Endangered
Varied Bunting	<i>Passerina versicolor</i>	Birds		Threatened
Yellow-billed Cuckoo (western pop)	<i>Coccyzus americanus occidentalis</i>	Birds	Threatened	
Diminutive Amphipod	<i>Gammarus hyalleloides</i>	Crustaceans	Endangered	
Bigscale Logperch (native pop.)	<i>Percina macrolepida</i>	Fishes		Threatened
Blue Sucker	<i>Cycleptus elongatus</i>	Fishes		Endangered
Gray Redhorse	<i>Moxostoma congestum</i>	Fishes		Endangered
Greenthroat Darter	<i>Etheostoma lepidum</i>	Fishes		Threatened
Mexican Tetra	<i>Astyanax mexicanus</i>	Fishes		Threatened
Pecos Bluntnose Shiner	<i>Notropis simus pecosensis</i>	Fishes	Threatened	Endangered
Pecos Gambusia	<i>Gambusia nobilis</i>	Fishes	Endangered	Endangered
Pecos Pupfish	<i>Cyprinodon pecosensis</i>	Fishes	Under Review	Threatened
Monarch Butterfly	<i>Danaus plexippus plexippus</i>	Insects	Under Review <sup>3</sup>	
Least Shrew	<i>Cryptotis parvus</i>	Mammals		Threatened

Common Name	Scientific Name	Species Group	Federal Listed	State Listed
Spotted Bat	<i>Euderma maculatum</i>	Mammals		Threatened
Ovate Vertigo Snail	<i>Vertigo ovata</i>	Molluscs		Threatened
Pecos Springsnail	<i>Pyrgulopsis pecosensis</i>	Molluscs		Threatened
Texas Hornshell	<i>Popenaias popeii</i>	Molluscs	Endangered	Endangered
Arid Land Ribbonsnake	<i>Thamnophis proximus</i>	Reptiles		Threatened
Desert massasauga	<i>Sistrurus catenatus</i>	Reptiles	Under Review <sup>3</sup>	
Dunes Sagebrush Lizard	<i>Sceloporus arenicolus</i>	Reptiles		Endangered <sup>1</sup>
Gray-banded Kingsnake	<i>Lampropeltis alterna</i>	Reptiles		Endangered
Mottled Rock Rattlesnake	<i>Crotalus lepidus lepidus</i>	Reptiles		Threatened
Plain-bellied Water Snake	<i>Nerodia erythrogaster</i>	Reptiles		Endangered
Western River Cooter	<i>Pseudemys gorzugi</i>	Reptiles	Under Review <sup>2</sup>	Threatened
Gypsum Wild-Buckwheat	<i>Eriogonum gypsophilum</i>	Flowering Plants	Threatened	Endangered
Kuenzler Hedgehog Cactus	<i>Echinocereus fendleri</i> var. <i>kuenzleri</i>	Flowering Plants	Threatened	Endangered
Lee Pincushion Cactus	<i>Escobaria (Coryphantha) sneedii</i> var. <i>leei</i>	Flowering Plants	Threatened	Endangered
Scheer's Pincushion Cactus	<i>Coryphantha scheeri</i> var. <i>scheeri</i>	Flowering Plants		Endangered
Shining Coralroot	<i>Hexalectris nitida</i>	Flowering Plants		Endangered
Sneed's Pincushion Cactus	<i>Escobaria sneedii</i> var. <i>sneedii</i>	Flowering Plants	Endangered	Threatened
Tharp's Bluestar	<i>Amsonia tharpii</i>	Flowering Plants	Under Review <sup>2</sup>	Endangered
Wright's Marsh Thistle	<i>Cirsium wrightii</i>	Flowering Plants	Candidate	Endangered

Note: Footnote references (i.e., footnote 1) are added to the listing when the species appears on the list for Lea County. Listings without this footnote reference means the listing is only applicable to Eddy County. All species on the federal and state lists for Lea County were also found on the list for Eddy County. Blank entries indicate the species not listed in either Eddy or Lea Counties. In New Mexico, the federal list is not automatically adopted as part of the state list. Instead, the New Mexico State Game Commission must adopt it by regulation and, to date, only select species from the federal list have become part of the state list.

<sup>1</sup> Also listed in Lea County.

<sup>2</sup> Not listed on federal list but verified in Eddy County per BLM and state listing.

<sup>3</sup> Not listed on federal or state lists for Eddy or Lea Counties but verified in BLM's Carlsbad Resource Area and categorized as sensitive by BLM.

### **3.1 OBJECTIVES**

The objective of the DOE is to maintain and/or enhance the ecological condition of wildlife habitat within the WLWA.

Decisions regarding the management of wildlife are implemented over time in accordance with the DOE planning and budgeting processes. Priorities will be established for each management program to coordinate sequential implementation.

Implementation of wildlife management objectives shall be in accordance with existing local, state, and federal laws. In addition, it is the DOE's objective to comply with commitments contained in existing MOUs and interagency agreements with separate agencies and to consider the needs of, and the impacts to, native wildlife populations throughout the life of the WIPP facility (to include decommissioning).

### **3.2 PLANNED ACTIONS**

#### **3.2.1 Protected Species**

Upon identification of habitat within WIPP lands occupied by any protected species of wildlife, to include state or federally listed species, the area will be monitored and, if needed, set aside, and posted against unauthorized entry. Prior to implementation of proposed projects and/or other activities that may affect special status plant or animal species within the WLWA, expeditious notification (within 30 days of project implementation) of cognizant regulatory agencies (e.g., the NMDGF, the USFWS, the New Mexico Energy, Minerals, and Natural Resource Department [EMNRD] State Forestry Division) will be made by WIPP personnel. The DOE will solicit recommendations from said agencies for incorporation into a habitat management plan to be developed and implemented in a timely manner.

Federally listed threatened and endangered (T&E) plant and animal species shall be managed according to USFWS recovery plans. If a preliminary determination is made during the assessment process that a proposed project could affect T&E species habitat, then consultation with USFWS will be initiated under Section 7 of the Endangered Species Act of 1973, as amended. State-listed species will be protected by way of cooperative agreements, joint powers agreements, or MOUs with the NMDGF, EMNRD State Forestry Division, or other cognizant regulatory agencies.

The DOE will continue to monitor for the presence of T&E species.

Cognizant WIPP personnel will monitor and maintain, as required, sensitive habitats for T&E species.

### **3.2.2 Wild Ungulates**

WIPP biologists will consult with BLM to determine the best seed mix to be used in reclamation plans.

New water developments within the WLWA will be made accessible to wild ungulates. Existing water developments (e.g., livestock watering units) inside the WLWA will be modified (if necessary) to accommodate wildlife needs.

Fencing within the WLWA will reflect configurations recommended by the BLM for construction in areas containing wild ungulates.

### **3.2.3 Small Game**

#### **3.2.3.1 Galliformes**

Galliformes, particularly quail, comprise one of the more popular recreational pursuits of local hunters and therefore represent a direct pathway to man for environmental contaminants.

New water developments within the WLWA will be equipped to facilitate Galliformes (e.g., bird ramps in livestock waterers). Existing water developments will be modified to facilitate Galliformes. WIPP biologists will consult BLM to select seed mixes for reclamation that will reflect plant species conducive to the needs of native gallinaceous birds.

### **3.2.4 Nongame Species**

#### **3.2.4.1 Small Mammals**

Small mammal population management will be on an "as needed" basis.

#### **3.2.4.2 Furbearers**

Trapping of furbearers in the WLWA will be allowed; however, restrictions will apply, as posted at area access points and discussed in Chapter 6 of this document. Trapping will be done in accordance with applicable state and federal laws. Traps shall be well-marked and checked every calendar day at a minimum. If the presence of traps represents a safety concern, or if the trapper has not complied with stipulations imparted by cognizant WIPP personnel, the owner of the traps will be notified. Any trapping found to be not in compliance with applicable state and federal laws will be reported to the proper authorities.

Resident populations of furbearers (e.g., coyotes, foxes, bobcats) will be managed on an "as needed" basis. Responses to anomalous conditions (e.g., disease) in the

furbearer population will be based on the severity of the condition (e.g., rabies) and the potential threat it represents to the employees at the WIPP facility.

The deployment of traps utilizing poisons such as cyanide (e.g., M-44s), is strictly prohibited on WIPP lands.

#### **3.2.4.3 Birds**

WIPP personnel will incorporate management directives for resident and transient populations of birds including raptors on an "as needed" basis. Migration trends, habitat preferences, and nesting behavior will be factored into mitigation actions concerning adverse impacts of WIPP operations on protected species.

WIPP biologists will consult BLM when conducting reclamation efforts to use plant species conducive to the needs of birds.

Water developments and similar avian hazards (e.g., molasses troughs) within the WLWA will be configured to prevent mortalities of birds.

If the determination is made that the nest occupied by a protected species (includes egg, fledgling, or adult) compromises the normal working operation of the WIPP facility (e.g., nests built on construction machinery) or the activity of any land use permit holder, cognizant WIPP personnel will contact appropriate regulatory agencies (NMDGF, USFWS) for guidance regarding response protocol. Nests will remain in place and undisturbed until the LUC evaluates the situation and provides a response protocol.

#### **3.2.4.4 Reptiles**

The monitoring and management of reptiles will fall primarily under the auspices of T&E species management. Potential impacts will be considered during deliberation of land management decisions.

Construction projects conducted on WIPP lands will be in accordance with applicable state and federal laws pertaining to the mitigation of impacts to habitat conducive to the presence of protected species of reptiles.

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## CHAPTER 4

### CULTURAL RESOURCES

#### 4.0 INTRODUCTION

This chapter provides information on the appraisal, documentation, protection, preservation, and chronology of archaeological and historic resources within the WLWA. The BLM's RMP is used as guidance for the management of the cultural resources.

##### 4.0.1 Cultural Resources in the Affected Environment

Southeastern New Mexico was inhabited by aboriginal hunters and gatherers who subsisted on wild plants and animals. These people would have found a number of edible plants throughout the region, including mesquite beans, hackberries, walnuts, acorns, seed-producing grasses, agave, and a variety of other succulents. Big and small game, including bison, deer, pronghorn, rabbits, reptiles, birds, and various invertebrates, could have been hunted or collected in the region.

From approximately 600 A.D. onward, as trade networks were established with Puebla people to the west, domesticated plant foods and materials, including corn (or maize), beans, squash, and cotton, were acquired in exchange for dried meat, hides, and other products from the Pecos Valley and Plains. The indigenous population may also have practiced horticulture at favorable locales in the area, but only on an intermittent basis, since water for crops would have been scarce and unpredictable much of the time.

In the mid-1500s, the Spanish Conquistadors encountered Jumano and Apachean peoples in the region practicing hunting and gathering and engaging in trade with Pueblans. Later, as the natives acquired horses, and as Europeans began settling the land, this traditional way of life evolved into specialized bison hunting on the Llano Estacado and raiding both Spanish and Puebla settlements to the west. In the late 1800s, the region was settled by ranchers and farmers.

The WLWA is situated in dune-covered, rolling-plains terrain in the eastern part of the BLM's Carlsbad Resource Area. Known archaeological sites within the area are primarily the remains of prehistoric camps and short-term settlements. These localities are generally marked by hearth features, scattered burned rock, flaked stone projectile points, and cutting and scraping tools, pottery fragments, and ground stone implements. Locations generally represent short-term, seasonal occupations by small, nomadic groups of hunters and gatherers who utilized the plants and animals in the dune lands east of the Pecos River. In a few cases within the WLWA, sites with evidence of structures have been reported. These sites probably hosted occupations of perhaps several weeks or months.

Many known historical sites in southeastern New Mexico consist primarily of early twentieth century homesteads that failed, or isolated features from late nineteenth and early twentieth century cattle or sheep ranching and military activities. Although the region was part of the Spanish and Mexican colonial empires, no related conquest or settlement sites have yet been identified.

Historic components (more than 50 years old) are rare, but are occasionally noted within the WLWA. These include features and debris related to ranching in the early years of the twentieth century. In addition, more modern ranching debris and facilities such as fence lines are present in the area, including some which are likely still in use. Ranch-related sites which date to the 1940s and 1950s are common in parts of the WLWA. These will be considered historical properties as they age into that category, and under current law will have to be treated as such. The majority of the several sites recorded in the area typically include elements which can contribute to their eligibility for the National Register of Historic Places. With few exceptions, cultural properties known or anticipated for the WLWA are significant; they must be identified, recorded, assessed through inventory, and considered in any plan of development for the area, such as new repository ventilation support structures, access roads, or shaft footprint areas (e.g., New Filter Building).

Compared with most other parts of southeastern New Mexico, the locations and nature of cultural resources within the WLWA can be described relatively well, based on intensive inventory of portions of the area, along with limited excavation and some other work on some sites.

In 1976 four sections comprising the WIPP core area (Sections 20, 21, 28, and 29), along with associated rights-of-way and drilling pads within and outside the WLWA (Nielson 1976, Linnabery 1976) were inventoried by the Agency for Conservation Archaeology (ACA) of Eastern New Mexico University. Additional rights-of-way within and outside the WLWA were inventoried in 1978 and 1979 by ACA (Schermer 1978; MacLennan and Schermer 1979). Sites identified in the core area were relocated and evaluated in 1980 by ACA, and management recommendations for those sites were prepared (Schermer 1980). Subsequently, in accordance with the ACA's recommendations, a number of sites within the WIPP core area were tested for eligibility and/or were excavated (Hicks 1981; Lord and Reynolds 1985).

In 1987 Mariah Associates conducted an intensive study of portions of 45 sections surrounding the WIPP site. Mariah's study included an inventory of 2,460 acres in 15 quarter-section units. Inventoried units were selected so as to be representative of the area as a whole. Within each of the sample units, cultural resource sites encountered were recorded, certain selected sites were tested, and management recommendations were prepared (Mariah Associates, 1987).

Between 1989 and 1992, several seismic projects associated with oil and gas development provided cultural resource clearances within the WLWA. Numerous inventories have been conducted outside the WLWA, primarily for oil and gas exploration and ranching.

Inventories conducted to date within the withdrawal area have located 59 archaeological sites, along with 91 isolated occurrences (single or few artifacts, or isolated features which can be fully recorded in the field). Sites and isolates identified are almost exclusively prehistoric. Only one site with both prehistoric and historic components has been noted.

Of a total of 10,240 acres in the WLWA, 3,830 acres (37 percent) have been inventoried for cultural resources. The results have been the discovery of 1 site for every 65 acres surveyed, and 1 isolate in every 42 acres. Based on this information, and assuming environmental homogeneity and a fairly even distribution of sites, the remaining 6,410 uninventoried acres could contain approximately 99 sites and 153 isolates. The combined results of the several inventories conducted within the WLWA compare well with those from Mariah's 1987 inventory of selected units over a much larger area. Mariah's results show only a slightly higher frequency of cultural resources per acre. In 2,460 acres, 40 sites and 75 isolates were recorded, or 1 site for every 62 acres and 1 isolate in every 33 acres.

Of the 40 sites identified and evaluated on the Mariah inventory, 14 appear to be eligible for the National Register of Historic Places, 24 are potentially eligible, and 2 are not eligible. None of the 75 isolates are considered eligible. While the data from the various researchers cited above are not always consistent with Mariah's explicit data on-site significance, it appears that within the WLWA, the majority of sites either are or have the potential to be eligible for the National Register of Historic Places and will require consideration in future land disturbing activities.

Site significance is contingent on the number of manifestations encountered, their diversity in composition, the total number of each type of manifestation, and existing evidence suggesting whether or not a given site is datable. Previous limited cultural inventories indicate that the WLWA represents a potentially significant cultural resource contributor to the discipline of archaeology and shall be regarded as such when deliberating land management decisions.

#### **4.1 OBJECTIVES**

The objectives of the DOE are to protect and preserve representatives of the full array of cultural resources within the WLWA for the benefit of scientific and socio-cultural use by present and future generations. This guidance will ensure that cultural resources are given full consideration in land use planning and management decisions. Planning/management policies pertaining to cultural resources within the WLWA shall be conducted in accordance with guidelines established in Appendix F of this plan.

## 4.2 PLANNED ACTIONS

The DOE will be responsible for completing cultural resource clearances for DOE-funded activities prior to initiating projects that result in land disturbance by means of the LUR process (see Chapter 2). Cultural resource clearances for actions by outside agencies or organizations, not funded by the DOE, but completed on DOE property, or crossing DOE property, are the responsibility of the outside agency or organization. Clearances will be completed in accordance with DOE standards, to include the guidelines established in this plan, and submitted to the DOE for review.

### 4.2.1 Cultural Resource Management

The DOE will continue to inventory, evaluate, and manage cultural resources inside the WLWA. In locating, evaluating, and adding properties to the management inventory, the DOE shall consult the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation.

### 4.2.2 Field Surveillance

The DOE will conduct field surveys in a timely manner relative to agency planning and LURs involving surface disturbance of land within the WLWA. The DOE shall select appropriate strategies to ensure that surveys are completed so that the DOE can carry out its responsibilities under Section 106 of the National Historic Preservation Act, 36 CFR Part 800, "Protection of Historic Properties," and the Native American Graves Protection and Repatriation Act (NAGPRA), before initiating any activity that might damage or disturb historic properties.

### 4.2.3 Reports on Survey Results

The DOE will provide reports on survey results, both negative and positive, fully documenting the rationale for decisions made in the identification and evaluation of properties. The inclusion of negative data - that is, data on surveys that result in the identification of no historic properties - is important to ensure that redundant surveys will not be performed in the future. Negative data are also needed to improve the reliability of predictive models. When large-scale surveys are conducted within the WLWA, or smaller scale surveys over time result in the accumulation of substantial bodies of survey data about cultural resources within the WLWA, the DOE will prepare reports synthesizing and analyzing the resulting data for use by interested scholars as well as for management purposes. Such analyses should be provided to the State Historic Preservation Officer (SHPO) and other interested parties for review, comment, and incorporation into inventories. The DOE will document current locations and conditions of artifacts, document records, and remains related to historic properties under their jurisdiction or control. In some cases, such as when objects have long been removed from their places of origin, documentation may not be feasible. Documentation should be included as appropriate in identification and evaluation records as well as *National Register* property records.

#### **4.2.4 Report Reviews**

The DOE will provide reports to the SHPO and other interested parties for review, comment, and incorporation into statewide historic resource inventories and for use in reviews under Section 106 of the National Historic Preservation Act and NAGPRA when applicable. Such reporting to the state assists the state in maintaining comprehensive inventories while ensuring that state and DOE efforts are coordinated and compatible.

#### **4.2.5 Potentially Eligible Properties**

While conducting surveys, the DOE may encounter properties which are potentially eligible for the *National Register of Historic Places*, but which do not meet the criteria at the time of the survey. For example, properties may be less than 50 years old and not of exceptional significance; consequently, they would not meet the National Register criteria. If it is determined that such properties are likely to become eligible in the future, it is to the DOE's advantage to document them at the time of the survey to facilitate later evaluation and registration. As cultural resources are identified, they will be evaluated in consultation with the New Mexico SHPO and the BLM to determine their eligibility for listing on the *National Register of Historic Places*.

Sites which are found to be eligible for listing in the *National Register of Historic Places* will be avoided to the maximum extent possible. Where avoidance is not possible, mitigative measures designed to treat the effects of the undertaking will be developed and implemented in consultation with the SHPO, the BLM, and the appropriate Indian tribe(s).

#### **4.2.6 Project Clearances**

Any proposed activity involving surface disturbance within the WLWA that has not received cultural resource clearance will be postponed until such time that an appropriate cultural resource investigation is completed and approved.

#### **4.2.7 Management and Record Inventory**

The DOE will maintain management inventory and maintain records of identification, using appropriate forms and following the Guidelines for Federal Agency Responsibilities under Section 110 of the National Historic Preservation Act, to include:

1. Description of methods used
2. Identification of lands inspected with data on all properties, both historic and non-historic
3. Identification of evaluation methods

4. Identification of sources (informants)
5. Documents produced during research and consultation

#### **4.2.8 Information Disclosure**

The DOE will establish guidelines for withholding and disclosing sensitive information regarding locations or character of historic or archaeological properties if such disclosure may create a substantial risk, harm, theft, or destruction of such properties. Protocol for restricting information disclosure will be in accordance with the National Register Bulletin 29, "Guidelines for Restricting Information About Historic and Prehistoric Resources."

## CHAPTER 5 GRAZING

### 5.0 INTRODUCTION

This chapter provides guidance pursuant to best management practices of the DOE, on lands contained in the WLWA, as they pertain to traditional livestock use. Grazing within the WLWA operates within the authorization of the Taylor Grazing Act of 1934, the FLPMA of 1976, the Public Improvements Rangelands Act of 1973, and the Bankhead-Jones Farm Tenant Act of 1973. The responsibilities of the DOE include supervision of ancillary activities associated with grazing (e.g., wildlife access to livestock water development, assurance that all livestock water developments inside the WLWA lands are configured according to regulatory requirements) and maintenance of an interface with respective allottees. Administration of grazing rights shall be in cooperation with the BLM in accordance with existing MOUs (Appendix C) and the coinciding SOW (Appendix D) through guidance established in the East Roswell Grazing Environmental Impact Statement (BLM 1979).

#### 5.0.1 Grazing within the Affected Environment

The LWA provides for the continuation of grazing practices within the WLWA as permitted by the Secretary in consultation with the Secretary of the Interior in accordance with applicable grazing laws and policies, including: the Act described as "An Act to stop injury to public grazing lands by preventing overgrazing and soil deterioration, to provide for their orderly use, improvement, and development, to stabilize the livestock industry dependent upon the public range, and for other purposes . . ." approved June 28, 1934 (43 *United States Code* [U.S.C.] 315 et seq., commonly referred to as the Taylor Grazing Act); title IV of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1751 et seq.); and the Public Rangelands Improvement Act of 1978 (43 U.S.C. 1901 et seq., and 43 CFR Part 4100).

The principles of multiple-use and sustained-yield are basic to the management of this program. Rangelands comprise a substantial portion of the WLWA and provide forage for livestock and valuable wildlife habitats.

The WLWA affects two grazing allotments administered by the BLM: the Livingston Ridge (NM77027) and the Antelope Ridge (NM77032) (Figure 5.1).

The Livingston Ridge allotment is comprised of 55,581 acres in size and permitted to a livestock rancher operating a year-round cow/calf business. Land ownership is distributed as follows: (1) 41,608 acres of Federal ownership (2,880 acres within the WLWA), (2) 13,063 acres of State Trust lands, and (3) 910 acres of private (deeded) land.

Pasture rotation with some of the pastures being rested for at least a portion of the growing season, is standard management practice for this allotment. Vegetative

monitoring studies to collect data on the utilization of the land, and the amount of precipitation by pasture from each study allotment are conducted as needed to compare production with consumption. Should vegetative monitoring studies indicate a need for an allotment management plan, a plan will be developed in consultation with the BLM. The allotment is permitted for 6,483 active animal unit months (AUMs), which converts to 6.4 acres per AUM on the total federal acreage (41,608 acres) in this allotment. (An AUM is the amount of forage necessary for the sustenance of a cow, or its equivalent, for a period of one month).

The Antelope Ridge allotment contains 77,574 acres and is permitted to a livestock rancher operating a year-round cow/calf business. A portion of the Antelope Ridge allotment contains the WIPP facilities and are posted against trespass (see Chapter 10, Security, for sector designations) and fenced to prevent grazing. Land ownership of the subject allotment is divided between federal, state, and private (deeded) lands. Acreages distributed by ownership are as follows: (1) 66,757 acres of federal land (7,360 acres within the WLWA), (2) 8,749 acres of State Trust lands, and (3) 2,068 acres of private land.

An allotment management plan has been developed for this allotment by the BLM. The plan includes a seven-pasture rotation system with some pastures being rested for full years and others receiving growing season rest. The allotment is permitted for 13,236 AUMs of which 3,660 AUMs are held in suspension leaving 9,576 AUMs active, this translates to approximately 7.0 acres per AUM on the total federal acreage (66,757) in this allotment.

Both allotments consist of sandy and deep sand range sites. These sites have combined SOD and SG aspects and include grasses such as gramas, bluestems, and dropseeds. Other key forage plant species include shinnery oak, and fourwing salt-bush (or Chamiza).

## **5.1 OBJECTIVES**

The objective of the DOE for grazing management is based on the current practices for adjacent public lands. Priorities involve maintaining rangeland resource values on a long-term, sustained-yield basis, utilizing vegetative monitoring studies of key forage species as the mechanism by which the need for any potential range management changes would be detected.

## **5.2 PLANNED ACTIONS**

Planned Actions will be administered by the BLM, for the DOE, in consultation with the State of New Mexico and affected county, state, and federal agencies.

### **5.2.1 Grazing Regulations**

With the exception of the WIPP Exclusive Use Area (EUA) and other areas as noted in 10.2.2 and shown in Figure 10.1, the DOE will continue to grant livestock grazing privileges in accordance with historical land uses as regulated by pertinent laws, regulations, and existing agreements (e.g., BLM/DOE MOU) governing livestock use of public lands.

Vegetative monitoring by the BLM will continue in the WLWA to determine if the goals and objectives of the grazing allotments are being achieved. As a minimum, data on actual livestock use, wildlife use, degree of utilization of key forage species, climatic conditions, and rangeland ecological condition and trend will be collected by the BLM.

### **5.2.2 Configuration of Rangeland Improvements**

As a result of the LWA, existing and future rangeland improvements (e.g., livestock water developments) within the WLWA belong to the DOE and are administered consistent with BLM policy. Therefore, all rangeland improvements within the WLWA will conform to configuration requirements established by cognizant regulatory personnel.

New or replacement livestock watering units may have water supplied from the Double Eagle Water System. For connections to the Double Eagle Water System, the allottee will be required to contact the City of Carlsbad. Request submittals will be routed in accordance with Chapter 2 and Appendix B of this document.

### **5.2.3 Wildlife Access**

All rangeland improvements within the WLWA will be made accessible to wildlife. Any improvement that is determined by cognizant personnel to pose an imminent threat to wildlife of the area will be corrected immediately by the responsible party/parties, allottees and/or holders of an approved LUR or will be expeditiously removed from service at the expense of the responsible party/parties.

### **5.2.4 Future Rangeland Improvements**

Future rangeland improvements will be initiated through a request to the BLM by the responsible party (requestor). The request will be forwarded by the BLM to the DOE for evaluation by the LUC. The BLM will determine the expediency of the request, make status decisions per the request, and attach necessary stipulations to the request. All

requests for rangeland improvements will be completed in accordance with existing MOUs or comparable documents.

### **5.2.5 Maintenance of Existing Improvements**

General maintenance of existing rangeland improvements will be the responsibility of the allottee. All maintenance will be conducted in accordance with all applicable laws and regulations governing the respective action. Removal of improvements within the WLWA will be conducted per the language contained in the specific agreement.

### **5.2.6 Violations of Existing Agreements**

Alleged violations of existing agreements (e.g., MOUs), commitments, and/or existing laws and regulatory requirements will be brought before the LUC for discussion, determination, and resolution. Examples of violations are connections to water developments that do not meet configuration requirements pertaining to existing regulations and/or laws, and fence configurations that do not meet existing requirements and/or laws.

### **5.2.7 Nonconformance with Grazing Requirements**

If evidence suggests that a respective allottee is in nonconformance with existing grazing regulations/requirements on lands within the WLWA (e.g., exceeding legal AUM allocation), the concern will be submitted in writing to the BLM for resolution.

### **5.2.8 Modifications to Improvements**

Modifications of existing rangeland improvements (e.g., fence line alterations) may be conducted by the respective allottee. However, the modification will not contradict the management goals and best management practices of the BLM and the LMP. Requests for modifications must be submitted in writing by the respective allottee to the BLM. The BLM will forward the request to the DOE for review, comments, and determination by the LUC.

### **5.2.9 Amending Grazing Rights**

If the determination is made that livestock grazing represents a significant risk to the health and/or safety of WIPP personnel, the integrity of critical T&E species or other wildlife habitat, or that it poses a risk to the incorporation of best management practices, ancillary restrictions and/or guidelines may be imposed on the respective allottee pursuant to their grazing privileges on WIPP lands. If the determination is made by the BLM that a respective allottee has committed three or more incidents of noncompliance pertaining to existing grazing laws and/or restrictions, grazing privileges may be revoked within the WLWA in accordance with all applicable laws and regulations governing the revocation of grazing rights on public lands.

### 5.2.10 State Notification

The DOE will provide notice to the EMNRD Forestry Division upon receipt or development of:

- Grazing management changes and/or plans proposed for the WLWA;
- Applicable reports generated from the BLM vegetative monitoring programs covering the WLWA.

### 5.2.11 Grazing Fees

Administration of grazing fees shall be conducted in accordance with the provisions of the BLM/DOE MOU (Appendix C).

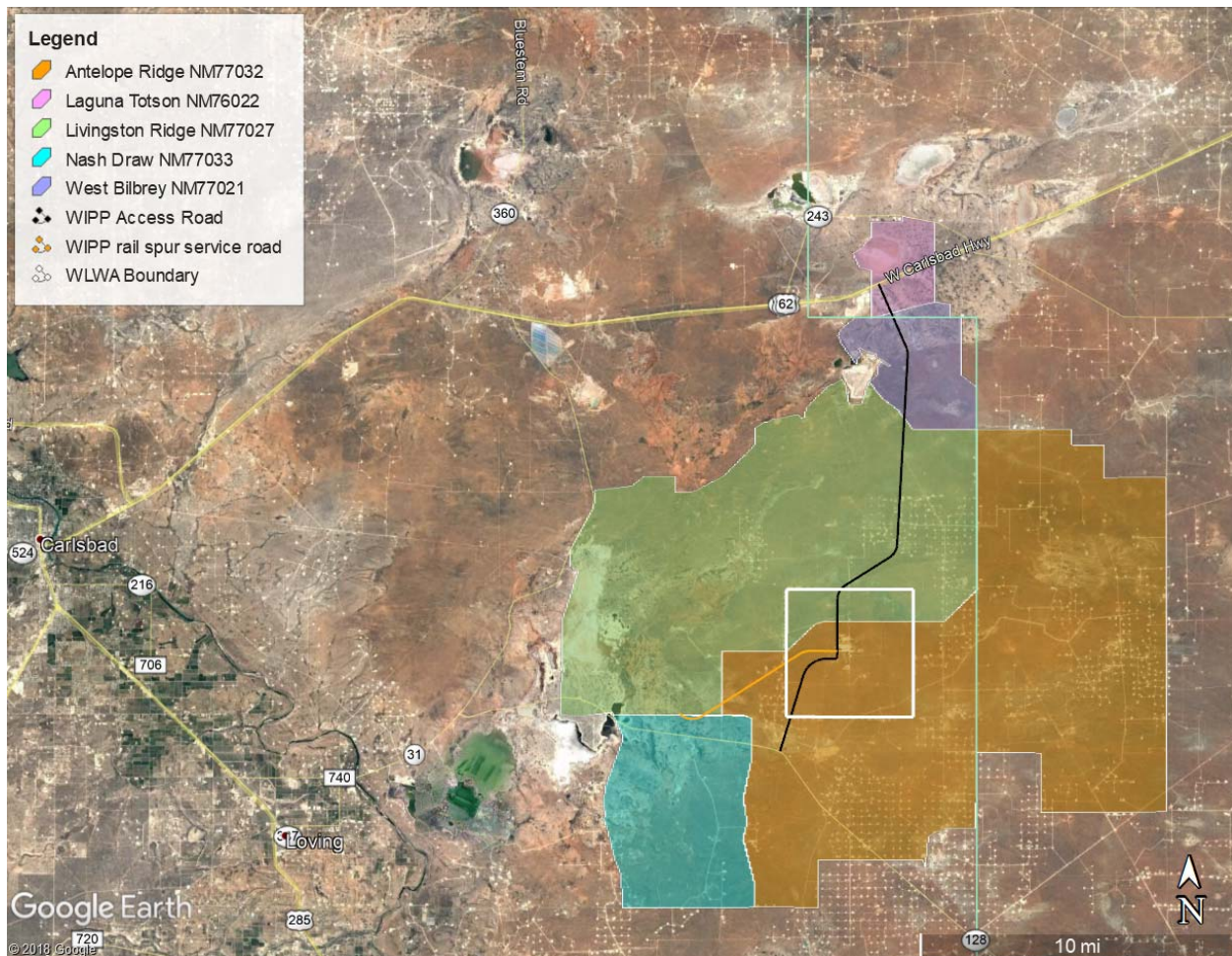


Figure 5.1. Grazing Allotments in the Vicinity of the WIPP Land Withdrawal Area

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## CHAPTER 6 RECREATION

### 6.0 INTRODUCTION

Recreational opportunities will continue in accordance with most traditional land uses as the Secretary determines to be appropriate. Examples of such land use concepts can be found in the Carlsbad Resource Area Resource Management Plan and Environmental Impact Statement (BLM-NM-PT-89-001-4410, including the 1997 Amendment). Properties posted with DOE "no trespassing" signs are excluded from public use and will be patrolled by WIPP Security personnel to prevent unauthorized use. Violators are subject to prosecution in accordance with applicable laws and regulations governing property protection.

In May 2016, increased safety notifications for persons within the WLWA were implemented. As a result, signs were posted at the 20 land vehicle entry points to the WLWA, which read as follows:

"Recreational land users and persons conducting work within this area MUST check in/out with the WIPP Site at 575-234-7585," followed by the corollary notification in Spanish, "Personas que usarán esta área para recreación o para trabajar, DEBEN registrarse a la hora de entrar y salir de le área llamando a WIPP a 575-234-7585."

This requirement applies to all persons, including WIPP facility personnel, but with exceptions for grazing lessees, who work or recreate outside the PPA within the WLWA.

#### 6.0.1 Recreation within the Affected Environment

Due to the topography, climatic conditions, and wildlife in the area of the WIPP site, an extensive (non-facility based) variety of recreational opportunities is available and includes: hunting for both big and small game animals; camping; horseback riding; hiking; watching wildlife (e.g., bird watching); and sightseeing.

### 6.1 OBJECTIVES

The objective of the DOE is to support a range of recreational outdoor activities for all segments of the public, commensurate with demand, access, safety, regulatory requirements, environmental protection, and liability. The WLWA encompasses 10,240 acres with the Off Limits Area at 1,453.9 acres making up the major portion that is not available to public access. That leaves close to 85 percent of the WLWA regularly available for public recreational opportunities (see Chapter 10, Figure 10.1).

## **6.2 PLANNED ACTIONS**

### **6.2.1 Access**

Roads used in the operation of the WIPP facility are maintained and open to public access, unless otherwise designated. [Note: Roads posted with stipulations denoting alternate designations will be managed in accordance with the posted restrictions]. Roads within the WLWA will enhance recreational opportunities and allow use of the WLWA. Areas identified as Special Management Areas (SMAs) (e.g., reclamation areas, wildlife habitat) can, at the discretion of the LUC, be removed from access. These areas will be barricaded and/or posted accordingly to prevent unauthorized access. The LUC may be contacted for additional information on access and recreational opportunities.

Recreational users are prohibited from parking any motor vehicle or camping within 300 yards of any man-made water hole, water well or watering tank used by wildlife or domestic stock, without the prior written consent of the LUC. Motor vehicle use by the general public is limited to existing roads. Any restrictions on use will be posted. All Federal and State motor vehicle laws apply. Parked vehicles shall be on the side of the road and in a manner that does not interfere with normal flow of traffic. Parking in an area where superheated parts of the vehicle catalytic converter are in contact with dry vegetation shall be avoided. Parking and leaving vehicles or equipment on the North and South Access Roads and easements is not permitted except as specified in section 8.2.8.

Recreational users must pack out or remove all refuse, litter, cigarette butts, hazardous materials, sewage, gray water and any other equipment or materials brought on to the WLWA.

Per the U.S. Department of Transportation Federal Aviation Administration, drone operators who interfere with wildfire suppression, law enforcement, or emergency response efforts are subject to civil penalties of up to \$20,000 and possible criminal prosecution.

### **6.2.2 Off-Highway Motor Vehicles**

Management of roads and trails within the WLWA is conducted under requisite restrictions. This means that recreational motor vehicle use can be limited or prohibited at certain times, in certain areas, and/or for certain specified purposes to protect the health and safety of the public, environmental quality of the area, or for the common defense and security of the site. These restrictions generally apply to the following:

- Numbers of vehicles
- Types of vehicles
- Time or season of use
- Permitted or licensed vehicle use only

- Use of existing roads and/or trails
- Vehicle use in designated areas (roads/trails)
- Other restrictions as deemed necessary

The use of off-highway vehicles (OHV) within the WLWA will be limited to existing roads. Exceptions are those projects which are in conjunction with WIPP-related activities and have received proper authorization from the LUC. Trails and primitive roads will be posted with informational signs that clearly communicate restrictions regarding the operation of OHVs. The unauthorized use of OHVs traveling off existing roads, or in posted areas within the WLWA, will be regarded as criminal trespass. Violators are subject to criminal prosecution in accordance with applicable laws and regulations governing property protection. Operators must comply with all requirements of the New Mexico Off-Highway Motor Vehicle Act (66-3-1001 through 66-3-1021 New Mexico Statutes Annotated [NMSA]). The use of OHVs is not permitted on the North and South Access road except as provided in 66-3-1011 NMSA.

### 6.2.3 Hunting and Trapping

The Secretary has made the decision to permit sport hunting and trapping inside the WLWA to continue in accordance with applicable traditional land uses, existing NMDGF and USF&WS regulations, and best management practices regarding the health and safety of WIPP personnel and the protection of the environment. The WLWA is accessible via the North and South Access Roads as described in section 8. Hunting and trapping within areas designated as "no trespassing," including the Off-Limits Area and all areas noted in 10.2.2 (see Figure 10.1), is prohibited. Any attempt to harvest wildlife located within the area closed to hunting is prohibited. Call the WIPP Security Office at 575-234-8324 or 575-234-8407 to retrieve big-game when the attempt to harvest was in an area open to hunting but the game subsequently perished in an area designated as "no trespassing." Driving off of existing roads without prior approval of the LUC is **NOT** allowed in the WLWA, this includes for retrieval of game. Taking or attempting to take game on, from or across the North and South Access Roads or within the fenced right-of-ways of these roads is prohibited. This prohibition also applies to hunters certified by NMDGF as mobility-impaired. Violators are subject to prosecution under existing laws and regulations pursuant to property protection. The DOE after consultation with the BLM and the State of New Mexico, may impose regulations that prohibit or limit hunting or trapping if it is determined that the activity represents a safety risk to WIPP personnel and/or the public, creates significant adverse impacts to the environment, represents a potential threat to the integrity of T&E species habitat, and/or threatens the quality of life for isolated wildlife populations residing within the WLWA.

The Secretary has made the decision to allow trapping inside the WLWA in accordance with applicable federal and state laws and regulations governing the taking of furbearers. Prerequisites that pertain to trapping on the WLWA will be implemented in accordance with subsection 3.2.4.2 of this plan.

#### 6.2.4 Horseback Riding and Hiking

The Secretary has made the decision to allow recreational riding and hiking in areas of the WLWA identified as "multiple land use areas." Restrictions such as "No Trespass" zones will apply to non-DOE users. Except for posted areas, horseback riding and/or hiking by the general public will be encouraged to provide non-motorized recreational experiences in addition to projecting affirmative relationships with non-consumptive users. Equine must meet federal and state vaccination requirements.

#### 6.2.5 Camping

**Note: Campers must check in with the WIPP Security Police Officers prior to establishing camp in addition to the stipulated WLWA use entry/exit notification at 575-234-7585. Call the WIPP Security Office at 575-234-8324 or 575-234-8407 for further instructions and information on any restrictions. All fire restrictions enacted for adjacent BLM and NMSLO lands will be enforced on the WLWA.**

Camping will be allowed for no more than a period of 14 days within any period of 28 consecutive days. The 14-day limit may be reached either through a number of separate visits or through 14 days of continuous overnight occupation (personnel or equipment) during the 28-day period. Names of campers, license numbers of vehicles, camp location, emergency phone numbers, and arrival and expected departure times shall be provided to the WIPP Security Police Officers. Campers must be informed that their camp is subject to random inspections at the discretion of security personnel. At the time of departure, campers should check out with WIPP Security personnel in addition to the stipulated WLWA use entry/exit notification. In the event that checkout does not occur, security personnel should deploy to the campsite for determination of camp status (e.g., abandoned, occupied, camper with injuries, vehicle problems).

WLWA information specific to recreational users, such as safety/security reminder cards and some BLM pamphlets, is available at the WIPP Security Office.

## CHAPTER 7

### ENERGY AND MINERAL RESOURCES

#### 7.0 INTRODUCTION

This chapter discusses mineral resources and reserves as they pertain to the judicious management of lands under the jurisdiction of the DOE. This serves as a baseline management document for the determination and analysis of energy and mineral resources in the affected environment.

##### 7.0.1 Mineral Resources in the Affected Environment

Mineable resources known to underlie the WLWA are caliche, gypsum, salt, sylvite, langbeinite, crude oil, natural gas, and distillate. Potassium salts (sylvite and langbeinite), and hydrocarbons (e.g., crude oil and natural gas) are the only resources of present-day commercial significance.

###### 7.0.1.1. Oil and Gas

The oil and gas industry is well established in the Los Medaños region of New Mexico (the vicinity of WIPP), with producing oil and gas fields, support services, and compressor stations. Nearly all phases of oil and gas activities have occurred in the locality. These phases include seismic exploration, exploratory drilling, field development (comprised of production and injection wells) and other sundry activities associated with hydrocarbon extraction. The location and number of oil and gas and other hydrocarbon wells within one mile of the WLWA boundary are maintained by the WIPP Delaware Basin Drilling Surveillance Program.

###### 7.0.1.2. Potash

Potash minerals are used to produce one of the major ingredients in fertilizers, and "potash minerals" is the common industrial term for potassium in various chemical combinations with sodium, magnesium, chloride, and sulfate. Important natural and commercial soluble potassium salts are sylvite and langbeinite. Sylvite, a mixture of sylvinite and halite, is the typical ore mined in the Carlsbad Potash District (CPD) in southeastern New Mexico. Geologically, all of the ore zones occur in the Permian Age. Detailed descriptions of these ore zones can be found in the *Generalized Columnar Section and Radioactivity Log*, Carlsbad Potash District by C. L. Jones, C. G. Bowles, and A. E. Disbrow (1954). Also, in 1995 the New Mexico Bureau of Mines (now Geology) and Mineral Resources performed an evaluation of the potash resources in the vicinity of the WLWA.

The CPD is near the northeast border of the Delaware Basin with soluble potash primarily occurring in Eddy and Lea Counties, which contain the only potash mines in the state. The Known Potash Leasing Area (KPLA) consists of that part of the CPD where federal and state lands under BLM management require competitive bidding for

mineral leases. The WIPP site is on the southeast edge of the KPLA in sections 15 through 22 and 27 through 34 of Township 22 South and Range 31 East.

In 2004, there were two active potash mining and refining operations in the area: Mosaic and Intrepid Potash New Mexico LLC. As of 2016, they continue to be the only active potash mines in the area.

### **7.0.1.3. Caliche**

Caliche, as the term is used in the Southwestern United States, refers to a buff, white, or reddish brown calcareous material of secondary accumulation, commonly found in layers on or near the surface of soils in the arid and semiarid regions. "Calcrete," "duricrust," and "hardpan" are other terms used to describe caliche in its various forms.

Caliche is considered a locally significant construction material due to its compaction properties. Deposits of caliche are frequently used for the construction of well pads, surfacing roads, and as a compacted base-course for buildings and paved roads. Although the caliche profile for the Los Medaños does not compare with the well-developed Llano Estacado profile, several pits which produce a high-quality material are located in the vicinity. Access to this caliche, for use by WIPP, is made available by way of Free Use Permits granted to the DOE by the BLM.

Several historic extraction pits are located within the WLWA. Historic pits within the WLWA are now the property of the DOE and will be managed in accordance with Chapter 9 of this plan.

Inasmuch as the LWA prohibits surface or subsurface mining unrelated to WIPP within the WLWA, supplementary conditions pertaining to caliche or potash extraction described within this document are not relevant. Accordingly, text within this chapter will pertain to oil and gas exploration and production only.

## **7.1 OBJECTIVES**

The objective of the DOE with respect to mining and oil and gas production is to ensure that the development of mineral leases adjacent to the WLWA does not affect the integrity of the disposal system.

## **7.2 PLANNED ACTIONS**

### **7.2.1 Provisions**

In accordance with Section 4(b)(5) of the LWA, no surface or subsurface mining unrelated to the WIPP Project, or oil or gas production, including slant drilling from outside the boundaries of the WLWA, are permitted at any time (including after decommissioning) on lands on or under the WLWA, with two exceptions. These exceptions are two 320-acre leases within the WLWA, below 6,000 feet, which are

leased for oil and gas development (Federal Oil and Gas Leases NM 02953 and NM 02953C). Both tracts, located in T.22 S., R. 31 E., Section 31, prohibit drilling within the first 6,000 feet of the surface. In accordance with the LWA, existing rights under these leases will not be affected since the Administrator of the EPA has determined that continued activities under these leases will not affect the ability of the DOE to comply with EPA disposal standards for transuranic wastes.

### **7.2.2 Surveillance**

Surveillance of drilling and mining activity within one mile of the WLWA boundary will be conducted by the DOE in coordination and cooperation with the BLM and/or the State of New Mexico in accordance with the MOU (Appendix C) and the associated SOW (Appendix D). The BLM and state agencies have agreed to forward Applications for Permit to Drill (APDs) and mining and reclamation plans to the DOE for review and comment in determining issuance of any drilling or mining permit within one mile of the WLWA. In addition to those commitments contained in the MOU and SOW, the DOE shall conduct perimeter surveillance to verify proposed drill locations in accordance with APD submittals and evaluate potential encroachment of ancillary activities associated with producing wells and mines.

### **7.2.3 U.S. Department of Energy Response to Mining Plans and Applications for Permit to Drill**

As directed by the existing MOU between the BLM and the DOE, WIPP personnel will receive APDs and mining reclamation plans from the BLM regarding activities proposed to be conducted within one mile of the WIPP site boundary. The DOE will field-verify the proposed locations and respond to the BLM within 15 days with DOE stipulations for approval. At the recommendation of the DOE (and in accordance with existing DOE/BLM MOUs), companies that file for proposed drilling activities (surface or subsurface) within 330 feet of the WLWA boundary may be required to submit a daily set of drilling logs or "suite" of logs for verification, by the DOE, that the horizontal displacement of the well at no time encroaches on the WLWA. In the event of encroachment, a trespass condition will exist. The company will be required to cease drilling activities immediately, and plug and seal the region of trespass in accordance with all applicable laws and regulations that govern drilling activities, and to the satisfaction of the DOE, prior to proceeding with completion of the well.

Transmittal of proposed resource extraction applications or mining plans to the DOE by the BLM and/or the appropriate state agencies is formalized through MOUs or similar agreements.

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## **CHAPTER 8 LANDS AND REALTY**

### **8.0 INTRODUCTION**

This chapter identifies land use management responsibilities of the DOE as they pertain to general realty issues, access corridors, rights-of-way, and avoidance areas that affect, but are not solely contained within the WLWA.

#### **8.0.1 Lands and Realty within the Affected Environment**

There are additional properties outlying the WLWA boundary, used in the operation of the WIPP facility, that are managed under the right-of-way reservations granted (typically) by BLM or the State of New Mexico. Groundwater monitoring well pads, their access roads, and environmental monitoring sampling stations predominate this property category of lands that the WIPP is authorized to use.

Access to the WLWA is from U.S. Highway 62/180, 13 miles to the north (North Access Road), and from NM State Highway 128, four miles to the south (South Access Road). A rail spur connected the WIPP site with the Burlington Northern Santa Fe (BNSF) railroad near the Nash Draw mine six miles southwest of the WIPP site (Figure 8.1). Rails at the WLWA North Access Road intersection have been removed and the rail spur currently is not in service.

The WLWA may be designated as right-of-way corridors or as avoidance areas to protect environmental and social values while optimizing economic efficiency for utilities and transportation facilities. The LUC will identify which lands will be avoided when routing future rights-of-way in order to protect sensitive resource values, and which areas may be designated as corridors. Major rights-of-way used in the operation of the WIPP facility, in addition to those that existed prior to land withdrawal, were acquired from the BLM. Existing rights-of-way are commonly associated with linear facility development (e.g., power lines, gas lines, water lines).

### **8.1 OBJECTIVES**

The objective of the DOE is to ensure proper management and maintenance of the WLWA and realty (e.g., rights-of-way and access routes), in addition to providing safe and adequate access to the WIPP facility while protecting the security of WIPP facility personnel, lands and realty (e.g., facilities). The CBFO will consult with BLM and the State of New Mexico, as appropriate, on future rights-of-way actions needed outside the WLWA.

## 8.2 PLANNED ACTIONS

### 8.2.1 Proposals for New Access Routes, Easements, and Rights-of-Way

The DOE will examine, in accordance with Chapter 2 of this document, proposals from land users (WIPP projects and non-WIPP projects) that impact lands/realty under the jurisdiction of the DOE to include new access routes, easements, and rights-of-way. A review of the proposed actions is required to determine if access will cause significant adverse impacts to other resources or impact regulatory permits or requirements. In addition, the DOE will:

1. Review and comment on applications or proposals received from the BLM for access routes, easements, and rights-of-way affecting, but not solely contained within, the WLWA.
2. Forward to the New Mexico EMNRD within 30 days of receipt from or submittal to the DOI/BLM:
  - A. Applications or proposals for any access routes, easements, and rights-of-way affecting, but not solely contained within, the WLWA; and
  - B. Any DOE comments developed on such applications or proposals.

### 8.2.2 Utility Development

In general, the WLWA is available for utility and transportation facility development; however, applicants will be encouraged to locate any new facilities within existing right-of-way corridors. Deviations from existing corridors may be permitted on the basis of the need of the proposal and lack of conflicts with other resource values and uses.

### 8.2.3 Noxious Weed Management

*Peganum harmala*, an invasive plant species commonly known as African rue, has been encountered on the WLWA and several WIPP right-of-ways. African rue is also commonly seen at oil and gas sites near the WLWA. These oil and gas well sites and access roads, within one mile of the WLWA boundary, and WIPP right-of-ways, are monitored for noxious weeds and other activities because of their close proximity to the WLWA.

The African rue plant is established as toxic to humans and livestock if ingested. African rue has been selected by the New Mexico Department of Agriculture to be targeted for control or eradication pursuant to the *Noxious Weed Management Act of 1998* and listed under class B species on the New Mexico Noxious Weed List. The list of weeds is subdivided into class A, B, and C and a watch list, which is indicative of management priorities. Class A weeds are given the highest priority. Class B species are limited to portions of the state and management in areas with severe infestations should be

designed to contain the infestation and stop any further spread. All weeds on the New Mexico Noxious Weed List have the potential to negatively impact the state's environment or economy.

Executive Orders 13112, *Invasive Species*, and 13751, *Safeguarding the Nation from the Impacts of Invasive Species*, are orders issued by United States Presidents and directed towards officers and agencies of the U.S. Federal Government. Executive orders have the full force of law. These orders were issued to protect the assets and security of the U.S. Executive Orders 13112 and 13751 call upon executive departments and agencies to take steps "to prevent the introduction, establishment, and spread of invasive species, as well as to eradicate and control populations of invasive species that are established." Further clarified in Executive Order 13751, these decrees were established to ensure the faithful execution of several laws of the U.S., such as the National Environmental Policy Act of 1969 and other pertinent statutes.

CBFO, along with multiple agencies, signed a MOU to support a program "to prevent introduction, control the spread of, and eradicate noxious plants through the coordinated efforts in Eddy County." The projects established under the MOU are administered by the Carlsbad Soil and Water Conservation District under the working group known as the Eddy County Coordinated Weed Management Area (CWMA). The purpose of the MOU is to "coordinate the management of noxious plants on public and private lands in Eddy County, New Mexico; to coordinate, encourage and formalize the cooperative relationship necessary for the effective management of noxious plants including implementation of an Integrated Pest Management System." The Eddy County CWMA identifies target weeds and provides updates on management strategies. Funding for the Eddy County CWMA is provided through many sources, including CBFO.

An additional obligation to manage noxious weeds originates from right-of-ways granted to CBFO for groundwater monitoring well sites and access roads. Standard stipulations typically include requirements for the lessee to keep areas free of noxious plant species, as specified in the right-of-way agreement. Management decisions for noxious weeds on right-of-ways granted by the NMSLO are influenced by New Mexico statutes (e.g., *Noxious Weed Management Act of 1998*).

In order to effectively manage invasive species, advocate improved ecosystem health, and comply with federal and state regulations, MOU agreements, and right-of-way stipulations, management and control measures will be employed at WIPP for noxious weeds. The most effective, economical, and ecologically sound approach for control of invasive species is prevention. Early detection and rapid response of problem areas is also an effective control method. The LUC will identify noxious weed problem areas and take appropriate action to prevent the spread of noxious weeds. The LUC will report detections to the Eddy County CWMA. For lands within the WLWA and WIPP right-of-ways, the LUC will also implement current management strategies recommended for the species. Typically, the use of herbicides is an effective means for control but other measures can and will be utilized for an integrated pest management strategy with a goal to minimize the use of chemical herbicides. In the event herbicides

are used, their use will be in compliance with all state and federal laws and regulations. Recommended control measures are species-specific and area-specific and may evolve over time. The LUC will research the best management and control strategies and oversee or apply these for obtaining the most effective control.

The following measures will be used within one mile of the WLWA boundary:

- Monitor oil and gas locations and access roads

The following measures (not all-inclusive and not in any specific order) may be used on the WLWA and WIPP right-of-ways for control of noxious weeds:

- Monitor access roads and right-of-ways
- Monitor disturbed areas
- Monitor for livestock overgrazing and report to BLM for mitigation
- Avoid spreading noxious weed seeds when mowing
- Ensure sources for fill dirt/caliche do not have noxious weeds
- Pre-construction/disturbance survey for noxious weeds
- Post-construction/disturbance monitoring for noxious weeds
- Minimize size of disturbed areas and reseed as feasible using weed-free seed mix
- Timely application of herbicides with follow-up treatment as required
- Mechanical control – methods that physically disrupt plant growth
- Biological control – use of organisms to disrupt plant growth
- Monitor for any illegal off-road activities
- Reclaim roads and disturbed areas that are no longer needed for WIPP operations
- Restrict access to roads and/or problem areas
- Avoid walking and/or driving through infested areas
- Evaluate LURs for the potential of spreading noxious weeds and add stipulations as needed
- Clean vehicles and equipment used at a location with noxious weeds
- If work is performed in infested areas, schedule work to reduce spread of seeds
- Perform jobs in weed-free areas before working in infested areas
- Perform noxious weed surveys concurrently with biological surveys
- Promote noxious weed awareness and reporting

The LUC will actively manage the African rue found on the WLWA and WIPP right-of-ways and incorporate aforementioned measures to prevent new infestations and spread of current infestations. In accordance with MOU agreements, areas where noxious weeds are found will be reported.

#### **8.2.4 Avoidance Areas**

Right-of-way avoidance areas are defined as areas where future rights-of-way may be considered only when no feasible alternative route or designated right-of-way corridor is available. Terms and conditions of right-of-way grants will depend on the sensitivity of the affected resources and existing laws and regulations established as protective measures for the area in question.

#### **8.2.5 Visual Resource Management**

The DOE implements the BLM's Visual Contrast Rating System to determine the degree to which any proposed projects or other activities within the WLWA would affect the visual quality of the landscape. Using this system, any anticipated unacceptable visual impacts can be mitigated during the planning and design stage.

The DOE aspires to conduct all WIPP-related activities in accordance with visual resource objectives. Proposed activities and projects will be evaluated for consistency with existing laws and best management practices regarding scenic quality. The impacts of each action will be evaluated by WIPP and affected stakeholders, via ERs, EAs, and/or visual inspections of the proposed site prior to implementation. The ER will analyze the project significance, the visual sensitivity of the affected area, and the project impacts. Stipulations will be attached as appropriate to ensure compatibility of projects with management objectives for visual resources. Painting requirements will be implemented for surface facilities in accordance with existing guidelines (e.g., BLM painting requirements). Activities may be modified, at the discretion of the LUC, to blend with the native landscape.

Prior to commencement of work, contractors and/or subcontractors will be briefed on compliance guidelines for proper land management. Work performed will be consistent with the WIPP environmental management system (EMS) principles, which provide the framework for implementing the commitments of the WIPP Environmental Policy Statement. Inspections revealing poor housekeeping (e.g., excessive trash and debris in and around a work site), or projects that compromise the visual integrity of the surrounding area, will result in the immediate suspension of the project until such time as the problem is remediated.

Access to aesthetic visual resources of the WIPP site (e.g., bird watching, wildlife photography, wildflower photography) will be encouraged and supported by cognizant WIPP professionals as time and funding allow.

#### **8.2.6 Access Permits**

The DOE will not grant permits for access when reasonable access already exists. Exceptions may be considered by the LUC only if the requestor presents, to the satisfaction of the LUC, a compelling need. [Note: See Chapter 2, "Environmental Compliance," for permitting protocol.]

### **8.2.7 Off-Highway Motor Vehicles**

Management of roads and trails within the WLWA is conducted under requisite restrictions. This means that recreational motor vehicle use can be limited or prohibited at certain times, in certain areas, and/or for certain specified purposes to protect the health and safety of the public, environmental quality of the area, or for the common defense and security of the site. These restrictions generally apply to the following:

- Numbers of vehicles
- Types of vehicles
- Time or season of use
- Permitted or licensed vehicle use only
- Use of existing roads and/or trails
- Vehicle use in designated areas (roads/trails)
- Other restrictions as deemed necessary

The use of OHVs within the WLWA will be limited to existing roads. Exceptions are those projects which are in conjunction with WIPP-related activities and have received proper authorization from the LUC. Trails and primitive roads will be posted with informational signs that clearly communicate restrictions regarding the operation of OHVs. The unauthorized use of OHVs traveling off designated roads, or in posted areas within the WLWA, will be regarded as criminal trespass. Violators are subject to criminal prosecution in accordance with applicable laws and regulations governing property protection.

### **8.2.8 Advertising**

No commercial advertising signs will be allowed on WIPP lands. Violations may result in prosecution of the violator. Directional and road signs must be authorized by the DOE and must conform to DOE specifications and configurations. Any other signs must be approved through the LUR process.

### **8.2.9 Rights-of-Way, Rights-of-Way Corridors, and Realty Components**

Realty components originally constructed, currently maintained, and/or utilized in the operation of WIPP (see Figure 8.1 for major features), under custodial right-of-way reservations include, but are not limited to, the following:

#### **8.2.9.1 North Access Road**

The North Access Road is a private road granted, for perpetuity, under right-of-way reservation NM 55676 on August 24, 1983. The North Access Road is approximately 13 miles in length with a total easement width of 170 feet (includes 50ft easement for City of Carlsbad water line). Except for emergencies and for those projects which are in conjunction with WIPP-related activities and have received proper authorization from the LUC, WIPP Security must be contacted at 575-234-8324 or 575-234-8407 before

parking and leaving vehicles in this easement. This road is restricted for use by the personnel, agents, licensees, and contractors of the DOE on official business related to the WIPP Project, or to personnel, permittees, licensees, or lessees of the BLM. Signs are placed and will be maintained at the turnout of Highway 62/180 stating the restrictions on access. Multiple-use access for the North Access Road will be allowed unless it is determined that access by industry or the general public represents a significant safety risk to WIPP personnel or to the public. Upon determination, general access of the North Access Road may be restricted at the WLWA boundary in accordance with DOE Manual 470.4-2, *Physical Protection*. Persons desiring access to NM State Highway 128 should use the public roads immediately to the east. Right-of-way NM 55676 was amended on April 22, 1988, to facilitate the construction of livestock fencing along either side of the subject road.

A future bypass road will connect the North Access Road with the South Access Road as seen in Figure 8.1.

#### **8.2.9.2 South Access Road**

The South Access Road, formerly Eddy County Road 802, is a private road granted under right-of-way reservation NM 123703. Terms for the right-of-way expire on December 31, 2039, and terms are subject to renewal. The South Access Road is approximately 4 miles in length with an easement width of 140 feet. On January 27, 2010, Eddy County relinquished right-of-way NM 46130 that was held by the County for Eddy County Road 802. This road right-of-way is now held by the DOE. Except for emergencies and for those projects which are in conjunction with WIPP-related activities and have received proper authorization from the LUC, WIPP Security must be contacted at 575-234-8324, or 575-234-8407, before parking and leaving vehicles in this easement. Multiple-use access for the South Access Road will be allowed unless it is determined that access by industry or the general public represents a significant safety risk to WIPP personnel or to the public. Upon determination, general access of the South Access Road may be restricted at the WLWA boundary in accordance with DOE Manual 470.4-2, *Physical Protection*.

A future bypass road will connect the South Access Road with the North Access Road as seen in Figure 8.1.

#### **8.2.9.3 Water Service Pipeline**

Water service for the WIPP facility is furnished by a City of Carlsbad owned waterline that originates 31 miles north of the facility and accesses the WLWA under right-of-way grant NM53809, issued to the city by the BLM. The volume capacity of the waterline is such that it meets the water requirements for the operation of the WIPP facility. As specified in a bill of sale transferring this waterline from the DOE to the City of Carlsbad in June of 2009, the City of Carlsbad will provide up to 6.6 million gallons of water per year to the WIPP facility free of charge for the next 100 years. Maintenance and operation of the waterline is the responsibility of the City of Carlsbad. The City of

Carlsbad has been issued a right-of-entry permit (permit #REEMCBCDOE-0-09-0900) for the purpose of inspecting, maintaining, and repairing the waterline within the WLWA.

#### **8.2.9.4 WIPP Rail Spur**

A rail spur connected the WIPP site with the BNSF railroad near the former Nash Draw Mine located six miles southwest of the site. This section of rail was constructed under the auspices of right-of-way reservation NM 55699 granted on September 27, 1983, is approximately five miles in length and consists of an adjacent frontage road in addition to the rail. Both rail spur and service road were constructed on an easement width of 150 feet. The rail spur is currently not in service.

#### **8.2.9.5 Transmission Line**

The WIPP facility is serviced by an overhead electrical transmission line that traverses the WLWA for two miles to the north (right-of-way reservation NM 043203) and an additional two miles to the south (right-of-way reservation NM 91163). The southern terminal of the overhead electrical transmission line is approximately five miles south of the WLWA at a location identified as Xcel Energy's Sand Dune Substation. Access to the power line easement within the WLWA is restricted to WIPP facility and Xcel authorized personnel. Unauthorized access to the easement is prohibited and will result in DOE response commensurate with property protection procedures (see Chapter 10, Security).

#### **8.2.9.6 High-Pressure Gas Line**

A 12.75-inch, high-pressure, non-regulated natural gas gathering pipeline with a corresponding easement road traverses portions of Sections 15, 16, 17, 19, and 20 of the WLWA. Maintenance and operation of the pipeline and the easement road are the proprietary responsibility of Enterprise Products Partners L.P. (the owner/operator of the line) under right-of-way reservation LC 060762. WIPP facility personnel periodically use the easement road for access to the east and, therefore, will conduct maintenance activities (as needed and in accordance with WIPP facility maintenance protocol) (see Chapter 13, Maintenance and Work Control) to the road in order to provide adequate and safe access for WIPP facility vehicles (e.g., emergency response vehicles).

#### **8.2.9.7 Sewage Treatment System and H-19 Evaporation Pond**

The WIPP facility sewage treatment system is a zero-discharge facility consisting of two primary settling lagoons, two polishing lagoons, and three effluent evaporation lagoons plus an additional unconnected evaporation pond. Each impoundment in the system is lined with synthetic liners, 60 mil liners in the settling and polishing lagoons, and 30 mil liners in the evaporation lagoons. The sewage treatment system is designed and permitted to receive up to 23,000 gallons per day of domestic sewage and nonhazardous industrial wastewater. This system is permitted for the disposal of up to 50,000 gallons per day of nonhazardous wastewaters in Effluent Lagoon B: Effluent

Lagoon C is also permitted for the disposal of up to 50,000 gallons per day of nonhazardous wastewaters.

The H-19 Evaporation Pond is a synthetically lined evaporation pond used for the evaporation of nonhazardous water generated from groundwater monitoring activities, mine dewatering activities, and condensation from mine ventilation exhaust. The pond is permitted to receive up to 50,000 gallons per day of nonhazardous brine, purge waters, and miscellaneous nonhazardous wastewaters. The H-19 Evaporation Pond contains synthetic liner (36 mil thickness) and is located southeast of the Off-Limits Area (see Figure 10.1). Even so, the H-19 Evaporation Pond is fenced and posted with DOE "no trespassing" signs.

The WIPP facility sewage treatment system and the H-19 Evaporation Pond are operated in accordance with the New Mexico Discharge Permit (DP-831) and the New Mexico Water Quality Control Regulations (20.6.2 New Mexico Administrative Code, Ground and Surface Water Protection). These requirements provide guidelines for discharge to surface water and discharge that could impact groundwater quality.

#### **8.2.9.8 Groundwater Surveillance Wells**

WIPP facility personnel monitor approximately 65 groundwater monitoring wells and their corresponding locations on or in the vicinity of the WLWA. Well depths range from approximately 225 feet to 4,325 feet below ground surface. These respective wells are used to conduct surveillance of groundwater surface elevation (groundwater level) data. In addition, 6 of the 65 wells contribute water characterization data to the Detection Monitoring Program at the WIPP facility. These evaluations are used to determine the physical and chemical characteristics of groundwater and maintain surveillance of groundwater surface elevation surrounding the WIPP facility, both before and throughout the operational lifetime of the facility. Well locations beyond the WIPP site boundary were constructed and are maintained under the guidelines of existing right-of-way reservations for each respective well. Well locations are periodically inspected, the existing well pads examined, and any nonconformities identified, reported, and dealt with accordingly.

In the event a well is considered unnecessary (e.g., no longer needed for groundwater surveillance or is found to be losing casing integrity), the well will be plugged and sealed in compliance with state and federal regulations in effect at the time. This procedure will apply as each DOE well (e.g., a well within the purview of the DOE or a well the DOE has assumed responsibility for) becomes abandoned until such time that all unnecessary or failing wells are plugged and sealed. Well pads and associated roads will be ripped, leveled, and reseeded in accordance with provisions contained in pertinent permits, agreements, right-of-way stipulations, and reclamation requirements identified in this document.

### 8.2.9.9 Salt Tailings Stockpiles

Salt from underground mining operations between the mid-1980s and May 2004 is stored in the 18.8-acre Salt Cell 1 just north of the surface facilities. In 2004, it was recontoured to 3:1 slopes and covered with a cap consisting of a synthetic liner and soil cover to prevent the infiltration of storm water into the salt pile. The associated evaporation pond (Salt Storage Pond 1, SSP1), which receives runoff from Salt Cell 1, was also lined with a 60-mil synthetic liner.

Salt Cells 2 and 3, lined with a 60-mil synthetic liner, were constructed north of Salt Cell 1. This area drains to a double-lined evaporation pond (Salt Storage Pond 2, SSP-2), with a leak detection sump to contain and evaporate salt contact storm water runoff. The area may be expanded as needed to provide sufficient capacity for the storage of the 2.1 million tons of salt anticipated to be mined during the life of the project. A second evaporation pond (Salt Storage Pond 3, SSP-3) was placed into operation in 2010.

Salt from the salt storage areas that is not needed for decommissioning will be disposed of under sections 2 and 3 of the Act of July 31, 1947 (30 U.S.C. 602, 603; commonly referred to as the "Materials Act of 1947"). After disposal of the salt, the salt storage areas will be reclaimed in accordance with stipulations for reclamation contained within this document (see Chapter 9, Reclamation/Environmental Restoration).

There is also an inactive storage pile containing roughly 162,000 cubic yards within the DOE EUA, east of the PPA fence. This pile, referred to as the Site and Preliminary Design Validation (SPDV) pile, resulted from accumulation of material(s) extracted during the drilling of one 12-foot diameter and one 6-foot diameter shaft to the repository depth of 2,150 feet and the initial excavations underground.

In 1999, the SPDV salt storage pile was reclaimed. The site was recontoured and covered with a geosynthetic liner. Three feet of rooting medium was placed over the liner, and ½-inch crushed rock was disked into the upper six inches to deter erosion. The pile was seeded with native plants compatible with sandy soils possessing physical properties (e.g., root structure, drought tolerance) to mitigate erosion.

Additionally, three storm water detention ponds that receive runoff from the WIPP facility and parking lot area were lined with 60mil synthetic liners to contain and evaporate storm water runoff. This construction work was completed in 2005.

### 8.2.9.10 Gigabit Circuit

Windstream Telecom, Carlsbad's local exchange carrier, installed the Gigabit Circuit in 2005. The Gigabit Circuit increases network bandwidth among the Skeen-Whitlock Building and the WIPP facility, and the Cascades Office Facility. The project included installation of 13 miles of fiber optic cable between U.S. Highway 62-180 (Hobbs Highway) and the WIPP site. The cable is located along the east side of the North Access Road within the BLM Right of Way Grant NM – 113339 with Valor Telecommunications as the holder. Sufficient fiber optic cable was installed for future utilization so that the need for re-excavation will be avoided.

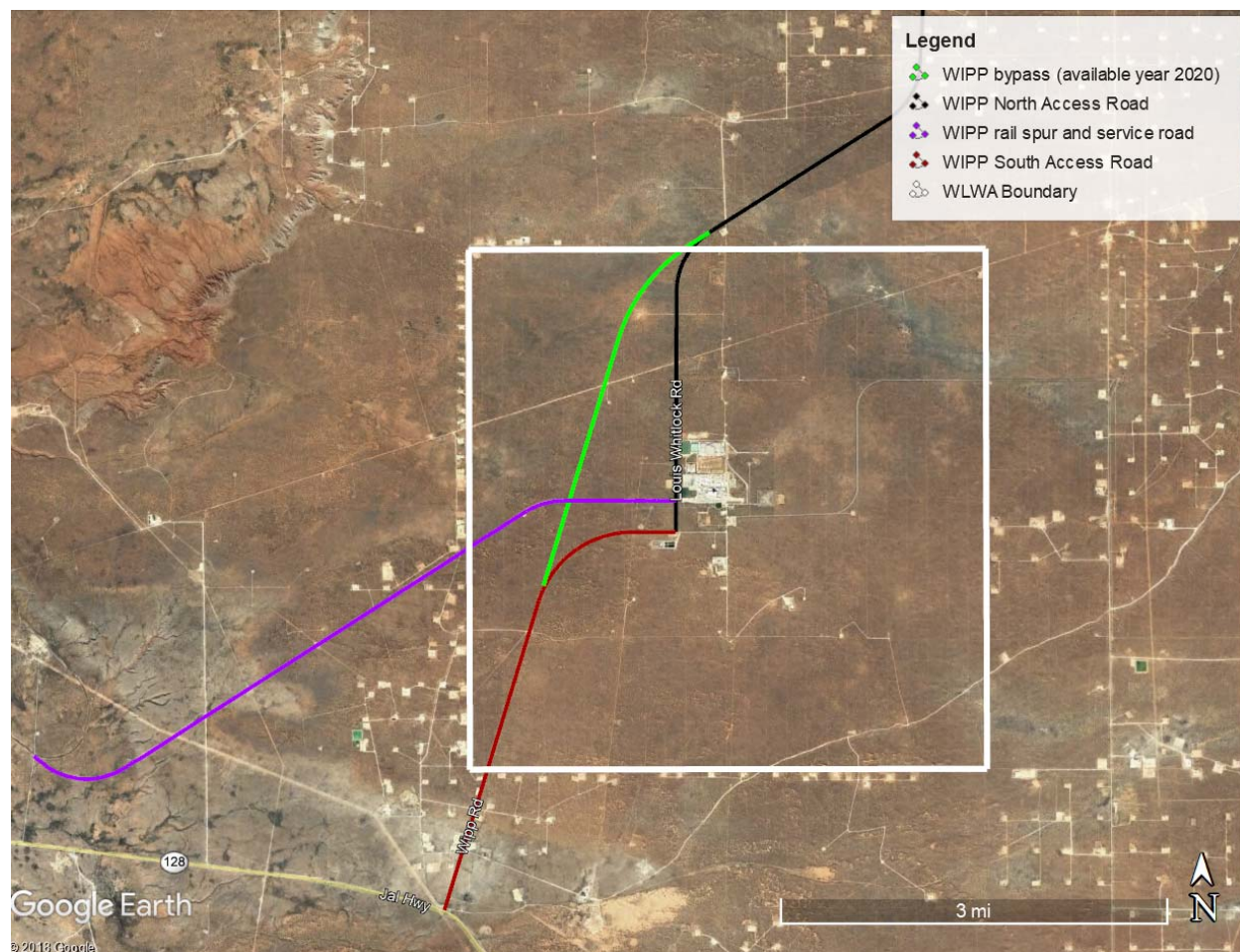


Figure 8.1. Access and Rights-of-Way for the WIPP Site

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## **CHAPTER 9**

### **RECLAMATION/ENVIRONMENTAL RESTORATION**

#### **9.0 INTRODUCTION**

This chapter identifies DOE plans to enhance and restore areas affected by WIPP activities, to include areas disturbed prior to WIPP activities that were accepted as part of the land transfer from the DOI to the DOE. This chapter is designed to be revised as needed to incorporate new techniques for reclamation and new plans which WIPP may incorporate in the future as applicable, unless expressly limited by law.

##### **9.0.1 Reclamation in the Affected Environment**

WIPP reclamation activities will be conducted in accordance with DOE Order 458.1, "Radiation Protection of the Public and the Environment"; DOE Order 436.1, Departmental Sustainability; the DOE Organization Act (42 U.S.C. 7112); the Federal Land Policy and Management Act of 1976 (P.L. 94-579); the SEIS-II (DOE/EIS-0026-3-2, September 1997); the SEIS-I (DOE/EIS-0026-FS, January 1990); the FEIS (DOE/EIS-0026); and applicable reclamation requirements by federal laws and regulations, Executive Orders, MOUs, DOE Orders, permits, certifications, and state and local laws. These commitments include any unforeseeable future mandates or amendments to existing regulations.

In accordance with this document, DOE will implement a contemporary reclamation program and corresponding long-range reclamation plan. As locations are identified for reclamation, WIPP personnel will reclaim these areas. BLM-approved seed mixes used will reflect those species indigenous to the vicinity and priority will be given to those plant species which are conducive to soil stabilization, wildlife, and livestock needs.

Reclamation activities will be designed to reduce soil erosion, increase the rate of plant colonization and succession, and provide habitat for wildlife in disturbed areas. In addition, reclamation will ultimately serve to mitigate the effects of WIPP-related activities on affected plant and animal communities.

#### **9.1 OBJECTIVES**

The objective of the DOE reclamation program is to return lands used in the operation of the WIPP facility that are no longer needed for WIPP operations to a stable ecological condition. Plant species and topography of the reclaimed area will be conducive to the functioning of the surrounding ecosystem.

#### **9.2 PLANNED ACTIONS**

The DOE will be responsible for reclaiming lands disturbed by DOE-funded activities. Reclamation for actions by outside agencies or organizations, completed on DOE property, or crossing DOE property, is the responsibility of the outside agency or

organization. All reclamation activities must be completed in accordance with the following pertinent guidelines. Reclamation activities will be specified in land use permits when appropriate.

### **9.2.1 Timeliness of Reclamation Projects**

Reclamation activities will be conducted as soon as is reasonably possible after the determination is made that an area is to be decommissioned. Scheduling of reclamation activities is done with mutual concurrence of the LUC and affected parties as applicable.

### **9.2.2 Review of Reclamation Activities**

The DOE will seek review of proposed reclamation activities, in advance, by the BLM and appropriate state agencies to ensure compliance with applicable DOE reclamation commitments. All proposed WIPP reclamation activities will be reviewed and approved by the WIPP LUC in consultation with cognizant DOE personnel and BLM.

### **9.2.3 Fencing of Reclamation Sites**

Reclamation activities include the fencing of the project with four-strand fence with smooth top and bottom wires to deter grazing when livestock are present. Wire spacing will be approximately 16, 22, 28, and 38 inches above ground. The fence will remain in place until the determination is made by the LUC that plant succession has progressed to a state of ecological stability suitable to sustain livestock access.

### **9.2.4 Reclamation Protocol**

Reclamation activities will incorporate low-impact, shallow-tillage protocol as often as is reasonably possible. This reclamation technique is preferred, as it helps to mitigate the loss of ground moisture critical to seed germination.

### **9.2.5 Prioritization of Reclamation Sites**

The LUC will identify and prioritize sites for reclamation (e.g., pads, roads, pits). Projects and/or facilities authorized by previous commitments (e.g., MOUs, cooperative agreements) will be managed by the LUC to project finalization in accordance with DOE commitments.

### **9.2.6 Seed Mixes**

All reclamation areas will be sown with BLM-prescribed seed mixtures. These mixes will reflect plant species indigenous to the area and have specific requirements for purity to preclude the introduction of noxious weeds.

### **9.2.7 Reseeding of Sites**

Reclamation sites with plantings that do not germinate within a reasonable time frame, to be determined by the LUC, will be reseeded.

### **9.2.8 Reclamation and Cultural Resources**

Reclamation activities will incorporate mitigation plans to address any potential adverse impacts to cultural resources imposed directly by reclamation activities, or by ancillary activities associated with reclamation projects.

### **9.2.9 Decommissioning of the Waste Isolation Pilot Plant**

Once decommissioning of the WIPP facility begins, surface structures are to be abandoned, decontaminated, and removed (including support facilities such as power lines). WIPP facilities will be decommissioned and closed in accordance with applicable laws, rules, permits, certifications, and regulations in effect at the time.

Decommissioning and subsequent surface reclamation activities will be conducted in accordance with the WIPP Permit, or other applicable regulations and requirements in effect at the time. The DOE will also perform postclosure monitoring as required by the Resource Conservation and Recovery Act (RCRA) as well as to satisfy requirements to provide both passive and active institutional controls after decommissioning.

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## CHAPTER 10 SECURITY

### 10.0 INTRODUCTION

**The security force for WIPP consists of a staff of Security Police Officers, and support personnel on duty 24 hours a day.** The WIPP security force maintains field vehicles, which are used several times daily for perimeter inspections.

### 10.1 OBJECTIVES

Security will be maintained within the PPA, EUA, and Off-Limits area only. These areas are posted against trespass under the authority of Section 229 of the Atomic Energy Act of 1954, 42 U.S.C. 2278a, and pursuant to the regulations set forth in 10 CFR Part 860 and DOE Order 473.3. Security personnel will evaluate requests for services within the WLWA and make determinations based on DOE direction, manpower, and funding.

### 10.2 PLANNED ACTIONS

#### 10.2.1 Property Protection Area

The interior core area of the facility (Figure 10.1) is a land area of approximately 34 surface acres surrounded by a chain link fence. This area is designated as the "PPA." All access control features are maintained with uniformed security personnel on duty 24 hours a day.

#### 10.2.2 Exclusive Use Area

The EUA (Figure 10.1) is comprised of approximately 293 acres within Sections 20, 21, 28, and 29 of Township 22 South, Range 31 East. It is surrounded by barbed wire fence and is restricted exclusively for the use of the DOE, its contractors, and subcontractors in support of the project. In addition, this area is defined as the point of closest public access, for the purposes of performing accident consequence assessments for the general public, in the WIPP Documented Safety Analysis (DSA). This area is marked by DOE "No Trespassing" signs and will be patrolled by WIPP security personnel to detect unauthorized activities or uses. A detailed description of this area can be found on engineering drawing 24-C-007-W3.

An additional area west of the WIPP parking lot and North Access Road will be established for construction of a new mine shaft. The approximate area as shown in Figure 10.1 (red-shaded area), will have the same restrictions as established above for the current EUA. This area will be ultimately added to the EUA and the referenced drawing after installation of the fence and acquisition of survey points.

Additional areas restricted exclusively for the use of the DOE, its contractors, and subcontractors include the H-19 Evaporation Pond near the southeast corner of the Off

Limits Area and a rally point/equipment staging area near the southwest corner of the WLWA.

### **10.2.3 Off Limits Area**

The Off Limits Area (Figure 10.1) is a sector comprised of 1453.9 acres, or 2.2 square miles (more or less), within Sections 20, 21, 28, and 29 of Township 22 South, Range 31 East. This sector is managed as an area wherein unauthorized entry and the unauthorized introduction of weapons and/or dangerous materials (as provided in 10 CFR §§860.3 and 860.4) is prohibited. Pertinent prohibitions and subsequent penalties (10 CFR §860.5) are posted at intervals along the perimeter as directed in 10 CFR §860.6. Grazing and public thoroughfare continue until such time that these activities present a threat to the security, safety, and/or environmental quality of WIPP. This sector will be patrolled by WIPP security personnel to detect unauthorized activity or use. While the subject sector is posted, the area is not entirely fenced. For a detailed description of the area included in the Off Limits Area, refer to Federal Register Document Number 94-18917.

### **10.2.4 Waste Isolation Pilot Plant Land Withdrawal Area**

The WIPP site boundary distinguishes the perimeter of the 16 section (or 10,240 acres) WLWA. This tract includes properties outlying the PPA, the EUA, and the Off Limits Area. This sector is designated at points of ingress and egress, as a Multiple Land Use Area, and is managed accordingly. Certain restrictions however do apply, as posted at area access points and discussed in Chapter 6 of this document.

In May 2016, increased safety notifications for persons within the WLWA were implemented. As a result, signs were posted at the 20 land vehicle entry points to the WLWA, which read as follows:

“Recreational land users and persons conducting work within this area **MUST** check in/out with the WIPP Site at 575-234-7585,” followed by the corollary notification in Spanish, “Personas que usarán esta área para recreación o para trabajar, **DEBEN** registrarse a la hora de entrar y salir de le área llamando a WIPP a 575-234-7585.”

This requirement applies to all persons, including WIPP facility personnel, but with exceptions for grazing lessees, who work or recreate outside the PPA within the WLWA.

### **10.2.5 Special Management Areas**

There are sectors used in the operation of WIPP (e.g., reclamation sites, well pads, roads) that are identified as SMAs. The SMA designation is due to values, resources, and/or circumstances that meet criteria for protection and management under special management designations. Unique resources of value that are in danger of being lost or damaged, sectors wherein ongoing construction is occurring, fragile plant and/or

animal communities, sites of archaeological significance, sectors containing imminent risks (safety hazards), or a sector(s) that may receive an unanticipated elevated security status would be suitable for designation as a SMA. Accordingly, the subject sector would receive special management emphasis under this stipulation. SMAs will be posted against trespass and shall be safeguarded commensurately with applicable laws.

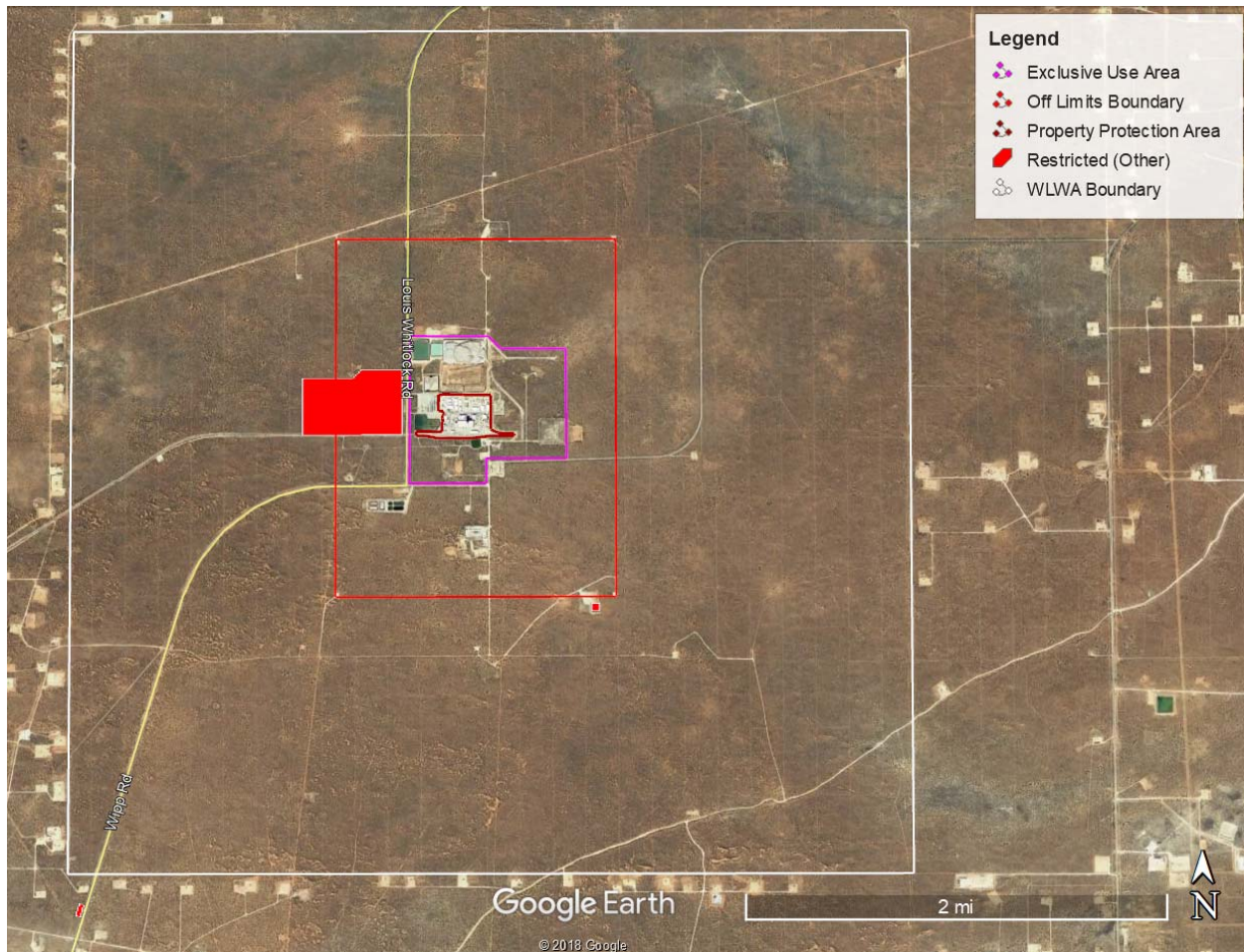


Figure 10.1. Security Zones within and near the WIPP Site Boundary

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## CHAPTER 11 EMERGENCY MANAGEMENT

### 11.0 INTRODUCTION

The management of emergency situations focuses on minimizing the risk of personnel injury and minimizing the exposure of employees, the environment, and the public to radioactive or hazardous substances/wastes to a level that is as low as reasonably achievable.

The Emergency Management Program is documented in WP 12-9, *WIPP Emergency Management Plan*, which provides guidance and requirements for emergency planning, preparedness, response, mitigation, readiness assurance, and recovery activities in order to maintain acceptable levels of protection for the safety and health of employees, responders, and the public, property, and environment. Preparedness and response activities are based on a graded approach commensurate with the identified hazards. This plan provides a framework of the responsibilities, capabilities, and authorities for the members of the Emergency Response Organization (ERO).

The purpose of the ERO is to respond to emergencies at the WIPP site and facilities in a timely, efficient, and effective manner, and implement immediate protective actions and emergency response to ensure the safety and health of workers and the public, and protect property, the environment, and national security. The ERO adheres to applicable ERO procedures and guides. The response of the ERO is based on the National Incident Management System (NIMS) approach to integrated emergency response. NIMS represents a core set of doctrines, concepts, principles, terminologies, and organizational processes to enable effective, efficient, and collaborative incident management at all levels.

The ERO facility maintains 24-hour readiness for response to an emergency event. Emergency response capabilities include firefighting and emergency medical services, which may also be deployed in accordance with existing Mutual Aid Agreements (e.g., with Carlsbad, Hobbs, and Eddy/Lea County, New Mexico).

Emergency conditions of particular concern to the WIPP facility are both natural and man-made. Plans, procedures, and standard operating guides are implemented to minimize facility or programmatic impacts during an emergency condition at the WIPP site.

### 11.1 OBJECTIVES

The DOE objective is to provide for the safety of employees, contractor personnel, visitors, and the members of the general public during emergency conditions at WIPP. Emergency situations may include, but are not limited to, structural and wildland fires, radioactive and hazardous material accidents, tornadoes, floods, lightning strikes, and earthquakes.

## 11.2 PLANNED ACTIONS

### 11.2.1 Initial Response and Notifications

The Central Monitoring Room Operator (CMRO) serves as the primary contact for notification that an incident has occurred at WIPP. The CMRO activates emergency response assets and personnel for incidents that require immediate response (e.g., personnel injury, spills, fires) based on the information provided according to procedures, and notifies the Facility Shift Manager (FSM). Requests for mutual aid assistance are approved by the FSM before responders are dispatched to ensure onsite emergencies take priority and capabilities to respond onsite are sustained.

The FSM assumes responsibility for emergency response functions including categorization/classification of the incident, issuing follow-on protective actions for personnel, approving and transmitting emergency notifications to offsite agencies, and providing protective action recommendations to offsite agencies, according to procedures. For all Operational Emergencies and any significant incidents as needed, the FSM will direct activation of the Emergency Operations Center (EOC). The FSM is also the primary RCRA Emergency Coordinator in accordance with the RCRA Contingency Plan and determines whether to implement the RCRA Contingency Plan for the incident. The RCRA Contingency Plan is located in the WIPP Hazardous Waste Facility Permit.

Once the EOC is staffed and declared operational, a formal transfer of responsibility for emergency management functions will occur between the FSM and the EOC Crisis Manager or Deputy Crisis Manager.

### 11.2.2 Field Response

WIPP ERO field responders include the WIPP Fire Department (fulfilling the role of the Fire Brigade as described in the New Mexico Environment Department NM4890139088-TSF, *WIPP Hazardous Waste Facility Permit*) and Protective Force. Once dispatched by the CMRO based on the type of incident, ERO field responders report to the scene. The role of Incident Commander (IC) is assumed by the senior qualified individual from the appropriate organization based on the type of event, indicators from the initial notification, facility designations, conditions at the scene, or other factors. The WIPP Fire Department typically serves as the IC for fire, medical, and hazardous materials (HAZMAT) responses. The WIPP Protective Force typically serves as the IC for security or law enforcement events.

The IC directs activities at the incident scene and uses the Incident Command System (ICS), which provides defined operating characteristics and interactive management components. This NIMS ICS structure allows for the integration of community mutual aid resources to supplement or relieve WIPP response units. The IC may make additional requests for mutual aid resources if necessary, such as additional ambulances, air ambulance helicopters, or other support from offsite responders (e.g.,

Explosive Operations Disposal, Special Weapons and Tactics). Responders take actions to mitigate the emergency according to applicable training, procedures, and guides under the direction of the IC.

### **11.2.3 Fire Response**

The WIPP Fire Department responds to all fires within the WLWA, including dispatch to the WLWA boundary specified in the LMP, and may also respond outside this area as part of mutual aid agreements. All such incident responses shall be conducted according to training, procedures, and guides. Pre-Incident Plans are kept in the WIPP Fire Department vehicles and used to identify WIPP facility building entrances, exits, and any potential HAZMAT. If conditions are such that the WIPP ERO chooses not to commit personnel to fires, then the WIPP ERO shall notify the BLM to coordinate suppression efforts.

Upon detection of a fire within the WLWA, the BLM Carlsbad Fire Management Officer is notified immediately by the LUC or designee at 575-234-5960. The DOE will provide notice, within 90 days, to the New Mexico EMNRD Forestry Division regarding the status of any fire or prescribed burn within the WLWA.

### **11.2.4 Radioactive and Hazardous Materials Response**

The WIPP Fire Department provides initial response to spills that cannot be managed by the responsible individual(s). Radiological Control personnel may also be dispatched to support the response to a radiological event. All such incident responses shall be conducted according to training, procedures, and guides by personnel wearing the appropriate level of personal protective equipment (PPE). Response to a radiological event may include teams from the DOE Radiological Assistance Program for offsite evaluation.

Spills or releases of HAZMAT will be reported to regulatory authorities in accordance with applicable regulations.

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## **CHAPTER 12**

### **INDUSTRIAL SAFETY**

#### **12.0 INTRODUCTION**

The industrial safety requirements for this section cover work performed by subcontractors, work performed on approved easements, work performed by WIPP employees, work performed on the WLWA by individuals not contracted to NWP, and non-camping recreational activities conducted within the boundaries of the WLWA. This program supplements WIPP policies contained in spill control plans and emergency response plans that relate to safe practices. The types of activities covered by this program include, but are not limited to:

- Construction work, including buildings, annexes, warehouses, storage areas, etc.
- Repairs or alterations
- Equipment installation and servicing
- Routine contract maintenance
- Remediation work
- Scrap and waste removal
- Transportation (i.e., trucking and deliveries)
- Electrical, piping, rigging, roofing, etc.
- Environmental monitoring/land management work
- Work supporting universities and laboratories

#### **12.1 OBJECTIVES**

The objective of the DOE is to provide and maintain a safe environment for any who wish to use WIPP lands. The industrial safety program defines the safety and health policies, rules, and guidelines for ensuring safe conditions and acts while preventing unsafe conditions that may result in personal injury and/or property damage. This program provides a mechanism for users of the WLWA to communicate their safety and health concerns to WIPP safety and health personnel.

In May 2016, increased safety notifications for persons within the WLWA were implemented. As a result, signs were posted at the 20 land vehicle entry points to the WLWA, which read as follows:

“Recreational land users and persons conducting work within this area **MUST** check in/out with the WIPP Site at 575-234-7585,” followed by the corollary notification in Spanish, “Personas que usarán esta área para recreación o para trabajar, **DEBEN** registrarse a la hora de entrar y salir de le área llamando a WIPP a 575-234-7585.”

This requirement applies to all persons, including WIPP facility personnel, but with exceptions for grazing lessees, who work or recreate outside the PPA within the WLWA.

## **12.2 PLANNED ACTIONS**

In order to maintain a safe environment, the following are prohibited within the WLWA boundary:

Possession or use of alcoholic beverages in violation of federal, state, and local laws  
Possession or use of an illegal controlled substance (e.g., marijuana)  
Discarding refuse/trash

See section 6 for restrictions specific to recreation within the WLWA.

### **12.2.1 Work Performed by Waste Isolation Pilot Plant Employees**

All work performed by WIPP employees shall comply with the applicable site requirements in the safety manual. The safety program addresses industrial safety and industrial health.

Any activity (e.g., recreational hunting, camping) that is identified by the DOE as an imminent risk to the health and/or safety of WIPP personnel may, at the discretion of the Secretary, be suspended indefinitely within the WLWA.

### **12.2.2 Safety Requirements for Subcontractors**

Work performed within the WLWA, regardless of the point of origin of a purchase requisition (e.g., NWP or Sandia National Laboratories), must comply with existing WIPP site safety requirements. Documentation for work performed on approved easements must be submitted to cognizant WIPP personnel for validation concerning the appropriate worker safety and health requirements for the type of work to be performed.

Subcontractors who conduct drilling activities (e.g., groundwater monitoring wells) within the WLWA will be held accountable for compliance with American Petroleum Institute

(API) Recommended Practices for Occupational Safety for Well Drilling and Servicing Operations, API Recommended Practices 54 (RP54).

### **12.2.3 Policy**

Contractors, and their subcontractors at all tiers, must comply with applicable local, state, and federal safety, health, and environmental regulations. The WIPP site representative (e.g., facility, work control, project engineer, or maintenance person in charge) will provide the site safety rules for which the contractor will be held accountable, and shall verify the adherence to these rules by the subcontractor. The DOE recognizes that the subcontractor may also require its employees to follow specific safety rules which exceed WIPP rules. These will be acceptable, provided they do not conflict with WIPP site rules.

### **12.2.4 General Guidelines**

The assigned subcontract technical representative (STR) will monitor the practices of subcontractors and establish a mechanism to control subcontractor services to assure that such services are performed in a safe and healthy manner.

### **12.2.5 Pre-Start Safety Conference**

Prior to commencement of work, all subcontractors are required to attend an on-site preconstruction and safety conference. Conferences for construction (Davis-Bacon) subcontractors shall be conducted by NWP Procurement Services; those for maintenance contractors (non-Davis-Bacon) shall be conducted by the WIPP STR.

### **12.2.6 Subcontractor Submittals Required**

#### **12.2.6.1 Construction Subcontractors (Davis-Bacon Work)**

The Davis-Bacon Act (40 U.S.C. 276a-276a-7) is a federal law applicable to federally funded construction work. Requisitions specify that each subcontractor shall provide NWP Procurement Services the following information when bidding a project. This documentation will be reviewed and approved by the NWP Industrial Safety Section.

1. Documentation of previous three-year injury experience and a current Occupational Safety and Health Administration (OSHA) 300 Log.
2. Historical information (last three years) on any OSHA citations and other regulatory inspection reports or citations relative to the type of work to be performed.
3. Confirmation of workers' compensation coverage or equivalent, including the experience modification rate and other specific insurance coverage.

4. Copies of written safety policy and programs, which include (as appropriate) but are not limited to (training requirements and supporting documentation):
  - Hazard communication program
  - Respirator protection plan
  - Respirator fit testing and medical approval
  - Confined space entry program
  - Medical surveillance and first aid plan
  - Electrical safety program
  - Hearing conservation program
  - Personal protection equipment program
  - Housekeeping and inspection program
  - Hazardous waste disposal procedures
5. Copies of the Safety Data Sheet (SDS) for each chemical to be brought inside the WLWA. The SDSs will be reviewed, evaluated, and approved by the NWP industrial hygienist or designee before any chemical is permitted within the WLWA. The contractor is responsible for removal and for cleaning up spills generated by their actions, including costs associated with the cleanup.
6. Written certification that all material handling equipment (e.g., cranes, hoists, powered industrial trucks, chains, slings, spreaders) have been inspected and meet all requirements of Subpart N of both 29 CFR Part 1910 and 29 CFR Part 1926.
7. Written Job Hazard Analysis (JHA) for each phase of the work to be performed.

When specified in the subcontract, contractors are required to supply work plans describing the type of work to be performed, the number of people performing task(s), their emergency action plan, their safety rules, and the names of responsible personnel.

Subcontractor personnel are required to complete the appropriate WIPP training requirements prior to operating any WIPP site equipment, performing unescorted lockout/tagout functions within the fenced area, or entering any area within the WLWA labeled as a confined space or meeting confined space criteria.

#### **12.2.6.2 Maintenance Contractors (Non-Davis Bacon Work)**

Maintenance contractors performing work within the WLWA without active direction from the WIPP STR shall submit the same documentation required of the Davis-Bacon contractors (see above). When applicable, contractors operating under the direction of the site STR provide, for approval, to the WIPP STR and NWP Industrial Safety the following:

1. Written documentation that all electrical hand tools have been tested as defined in OSHA 29 CFR §1926.404 (b).

2. Training records or confirmation of safety training for all employees as defined in OSHA 29 CFR §1926.21, "Safety Training and Education."
3. Copies of SDSs for each chemical to be brought on-site or to the project by the subcontractor.
4. Approved JHA or work instructions for each segment of work.

## **12.2.7 WIPP Management Responsibilities**

### **12.2.7.1 NWP Procurement Responsibilities**

NWP Procurement Services provides:

1. DOE safety rules and procedures for subcontractors (available on request from the LUC).
2. Specific safety requirements for construction subcontractors meeting the Davis-Bacon criteria (available on request from the LUC).
3. Copies of all subcontract purchase requisitions to the NWP Industrial Safety Section.

### **12.2.7.2 WIPP STR Responsibilities**

The WIPP STR shall:

1. Ensure that environment, safety, and health requirements pertinent to the work scope in the requests for proposal are clearly specified and consistent with the WIPP Worker Safety & Health Program.
2. Ensure that safety and environmental professionals review and approve all safety aspects before the start of any project.
3. Ensure that the subcontractors providing work on the WIPP site and covered workplaces are conducting work in accordance with NWP specific safety procedures and the subcontract's scope of work.
4. Provide oversight of the subcontractor or vendor performance of work, as delineated in the WIPP procedure regarding Subcontract Technical Representative responsibilities.

### **12.2.8 Reporting Accidents**

The WIPP site-specific procedure for reporting accidents will be used throughout the WLWA. All accidents involving injury or illness are required to be reported immediately to the CMR (first), the WIPP STR, the WIPP site medical personnel (according to WP 12-ES3918, *Reporting Occurrences in Accordance with DOE Order 232.2*), and the individual's manager. Compliance with WP 12-SA3130, *Occupational Injuries and Illnesses*, is required.

Property damage caused by accidents shall be reported to the CMR then to the WIPP STR, who will convey the information to appropriate management.

Subcontractors are required to post emergency numbers and ensure that such numbers are provided to all employees of lower-tier subcontractors.

No off-site authorities are contacted prior to contacting the WIPP STR.

Spills, releases to the environment, and other "off-normal" events are to be reported in accordance with WIPP procedures.

All information concerning injuries and/or illness involving subcontractor employees is required to be recorded on their OSHA 300 Log or other appropriate record.

### **12.2.9 Subcontractor Safety Procedures**

When stipulated in the SOW, all Davis-Bacon subcontractors are required to include in their bid package the safety program and policies information required in section 12.2.6.1.

The statement of work for non-Davis-Bacon subcontractors whose employees are under the direction of a WIPP STR is not required to contain the above requirements because employees of such subcontractors are subject to WIPP safety programs.

#### **12.2.9.1 Personal Protective Equipment**

Subcontractors are responsible for providing WIPP-approved PPE to their employees, except respirators designed to protect against airborne contaminants, which shall be distributed by a NWP industrial hygienist. Any employee required to wear respiratory equipment must have prior medical approval from a physician to wear such type of equipment and be trained to wear it properly.

#### **12.2.9.2 Safety Meetings**

Subcontractors are required to conduct safety meetings, the frequency of which will depend on the nature of the project.

### **12.2.9.3 Subcontractor Procedures**

Procedures of subcontractors will not conflict with WIPP site-specific procedures. In cases wherein procedures of subcontractors conflict with those of the WIPP project, the WIPP STR will seek assistance and guidance from the NWP Engineering Department.

### **12.2.10 Housekeeping Inspections**

Subcontractor personnel (including lower-tier subcontractors) are required to conduct daily safety checks of areas where their employees are working. Any unsatisfactory conditions will be reported immediately to the WIPP STR. Corrective actions will be taken immediately and documented on a daily safety inspection form.

Refuse and scraps that interfere with work flow and/or create fire hazards are required to be disposed of properly in a timely manner and not allowed to accumulate.

Subcontractors cannot block aisles, walkways, stairs, etc. The WIPP STR shall be notified prior to the erection of any barricades or other efforts by the subcontractor to prevent entry into areas.

### **12.2.11 WIPP Land Withdrawal Area Users not Contracted to NWP**

All companies, cities, universities, laboratories, and personnel performing work on CBFO property are required to abide by the guidelines contained in the *Site Users and Tenants Guide for Organizations, Personnel, or Companies That Perform Work on U.S. Department of Energy Property or Rights-of-Way on or Around the Waste Isolation Pilot Plant* (WP 02-EC.12). This document (Users Guide) is an introduction to accessing and safely working at the WIPP site and DOE CBFO-controlled off-site facilities. The CBFO holds NWP accountable for safe operations at WIPP and gives NWP authority to enforce safety rules and policies. NWP will assign at least one WIPP project contact who will be available to assist non-NWP contracted parties (Users) in carrying out their responsibilities as presented in this Users Guide.

A User means any individual, organization, laboratory, WIPP project regulator or stakeholder, entity, or company that may perform DOE-related work on DOE CBFO property or rights-of-way on or around the WIPP site with whom NWP has no contractual or employment relationship.

This Users Guide does not apply to recreational or other activities allowed by the LWA, which includes those whose sole business use is restricted to DOE permitted roads (e.g., oilfield vehicles using WIPP project roads to gain access to well sites). Also exempted are certain grazing activities that are separately permitted and managed by the BLM.

### 12.2.11.1 Required Work Documents for Approval

NWP has a process in place for assuring that proposed work is appropriately reviewed and authorized before work is performed. Users fit into this process by providing a detailed written description of the work they propose to perform. Attachment 1 of the User's Guide, *Guide to the Development of a Statement of Work*, provides the level of detail required for the written description. User's work can commence once the NWP Environmental Safety & Health Department has received the completed signature page from the User's Guide (Acknowledgment of Receipt and Designated Contacts), completed its review, and worked with the User to make any changes or enhancements in the way the proposed work will be carried out to assure that the work can be accomplished safely.

The statement of work (including a JHA) initiates the review of documents for approval. The JHA is described in the User's Guide within the section on the Integrated Safety Management System (ISMS). Job Hazard Analyses and SOWs must be completed by the User and must be reviewed and approved by the NWP Environmental Safety & Health Department and other departments affected by the proposed work. The NWP-approved JHA and SOW allows work to commence.

Changes to the work scope, procedures, work location or schedule require the review process to be performed again before the changes are implemented. If hazards are identified which were not addressed in the JHA, the affected work must be terminated until the JHA is updated, hazards are mitigated, and a representative of the Environmental Safety & Health Department signs the updated JHA.

In addition to the required work documents for approval, the WIPP site follows numerous other applicable regulations including those promulgated by the Mine Safety and Health Administration (MSHA), the EPA, the U.S. Department of Transportation, the New Mexico Environment Department (NMED), and the DOE, including applicable DOE Orders.

Application of these requirements will depend on the proposed work, the location of the work, the materials used, and the type and volume of wastes to be generated. For instance, MSHA has a list of chemicals that are prohibited in the underground.

Users' compliance with applicable requirements is mandatory. All Users are responsible for assuring that their respective employees, subcontractors, or other individuals under their authority follow the requirements, policies, JHAs, and procedures approved for their work scope. NWP may oversee the work based on a graded approach. The more complex and hazardous the work, the more oversight may be provided by NWP. Support and oversight by NWP in no way relieves or minimizes the User's responsibility to abide by all applicable legal requirements, their respective contractual requirements, and WIPP policies.

### **12.2.11.2 Working Independently**

Being able to ultimately work independently depends on the User's knowledge of the site, the training the User has received, the hazards associated with their work areas and proposed actions, the ability to eliminate or mitigate the hazards, and the User's experience and qualifications to perform the work safely and in accordance with WIPP's safety requirements.

Once the User becomes more experienced working at the site and has demonstrated outstanding safety practices, less NWP oversight is provided.

Clear communication among the User, the CBFO, and WIPP project contacts (including the LUC and those associated with the location of the User's work) is vital to personnel safety at WIPP.

### **12.2.11.3 Additional User Information**

Users should refer to WP 02-EC.12 for additional information on topics such as training requirements, PPE, security, emergencies, general radiation safety information, underground access, and responsibilities of the User and NWP.

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## **CHAPTER 13**

### **MAINTENANCE AND WORK CONTROL**

#### **13.0 INTRODUCTION**

Lands used in the operation of the WIPP facility are listed in one of two categories. The first category consists of lands contained within the WLWA. Included in this area are roads, groundwater monitoring well pads, reclamation sites, and storage yards. The second category consists of lands used in the operation of the WIPP facility outside the WLWA boundary. This area primarily includes access corridors to and from the WIPP site, groundwater well pads and air sampling installations, and a few isolated reclamation areas. The maintenance management program for the WIPP facility is consistent with best management practices (e.g., DOE Orders, WIPP procedures) that pertain to the maintenance of properties in a manner that promotes operational safety, worker health, environmental protection and compliance, property asset preservation, and cost effectiveness while meeting the programmatic mission.

In May 2016, increased safety notifications for persons within the WLWA were implemented. As a result, signs were posted at the 20 land vehicle entry points to the WLWA, which read as follows:

“Recreational land users and persons conducting work within this area **MUST** check in/out with the WIPP Site at 575-234-7585,” followed by the corollary notification in Spanish, “Personas que usarán esta área para recreación o para trabajar, **DEBEN** registrarse a la hora de entrar y salir de le área llamando a WIPP a 575-234-7585.”

This requirement applies to all persons, including WIPP facility personnel, but with exceptions for grazing lessees, who work or recreate outside the PPA within the WLWA.

#### **13.1 OBJECTIVES**

The DOE maintenance objective (scope) is defined as the preventive, predictive, modifications, and corrective maintenance activities for facilities, equipment, and support infrastructure necessary to accomplish the WIPP mission.

The NWP work control system controls maintenance activities. It ensures that maintenance activities are effective in maintaining safe and reliable facility operation. This system applies to all personnel doing maintenance activities at the WIPP facility.

The NWP work order system is the central component of the control system for maintenance activities at the WIPP facility. The work order system ensures that jobs are identified, logged, planned, scheduled, performed, tested, and formally accepted and documented in a systematic manner.

The Work Control Process describes the steps for identifying, prioritizing, planning, scheduling, testing, and acceptance of work performed. NWP's computerized maintenance management system is used to track the status of outstanding maintenance activities.

### 13.2 PLANNED ACTIONS

A maintenance training program has been established through the central site training organization. The training organization supports maintenance training programs that meet the intent of established industrial guidelines and address specific WIPP project needs.

The infrastructure and equipment of the WIPP facility are required to be maintained by a proper balance of preventive, corrective, and predictive maintenance; procedures and standards; and configuration management. The Action Request, submitted in accordance with *Work Control Process* (WP 10-WC3011), is the fundamental form used for initiating work. The Work Control process (WP 10-WC3011) and other supporting procedures address:

- Job planning and analysis
- Permits
- Work performance standards
- Priority system
- Scheduling
- Construction program interface
- Post maintenance/modification testing

Maintenance activities in support of this LMP will be performed, when needed, to the same criteria as established for the base facility (PPA). The expanded maintenance work scope as it pertains to land management activities includes, but is not limited to:

- Maintenance of roads inside the WLWA
- Maintenance of the WIPP rail spur easement and the corresponding frontage/service road
- Maintenance of DOE signs inside the WLWA
- Maintenance of signs outside the WIPP boundary on properties used in the operation of the WIPP facility (e.g., North Access Road)
- Maintenance of the North and South Access Roads
- Construction and maintenance of cattle guards inside the WLWA

- Construction and maintenance of cattle guards outside the WLWA on roads used expressly for WIPP facility operations
- Construction and maintenance of security/safety fences within the WLWA (e.g., the fence surrounding the EUA, and the fences that parallel the North and South Access Roads that prevent livestock from wandering on the road) or at remote locations outside the WLWA used in the operation of the WIPP facility.
- Construction and maintenance of groundwater surveillance well pads and corresponding access roads inside the WLWA.
- Construction and maintenance of groundwater surveillance well pads and corresponding access roads outside the WLWA. [Note: Roads outside the WLWA, identified as part of the WIPP facility maintenance work scope are limited to those which are intended exclusively for WIPP-related activities. Road maintenance of existing easements or rights-of-way, not constructed expressly for WIPP facility uses but used as convenient access routes for WIPP-related activities, is not the responsibility of the DOE].

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## **APPENDIX A**

### **LAND MANAGEMENT PLANNING AND RESPONSIBILITIES**

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## **LAND MANAGEMENT PLANNING AND RESPONSIBILITIES**

### **1.0 SCOPE**

The WIPP Land Use Coordinator (LUC) and CBFO NEPA Compliance Officer provide policy guidance to the Department of Energy (DOE) in areas involving coordination of the management and oversight of lands included within the boundaries of the Waste Isolation Pilot Plant (WIPP) Land Withdrawal Area (WLWA) and those lands outside the WIPP boundary used in the operation of the WIPP site. This includes compliance with all applicable regulatory requirements relating to activities which occur or are likely to occur within the boundaries of those lands used in the operation of WIPP. These include (but are not limited to) regulations referenced in the WIPP Land Management Plan (DOE/WIPP-93-004), Joint Powers Agreement(s) (JPA), and the U.S. Department of the Interior, Bureau of Land Management (BLM) - DOE Memorandum of Understanding (MOU) incorporating all regulatory requirements and directives contained therein.

### **2.0 RESPONSIBILITIES**

The responsibilities of the LUC and the CBFO NEPA Compliance Officer include:

1. Meet regularly to discuss land management issues.
2. Evaluate and establish positions on issues or proposals for consideration, and register individual concurrence or nonconcurrence.
3. Establish and maintain lines of communication among participant entities which, at any time, may have reason to utilize lands under the jurisdiction of the WIPP site.
4. Obtain recommendations and guidance from appropriate federal and state agencies, as well as appropriate regulatory experts and stakeholders.
5. Provide recommendations and guidance to federal and state agencies as appropriate.
6. Monitor DOE compliance with applicable implementation of new state and/or federal regulatory requirements as they pertain to lands under the jurisdiction of the WIPP Project.
7. Review of any unusual occurrences involving potential or existing safety concerns, contamination release, environmental noncompliance, nonconformance(s) with the Safety Analysis Report, and the like as they pertain to land management concerns.

8. Track all Land Use Requests from inception to project culmination, to include modifications, longevity, and/or decommissioning.
9. Evaluate other pertinent issue/policy agenda items.

### **3.0 KEY EXTERNAL INTERFACES**

1. Agency for Conservation Archaeology (ACA)
2. City of Carlsbad, New Mexico
3. Eddy County
4. New Mexico Energy, Minerals, and Natural Resources Department (EMNRD)
5. Pecos Management Services
6. Forestry Division of EMNRD
7. New Mexico Department of Cultural Affairs (DCA)
8. Lea County
9. Mills Ranch, Mr. Stacey Mills, Operator
10. New Mexico Department of Game and Fish (NMDGF)
11. New Mexico Environment Department (NMED) - DOE/WIPP Oversight
12. Department of Cultural Affairs (DCA) Historic Preservation Division
13. Oil Conservation Division of the EMNRD (OCD)
14. Sandia National Laboratories (SNL)
15. Smith Ranch, Mr. K. Smith, Operator
16. New Mexico State Historic Preservation Officer (SHPO)
17. New Mexico State Land Office (NMSLO)
18. U.S. Department of the Interior, Bureau of Land Management (BLM)
19. U.S. Department of the Interior, U.S. Fish and Wildlife Service (USFWS)
20. New Mexico State Engineer Office

21. U.S. Federal Bureau of Investigation
22. State Police; New Mexico Department of Public Safety
23. New Mexico Department of Agriculture
24. U.S. Department of Agriculture
25. Carlsbad Field Office (CBFO) of the DOE
26. U.S. Department of Justice
27. Department of Homeland Security

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## **APPENDIX B**

### **GUIDE FOR THE COMPLETION OF A LAND USE REQUEST**

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## GUIDE FOR THE COMPLETION OF A LAND USE REQUEST

Acceptance or denial of a Land Use Request (LUR) is contingent on the intent, purpose, accuracy, and completeness of the LUR submittal. An LUR submittal consists of four basic elements or steps. These are:

- 1: Complete Environmental Compliance Review Form. The Environmental Compliance Review Form is available as an electronic checklist in the WIPP electronic document management system as Form EA02EC3801-1-0, or by contacting the WIPP Land Use Coordinator (LUC).
- 2: Complete the Land Use Request (LUR) form which provides the abstract for the proposed project. The abstract must provide a detailed, narrative description of the proposed activities for evaluation by the LUC. The project abstract must address:
  - Disclosure of the names of all individual(s) and/or companies scheduled to perform the proposed action;
  - The intent or purpose of the proposed action;
  - Anticipated time lines for completion;
  - Impacts on WIPP that would result if the LUR for the proposed action was denied;
  - Alternatives;
  - Detailed reclamation/restoration plans.
  - Anticipated Sustainability impacts
    - ENVIRONMENTAL IMPACTS (summarize impacts identified on Environmental Compliance Review Form)
    - GENERATED WASTE MATERIAL (summarize from Environmental Compliance Review Form. Address waste minimization and disposal plans)
    - OTHER SUSTAINABILITY IMPACTS
    - Address the following specifics if applicable or potentially applicable to project:
      - Has the most energy efficient equipment been chosen?

- Is it feasible to provide for project energy needs from a renewable source (solar photovoltaic, wind generated)?
  - How will the project seek to use recycled or biobased materials/products?
  - How will the unused materials and wastes be recycled or reused?
  - How will travel (trips/vehicles) be minimized?
  - Facilities Information Management System (FIMS)-related impacts of tracking of DOE property (applies ONLY to specific DOE-owned property/equipment)
- 3: Provide a map (USGS 7.5-minute topographic quadrangle, BLM land status, [including equivalent electronic map], or WIPP generated) depicting the location(s) of the proposed action.
- 4: Attach Environmental Compliance Review Form and map to the completed LUR and submit to WIPP LUC.

## ***LAND USE REQUEST (LUR) – PROJECT ABSTRACT***

LUR # \_\_\_\_\_ [LUC-assigned yymmddx]

Project Title: \_\_\_\_\_

- INDIVIDUAL(S)/COMPANY(S) SCHEDULED TO PERFORM WORK ASSOCIATED WITH THE LAND USE REQUEST
  
- INTENT OR PURPOSE
  
- ANTICIPATED TIME LINES FOR COMPLETION
  
- IMPACTS (ON WIPP) IF THE LUR WERE DENIED
  
- ALTERNATIVES
  
- RECLAMATION/RESTORATION PLANS
  
- ANTICIPATED SUSTAINABILITY IMPACTS
  - ENVIRONMENTAL IMPACTS
  - GENERATED WASTE MATERIAL
  - OTHER SUSTAINABILITY IMPACTS
  
- FACILITY INFORMATION MANAGEMENT SYSTEM (FIMS) IMPACTS

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## **APPENDIX C**

### **MEMORANDUM OF UNDERSTANDING BETWEEN THE U.S. DEPARTMENT OF ENERGY AND THE U.S. DEPARTMENT OF INTERIOR**

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**MEMORANDUM OF UNDERSTANDING  
BETWEEN  
THE U.S. DEPARTMENT OF ENERGY  
AND  
THE U.S. DEPARTMENT OF INTERIOR**

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**MEMORANDUM OF UNDERSTANDING  
BETWEEN  
THE U.S. DEPARTMENT OF ENERGY  
AND  
THE U.S. DEPARTMENT OF THE INTERIOR**

**(Updated December 2012, minor editorial changes  
not requiring resigning as agreed by both parties)**

**I. PARTIES**

The parties to this Memorandum of Understanding (MOU) are the U.S. Department of Energy (DOE), represented by its Waste Isolation Pilot Plant (WIPP) Carlsbad Field Office and the U.S. Department of the Interior (DOI) represented by its Bureau of Land Management (BLM), Carlsbad Field Office.

**II. BACKGROUND AND PURPOSE**

The WIPP is authorized under Section 213 of the DOE National Security and Military Applications of Nuclear Energy Authorization Act of 1980, Public Law (P.L.) 96-164. The WIPP is authorized 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 exempted from regulation by the Nuclear Regulatory Commission.

The WIPP Land Withdrawal Act of 1992, P.L. 102-579 ("the LWA"), withdrew 10,240 acres of land in Eddy County, New Mexico, from the operation of the public land laws and reserved those lands for the construction, experimentation, operation, repair and maintenance, disposal, shutdown, monitoring, decommissioning, and other authorized activities associated with the purposes of the WIPP as set forth in Section 213 of P.L. 96-164.

Section 4 of the LWA makes the Secretary of Energy responsible for the management of the withdrawal, consistent with the Federal Land Policy and Management Act of 1976. The LWA directs the Secretary, in consultation with the Secretary of the Interior and the State of New Mexico, to develop a land management plan (DOE/WIPP 93-004) for the use of the withdrawal area until the end of the decommissioning phase. It further directs the Secretary and the Secretary of the Interior to enter into an MOU to implement the management plan.

**III. AUTHORITY**

This MOU is entered into pursuant to the authority of, and is consistent with, the LWA. Further, it is consistent with and subject to certain other appropriate

statutory authorities, including the Department of Energy Organization Act, P.L. 95-91; the Energy Reorganization Act of 1974, P.L. 93-438; and the Economy Act of 1932, as amended by P.L. 98-216.

#### **IV. MANAGEMENT**

This MOU envisages direct communication between officials of the DOE and the BLM in consultation with other federal and state land management agencies which are involved in managing the resources within or activities impacting the surrounding areas of the WIPP withdrawal area. This MOU sets forth the cooperative arrangements and procedures for addressing land management within the withdrawal area. These cooperative arrangements and procedures implement the WIPP Land Management Plan for the withdrawal area and are consistent with the WIPP Land Management Plan's concept of multiple-use management.

The responsibilities and duties listed pursuant to this MOU relate to those shared by the DOE and the DOE. For additional land management issues not found in this MOU, consult the WIPP Land Management Plan (DOE/WIPP-93-004).

This MOU will be administered on behalf of the DOE by the Manager, Carlsbad Field Office, P.O. Box 3090, Carlsbad, New Mexico 88221.

This MOU will be administered on behalf of the DOI by the Field Manager, Carlsbad Field Office, BLM, 620 E. Greene Street, Carlsbad, New Mexico 88220-6292.

#### **V. FUNDING**

The details of the levels of funding to be furnished to one signatory organization by the other will be developed in specific interagency agreements, subject to the availability of funds. This MOU shall not be used to obligate or commit funds or as the basis for the transfer of funds. The DOE and the DOI will provide each other mutual support in budget justification to the Office of Management and Budget and in hearings before the Congress with respect to the programs described in the WIPP Land Management Plan and implemented through this MOU.

#### **VI. RESPONSIBILITIES OF PARTICIPATING PARTIES**

##### **Cultural Resources**

It is the intent of the DOE to manage cultural resources within the withdrawal area pursuant to Sections 106 and 110 of the National Historic Preservation Act, Archaeological Resource Protection Act, Native American Graves Protection and Repatriation Act, and applicable DOE Orders to ensure that

scientific and sociocultural use by present and future generations shall not be diminished.

The DOE agrees to:

- Retain responsibility for management of cultural resources within the withdrawal area.

- Inventory and evaluate cultural resources prior to surface-disturbing activities.

- Use avoidance as the primary mitigation measure.

The DOI agrees to:

- Provide recommendations to the DOE in developing mitigation measures when avoidance of historic property is not possible.

#### Grazing Management

The withdrawal area includes portions of two grazing allotments administered by the BLM. The DOE's intent is to continue current management practices.

The DOE agrees to:

- Retain responsibility for grazing management decisions affecting the two grazing allotments within the withdrawal area.

The DOI agrees to:

- Provide proposed grazing management changes and/or plans to the DOE for review and comment.

- Provide grazing management of the grazing allotments within the withdrawal area in accordance with applicable grazing laws including the Taylor Grazing Act, the Federal Land Policy and Management Act, and the Public Rangelands Improvement Act.

Continue BLM-funded vegetative monitoring program to determine if range management goals and objectives established for the grazing allotments are being achieved. As a minimum, the monitoring program will include collecting data on actual livestock use, wildlife habitat and population trends, degree of utilization of the key forage species, climatic conditions, and rangeland ecological conditions and trends.

## Wildlife

The DOE intends to manage wildlife habitat within the withdrawal area for ungulates, raptors, upland game, and any special-status plant or animal species occupying the withdrawal area.

The DOE agrees to:

Retain responsibility for management decisions affecting wildlife habitat and the habitat of any special-status plant or animal species found occupying the withdrawal area.

Upon receipt of the draft copy of the recovery plan (see Part 2a, below), the DOE shall review, comment, and transmit the draft copy of the recovery plan back to the BLM within 30 days.

The DOI agrees to:

Develop a recovery plan in cooperation with the U.S. Fish and Wildlife Service and appropriate state agencies for any threatened or endangered plant and animal species found occupying the WIPP withdrawal area to ensure its success and survival.

Consult with the DOE to ensure that any range improvement developments (e.g., installation of livestock watering units) will be designed to accommodate wildlife needs.

## Fire Management

It is the intent of the DOE to provide a fire management program that will ensure a timely, well-coordinated, and cost-effective response to suppress wildfire within the withdrawal area.

The DOE agrees to:

Employ full suppression strategy of a wildfire within the withdrawal area by utilizing the WIPP incident commander to coordinate fire management activities.

The DOI agrees to:

Provide full fire-fighting support within the withdrawal area should the WIPP incident commander request such support.

Commit necessary additional fire suppression resources should local BLM fire suppression resources be insufficient. The additional resources to be committed will be negotiated based upon the severity and behavior of the fire.

#### Mining and Gas and Oil Production

It is the intent of the DOE to ensure that mining and gas and oil activities do not encroach upon the withdrawal area. Adherence to this MOU is crucial to protecting the repository from inadvertent human intrusion. The DOE is an offset owner to all gas and oil leases adjacent to the withdrawal boundary and will exercise the right to provide input on proposed activities of adjacent offset operators requesting an exception to applicable New Mexico Oil Conservation Division (NMOCD) rules and regulations.

In accordance with Section 4(b)(5)(A) or the LWA, no surface or subsurface mining or oil or gas production, including slant drilling from outside the boundaries of the withdrawal, shall be permitted at any time (including after decommissioning) on lands on or under the withdrawal.

In accordance with Section 4(b)(5)(B) of the LWA, existing rights under Federal Oil and Gas Leases No. NM 02953 and No. NM 02953C shall not be affected unless the Administrator of the Environmental Protection Agency determines, after consultation with the Secretary of Energy and the Secretary of the Interior, that the acquisition of such leases by the Secretary of Energy is required to comply with the disposal regulations or with the Solid Waste Disposal Act (42 U.S.C. 6901 et seq.).

The DOE agrees to:

Coordinate with the BLM to provide input and recommendations in determining a BLM permit issuance for oil and gas extraction and mining activity on federal lands within one mile of the WIPP withdrawal boundary.

Provide the technical expertise to interpret, review, and verify oil and gas activity calculations performed by the BLM.

The DOI agrees to:

Forward applications for Permit to Drill and mining and reclamation plans to the DOE for review and comment in determining issuance of any oil and gas extraction or mining permit within one mile of the WIPP withdrawal boundary. The BLM shall resolve any DOE comments prior to approval of such applications and plans.

Include the following as a Special Condition of Approval for oil and gas activity on federal lands at 330 feet or closer to the WIPP withdrawal boundary:

- (1) Shall require the operator to provide daily drilling reports to the BLM and designated DOE representative at the WIPP site until a total vertical depth of 7,000 feet is reached. These reports, at a minimum, will detail rate of penetration and have a clearly marked section showing the deviation for each 500-foot interval.
- (2) Shall require the operator to provide daily drilling reports on wells that could deviate to within 100 feet of the withdrawal boundary to the BLM and DOE representative at the WIPP site until a total vertical depth of 7,000 feet is reached. These reports at a minimum will detail rate of penetration and have a clearly marked section showing the deviation for each interval 500- or 100-foot intervals. Should these daily drilling reports indicate that the deviation is toward the withdrawal, the BLM shall require a deviation survey at 100-foot intervals until such time as data could indicate that the bottom hole location at total depth would not exceed ten degrees from vertical or could result in a borehole or bottom hole location less than 100 feet from the withdrawal boundary. Should deviation direction continue towards the withdrawal boundary during the BLM monitoring of the 100-foot directional survey intervals, the BLM shall require the operator to take corrective measures (i.e., side tracking) or cease drilling activity.
- (3) Shall provide expertise as required on evaluating the deviation survey.

- (4) Shall require the operator to submit a complete directional survey to both organizations upon completion of the well.
- (5) Shall provide the DOE with the aforesaid directional surveys within three days of receipt and completion, alternate use, and/or plugging and abandonment reports within five days of receipt.

#### Realty/Lands/Rights-of-Way

Land use management within the WIPP withdrawal boundary is the sole responsibility of the DOE. It is the intent of the DOE to monitor any land use proposal affecting the withdrawal area.

The DOE agrees to:

Consult with the BLM regarding future DOE right-of-way actions needed outside the withdrawal area.

Review and comment on applications and proposals received by the BLM for any land uses affecting, but not solely contained within, the WIPP withdrawal boundary.

Submit comments relative to any land uses affecting, but not solely contained within, the WIPP withdrawal boundary to the BLM's Carlsbad Field Manager, or their representative, within 30 days of receipt from the BLM.

The DOI agrees to:

Forward applications and proposals for land uses affecting, but not solely contained within, the WIPP withdrawal boundary to the DOE.

Assume responsibility, when designated as the lead agency, for the preparation of the National Environmental Policy Act documentation for land uses affecting, but not solely contained within, the WIPP withdrawal boundary. The BLM shall obtain the review and approval of the DOE (the contributing agency) in regard to the BLM issuance of a Record of Decision.

Incorporate any DOE- and/or WIPP-specific compliance requirements when preparing documentation for land uses

affecting, but not solely contained within, the WIPP withdrawal boundary.

#### Reclamation

The DOE intends to return land disturbed by the WIPP activities to a stable ecological state that will assimilate with the surrounding undisturbed ecosystem.

The DOE agrees to:

Reclaim land disturbed by the WIPP activities in accordance with the Environmental Protection Implementation Plan (DOE/WIPP90-050); the Federal Land Policy and Management Act, 1976 (P.L. 94-579); the WIPP Disposal Phase Final Supplemental Environmental Impact Statement (SEIS-II) (DOE/EIS-0026-3-2, September 1997); the WIPP Final Supplement Environmental Impact Statement (DOE/EIS-0026-FS, Jan.90); the WIPP Final Environmental Impact Statement (DOE/EIS-0026, Oct.80); EPA requirements regarding disposal regulations; future Environmental Impact Statements; and land withdrawal requirements.

Consult with the BLM in advance of reclamation activities to ensure compliance with applicable DOE reclamation commitments.

The DOI agrees to:

Review DOE-proposed reclamation actions to ensure compliance with applicable DOE reclamation commitments.

#### VII. PUBLIC INFORMATION COORDINATION

Subject to the Freedom of Information Act, Title 5 U.S.C 553, decisions by either party on disclosure of information to the public regarding projects and programs developed pursuant to this MOU shall be made only after consultation between the parties.

#### VIII. PATENTS AND TECHNICAL DATA

Appropriate patent and other intellectual property provisions shall be included in interagency agreements and any other agreements entered into by the parties in order to implement this MOU. DOE patent and intellectual property policies shall apply to any such work performed by a contractor (including any subcontractor)

which is funded in whole or in part by the DOE. Rights to inventions made by U.S. government employees shall be determined by the employing agency.

**IX. REVIEW, AMENDMENT, AND TERMINATION**

The DOE and the DOI, in consultation with other federal and state agencies involved in managing the resources within the withdrawal, shall review the MOU on an annual basis to determine whether it remains current and whether it effectively and appropriately implements the WIPP Land Management Plan for the WIPP withdrawal.

In the event that the DOE and the DOI determine that this MOU should be revised or amended, such revision or amendment shall be accomplished only upon written agreement between the parties. Any revisions or amendments to this MOU shall be developed in consultation with the State of New Mexico.

This MOU may be terminated by mutual agreement of the DOE and the BLM, or by either party upon a 30-day written notice to the other party.

This MOU shall remain in effect until the end of the decommissioning phase of the WIPP, as that phase is defined in the LWA.

**X. EFFECTIVE DATE**

This MOU shall become effective upon the latter date of signature of the parties.

**U.S. DEPARTMENT OF ENERGY**

BY: David C. Moody - Signature on File

DATE: 9/28/10

**U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT**

BY: Jim Stovall - Signature on File

DATE: 10/25/10

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**APPENDIX D**

**WASTE ISOLATION PILOT PLANT**

**STATEMENT OF WORK**

**FOR**

**THE BUREAU OF LAND MANAGEMENT**

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**FOR**  
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**WASTE ISOLATION PILOT PLANT**  
**STATEMENT OF WORK**  
**FOR**  
**THE BUREAU OF LAND MANAGEMENT**

**(Updated December 2012)**

The Bureau of Land Management (BLM) shall perform the following specific tasks identified by the U.S. Department of Energy (DOE) as being necessary to the management of the Waste Isolation Pilot Plant's (WIPP) 16 section withdrawal area.

The parties to this Statement of Work (SOW) are the DOE, represented by its WIPP Carlsbad Field Office, and the U.S. Department of the Interior (DOI), represented by its BLM, Carlsbad Field Office.

This SOW supports the WIPP Land Management Memorandum of Understanding executed between the DOE and the DOI.

This SOW will be administered on behalf of the DOE by the Manager, Carlsbad Field Office, P.O. Box 3090, Carlsbad, New Mexico 88221.

This SOW will be administered on behalf of the DOI by the District Manager, Carlsbad Field Office, BLM, 620 E. Greene Street, Carlsbad, New Mexico 88220-6292.

**RESPONSIBILITIES OF THE BLM**

**A. Cultural Resources**

The BLM shall:

1. Provide recommendations to the DOE, within 30 days of request, in developing mitigation measures when avoidance of an historic property area is not possible.

**B. Grazing Management**

The BLM shall:

1. Provide proposed grazing management changes and/or plans to the DOE for review and comment.
2. Have the responsibility for all traditional administration of range resources afforded under the Taylor Grazing Act, the Federal Land Policy Management Act, and the Public Rangelands Improvement Act. Duties

include, but are not limited to, the collection of grazing fees, project design and planning for development of range improvements, and development of Allotment Management Plans.

3. Continue BLM-funded vegetative monitoring program to determine if range management goals and objectives established for the grazing allotments are being achieved. As a minimum, the monitoring program shall include collecting data on actual livestock use, wildlife habitat and population trends, degree of utilization of the key forage species, climatic conditions, and rangeland ecological conditions and trends.

**C. Wildlife**

The BLM shall:

1. Prepare in cooperation with the U.S. Fish and Wildlife Service and appropriate state agencies a recovery plan for any threatened or endangered plant and animal species found occupying the WIPP withdrawal area to ensure its success and survival.
2. Provide the DOE, within 30 days of report completion, a draft copy of the recovery plan for review and comment.
3. Consult with the DOE to ensure that any range improvement developments (e.g., installation of livestock watering units) will be designed to accommodate wildlife needs.

**D. Fire Management**

The BLM shall:

1. Provide full fire-fighting support within the withdrawal area should the WIPP incident commander request such support.
2. Commit necessary additional fire suppression resources should local BLM fire suppression resources be insufficient. The additional resources to be committed will be negotiated based upon the severity and behavior of the fire.
3. Negotiate with the DOE for monetary compensation required by the DOI for commitment of fire-fighting resources within the withdrawal area on a case-by-case basis.

E. Mining and Gas and Oil Production

The BLM shall:

1. Forward applications for Permit to Drill and mining and reclamation plans to the DOE within ten days of receipt for review and comment in determining issuance of any drilling or mining permit on federal lands within one mile of the withdrawal boundary. Drilling or mining permits for this area will not be issued by the BLM until DOE recommendations have been received.
2. Include the following as a Special Condition of Approval for oil and gas activity on federal lands at 330 feet or closer to the WIPP withdrawal boundary:
  - a. Shall require the operator to provide daily drilling reports to the BLM and designated DOE representative at the WIPP site until a total vertical depth of 7000 feet is reached. These reports at a minimum will detail rate of penetration and have a clearly marked section showing the deviation for each 500 foot interval.
  - b. Shall require the operator to provide daily drilling reports on wells that could deviate to within 100 feet of the withdrawal boundary to the BLM and DOE representative at the WIPP site until a total vertical depth of 7000 feet is reached. These reports at a minimum will detail rate of penetration and have a clearly marked section showing the deviation for each interval 500 or 100 foot intervals. Should these daily drilling reports indicate that the deviation is toward the withdrawal, the BLM shall require a deviation survey at 100 foot intervals until such time as data could indicate that the bottom hole location at total depth would not exceed ten degrees from vertical or could result in a borehole or bottom hole location less than 100 feet from the withdrawal boundary. Should deviation direction continue towards the withdrawal boundary during the BLM monitoring of the 100 foot directional survey intervals, the BLM shall require the operator to take corrective measures (i.e., side tracking) or cease drilling activity.
  - c. Shall provide expertise as required on evaluating the deviation survey.
  - d. Shall require the operator to submit a complete directional survey to both organizations upon completion of the well.
  - e. Provide the DOE with the aforesaid directional surveys within three days of receipt and completion, alternate use, and/or plugging and abandonment reports within five days of receipt.

**F. Realty/Lands/Rights-of-Way**

The BLM shall:

1. Forward applications and proposals for land uses affecting, but not solely contained within, the WIPP withdrawal boundary to the DOE within ten days of the BLM receipt of a completed application.
2. Assume the responsibility, when designated as lead agency, for the preparation of the National Environmental Policy Act documentation for land uses affecting, but not solely contained within, the WIPP withdrawal boundary and any DOE and/or WIPP specific compliance requirements documentation. The BLM shall obtain the review and approval of the DOE (the contributing agency) of the aforesaid documents in determining issuance of a Record of Decision by the BLM.
3. Incorporate DOE- and/or WIPP-specific compliance requirements when preparing documentation for land uses affecting, but not solely contained within, the WIPP withdrawal boundary.

These requirements shall include at a minimum:

- a. A safety plan that includes a job hazard analysis
- b. A list of all hazardous materials
- c. A description of methods used to manage and dispose of solid and hazardous waste
- d. Detailed project design drawings to include specific areas of impact
- e. A copy of their threatened and endangered species review (wildlife study)
- f. A copy of the archaeology study

G. Reclamation

The BLM shall:

1. Within ten days of receipt from the DOE, review and comment on the DOE proposed reclamation actions to ensure compliance with applicable DOE reclamation commitments.

U.S. DEPARTMENT OF ENERGY

BY: David C. Moody - Signature on File

DATE: 9/28/10

U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

BY: Jim Stovall - Signature on File

DATE: 10/25/10

**APPENDIX E**

**MEMORANDUM OF UNDERSTANDING  
BETWEEN THE  
UNITED STATES DEPARTMENT OF ENERGY  
WASTE ISOLATION PILOT PLANT  
CARLSBAD FIELD OFFICE  
AND THE NEW MEXICO DEPARTMENT OF  
HOMELAND SECURITY AND EMERGENCY MANAGEMENT  
CONCERNING EMERGENCY RESPONSE**

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MEMORANDUM OF UNDERSTANDING BETWEEN THE  
UNITED STATES DEPARTMENT OF ENERGY

WASTE ISOLATION PILOT PLANT  
CARLSBAD FIELD OFFICE  
AND THE  
NEW MEXICO DEPARTMENT OF HOMELAND SECURITY AND EMERGENCY  
MANAGEMENT CONCERNING EMERGENCY RESPONSE

This Memorandum of Understanding (MOU) is between the United States Department of Energy (DOE), Waste Isolation Pilot Plant (WIPP), represented by the Carlsbad Field Office (DOE/CBFO) and the State of New Mexico, represented by the Department of Homeland Security and Emergency Management (DHSEM).

WHEREAS, both parties have certain responsibilities for protecting workers, the general public, the environment and property, and have developed and maintain capabilities to accomplish these responsibilities; and

WHEREAS, the WIPP is managed for DOE under a Management and Operating contract, and in that capacity the contractor has responsibility for and maintains certain emergency response capabilities; and

WHEREAS, the DOE is authorized to enter into this agreement by the Department of Energy Organization Act (42 U.S.C 7256); and

WHEREAS, the DHSEM is authorized to enter into this agreement on behalf of the State of New Mexico to the extent provided by NMSA 9-28-1 through 9-28-7.

This agreement replaces applicable emergency management coordination and support contained in the Memorandum of Understanding between the United States Department of Energy and the New Mexico Department of Public Safety Concerning Mutual Assistance and Emergency Management, dated April 19, 1992.

**PROVISIONS**

The provisions of this MOU apply to any actual or potential emergency or incident that:

- Involves a significant threat to employees of the WIPP and / or the general public; and
- Involves property under the control or jurisdiction of either the DOE/CBFO or the State of New Mexico; and
- Involves a threat to the human health, safety, or the environment at, or related to the operations of the WIPP which is reportable to an offsite agency; and
- Requires the combined resources of the DOE/CBFO and the State of New Mexico to resolve; and

- Requires a resource that the DOE/CBFO has which the State of New Mexico does not have, or a resource that the State of New Mexico has which the DOE/CBFO does not have; and
- Has or is expected to exhaust the available resources of either the DOE or the State of New Mexico.

The provisions of this MOU also apply to any other incident for which a joint determination has been made by the DOE/CBFO and the State of New Mexico that the provisions of this MOU will apply.

For the purpose of this MOU, DOE/CBFO and DHSEM intend to:

1. Provide emergency response support in the above-described circumstances.
2. Permit emergency management personnel access to the respective Emergency Operations Centers for the purpose of coordinating communication among responding agencies.
3. Establish and maintain communications capabilities to ensure compatibility between the parties during an emergency.
4. Provide mutual support in training, drills and exercises.
5. Provide liaisons when requested between the parties for planning, preparedness, and response / recovery from an emergency.
6. Provide orientation training to emergency response personnel on emergency response procedures.
7. Notify the other party of any actual or potential situation that may impact the other party's emergency management resources.

In performing this MOU, DOE/CBFO and DHSEM will:

1. Provide emergency notification to and between DOE/CBFO and DHSEM Emergency Operations Centers (EOC) in accordance with directives or procedures.
2. Coordinate the timely release of joint information, when applicable, to the public during an emergency.
3. Comply with all applicable security regulations and requirements during training, drills, exercises and real events.
4. Act in accordance with respective statutory, regulatory or other legal authorities, duties or obligations.
5. Waive any and all claims against each other for any loss, damage, personal injury, or death occurring in consequence of a reasonable performance of this MOU.
6. Utilize the National Incident Management System during joint emergency operations.

#### NOTIFICATION

1. DOE/CBFO will promptly notify DHSEM through the Central Monitoring Room (CMR) or EOC of any actual or potential emergency or incident classified in accordance with DOE Order 151.1C, and of any other actual or potential incident which in the determination of the EOC Crisis Manager or Incident Commander, may impact the State, or for which it is determined that DHSEM may need to be informed.

2. DHSEM will promptly notify DOE/CBFO through the State EOC of any actual or potential emergency or incident which, in the determination of the State ERO on duty or the Director of the State EOC, may impact the DOE/CBFO or for which it is determined that the DOE/CBFO may need to be informed.
3. Attached to this MOU is a matrix containing the contact information of both the DOE/CBFO and DHSEM that shall be used in making all notifications required by this MOU, plus other contact information relative to WIPP and State emergency management. This attachment will be revised as changes occur and reviewed annually by the parties.

#### **LIABILITY**

1. This MOU in no way restricts either of the parties from participating in any activity with other public or private agencies, organizations, or individuals.
2. This MOU is neither a fiscal nor a funds obligation document. Nothing in this MOU authorizes or is intended to obligate the parties to expend, exchange, or reimburse funds, services, or supplies, or transfer or receive anything of value.
3. This MOU is strictly for internal management purposes for each of the parties. It is not legally enforceable and shall not be construed to create any legal obligation on the part of either party.
4. Subject to the Freedom of Information Act (5 U.S.C. 552), decisions on disclosure of DOE information to the public regarding projects and programs referenced in the MOU shall be made by DOE following consultation with the other party.

#### **AMENDMENT AND TERMINATION**

This MOU may be amended by written agreement between DOE/CBFO and DHSEM. This agreement may be terminated by either party at any time upon 90 day written notice to the other party. The parties agree that this agreement is mutually beneficial to both parties and that termination of the agreement should be avoided unless it is replaced by a new agreement.

#### **EFFECTIVE DATE AND TERM**

This MOU will become effective when the last party has executed this MOU and the other party has received the fully executed MOU. The effective date will be the last signature date of the fully executed MOU. It will remain in effect for a 5-year term from the effective date, unless terminated earlier as provided herein.

This agreement shall be reviewed at least biennially by both parties. Any additions, deletions, or modifications made to the agreement either as a result of the biennial review or at any time between the biennial reviews shall require written approval of both parties and shall become effective upon such written approval. If no changes are required, the parties shall exchange written communications indicating such. Failure of the parties to perform the biennial review described above shall not terminate the agreement.

### THIRD PARTIES

Nothing in the MOU, expressed or implied, is intended or shall be construed to confer any rights, remedies, claims, cause of action, or interests upon any person or entity.

### ENTIRE AGREEMENT

This MOU represents the entire understanding between the parties and supersedes any prior agreements or understandings with respect to the subject matter of this MOU.

Accepted on the behalf of:

U.S. DEPARTMENT OF ENERGY  
WASTE ISOLATION PILOT PLANT  
CARLSBAD FIELD OFFICE

By: Signature On File Date: 1/8/16  
Todd Shrader  
Manager

NEW MEXICO DEPARTMENT OF HOMELAND SECURITY  
AND EMERGENCY MANAGEMENT

By: Signature on File Date: 27 Jan 16  
M. Jay Mitchell  
Cabinet Secretary

ATTACHMENT  
TO THE  
MEMORANDUM OF UNDERSTANDING BETWEEN THE  
UNITED STATES DEPARTMENT OF ENERGY  
WASTE ISOLATION PILOT PLANT  
CARLSBAD FIELD OFFICE  
AND THE NEW MEXICO DEPARTMENT OF HOMELAND SECURITY  
AND EMERGENCY MANAGEMENT CONCERNING  
EMERGENCY RESPONSE

		EMERGENCY NOTIFICATION		OTHER
		8 a.m. - 4 p.m.	Other Hours	
STATE	ERO *	827-9126	827-9126	
	EOC			827-9236 827-9126 827-9247
DOE	AL EOC *	845-4667	845-4667	
	KAO Duty Officer	845-0142-1153	845-0142-1153	
	LAAO Duty Officer	FTS 843-6211 Com. 667-6211	FTS 843-7080 Com. 667-7080	
	SNL EOC			845-8150 845-4667
	LANL EOC			FTS 843-6211 Com. 667-6211 FTS 843-7080 Com. 667-7080
	WIPP EOC			887-8111 887-8100
	ITRI EOC			844-1169 845-4264
	Ross Dispatch			845-5728
	KAO			845-5575 845-5224

## \* First Notification

EOC	• Emergency Operations Center
EMB	• Emergency Management Bureau
ERO	• Emergency Response Officer
DOE	• Department of Energy
AL	• Albuquerque Field Office
ITRI	• Inhalation Toxicology Research Institute
SNL	• Sandia National Laboratories
WIPP	• Waste Isolation Pilot Plant
LANL	• Los Alamos National Laboratory
LAAO	• Los Alamos Area Office
KAO	• Kirtland Area Office

## **APPENDIX F**

### **IMPLEMENTING REGULATIONS REGARDING CULTURAL RESOURCES**

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## **IMPLEMENTING REGULATIONS REGARDING CULTURAL RESOURCES**

1. Antiquities Act of 1906 (P.L. 59-209)
2. Historic Sites, Buildings, and Antiquities Act of 1935, P.L. 74-292, as amended by P.L. 89-249, P.L. 94-458, and P.L. 96-625
3. Archeological Recovery Act of 1960, P.L. 86-523, as amended by P.L. 93-291 (The Archeological and Historic Preservation Act of 1974), P.L. 95-625, P.L. 96-205, and P.L. 96-515
4. Executive Order 11593 (1971)
5. President's Memorandum on Environmental Quality and Water Resources Management (1978)
6. Archaeological Resources Protection Act of 1979, P.L. 96095, as amended by P.L. 100-555 and P.L. 100-588
7. National Historic Preservation Act, P.L. 89-665, as amended by P.L. 91-243, P.L. 93-54, P.L. 94-422, P.L. 94-458, P.L. 96-199, P.L. 96-244, P.L. 96-515, and P.L. 101-70
8. 36 CFR Part 60 - National Register of Historic Places
9. 36 CFR Part 63 - Determinations of Eligibility for Inclusion in the National Register of Historic Places
10. 36 CFR Part 65 - National Historic Landmarks Program
11. 36 CFR Part 78 - Waiver of Federal Agency Responsibilities Under Section 110 of the National Historic Preservation Act
12. 36 CFR Part 800 - Protection of Historic Properties
13. 43 CFR Part 7 - Protection of Archaeological Resources

### Additional Guidance

1. U.S. Department of Energy Order 1324.7 - Departmental History Program
2. U.S. Department of Energy Memorandum - Management of Cultural Resources at Department of Energy Facilities
3. Section 110 of the National Historic Preservation Act

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**APPENDIX G**

**JOINT POWERS AGREEMENT  
AMONG  
UNITED STATES DEPARTMENT OF ENERGY,  
NEW MEXICO DEPARTMENT OF GAME AND FISH,  
NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES,  
NEW MEXICO OFFICE OF CULTURAL AFFAIRS, and  
NEW MEXICO STATE LAND OFFICE  
ON  
MANAGEMENT OF THE WIPP WITHDRAWAL AREA**

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**JOINT POWERS AGREEMENT  
AMONG  
UNITED STATES DEPARTMENT OF ENERGY,  
NEW MEXICO DEPARTMENT OF GAME AND FISH,  
NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES,  
NEW MEXICO OFFICE OF CULTURAL AFFAIRS, and  
NEW MEXICO STATE LAND OFFICE  
ON  
MANAGEMENT OF THE WIPP WITHDRAWAL AREA**

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**JOINT POWERS AGREEMENT  
AMONG  
UNITED STATES DEPARTMENT OF ENERGY,  
NEW MEXICO DEPARTMENT OF GAME AND FISH,  
NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT,  
NEW MEXICO OFFICE OF CULTURAL AFFAIRS, AND  
NEW MEXICO STATE LAND OFFICE  
ON  
MANAGEMENT OF THE WIPP WITHDRAWAL AREA**

**THIS AGREEMENT** is made and entered into by the U.S. Department of Energy (DOE), represented by its Waste Isolation Pilot Plant (WIPP) Carlsbad Area Office; the New Mexico Department of Game and Fish (DGF); the New Mexico Energy, Minerals and Natural Resources Department (EMNRD); the New Mexico Office of Cultural Affairs (OCA), represented by its Historic Preservation Division; and the New Mexico State Land Office (SW), represented by its Oil, Gas & Minerals Division. The common powers to be exercised are:

**WHEREAS**, all parties are public agencies, as defined in the Joint Powers Agreements Act, Section 11-1-1 et seq NMSA 1978, and are authorized by law to enter into this Agreement, and

**WHEREAS**, this Agreement is consistent with and subject to certain other appropriate statutory authorities, including the Department of Energy Organization Act, P.L. 95-91; the Energy Reorganization Act of 1974, P.L. 93-438; and the Economy Act of 1932, as amended by P.L. 98-216, and

**WHEREAS**, the Director of the DGF is authorized under the Wildlife Conservation Act, Sections 17-2-37 through 17-2-46 NMSA 1978, to conduct investigations and establish program, within the limits of its authority, relating to conservation and management of fish or wildlife in New Mexico, and

**WHEREAS**, the Secretary of EMNRD, or her designee, is a statutory member of the Radioactive Waste Consultation Task Force (Task Force), as authorized by the Radioactive and Hazardous Materials Act, Sections 74-4A-2 through 74-4A-14 NMSA 1978, and

**WHEREAS**, the Task Force is empowered under the Radioactive and Hazardous Materials Act, Sections 74-4A-7 and 74-4A-8 NMSA 1978, to address issues and

concerns in areas relating to the operation of new federal disposal facilities for radioactive waste, including the WIPP in southeastern New Mexico, and

**WHEREAS**, the EMNRD Secretary currently chairs the Task Force and the EMNRD Office of the Secretary provides for its primary staff support and coordination, and

**WHEREAS**, the EMNRD Forestry Division is authorized under section 75-6-1 NMSA 1978 to conduct investigations and establish programs, within the limits of its authority, relating to conservation and management of endangered species of plants in New Mexico, and is authorized under Section 68-2-6 NMSA 1978 to enter into agreements with federal agencies to prevent or suppress grass, brush and forest fires, and is authorized under Section 68-2-8 NMSA 1978 to cooperate with federal, state and local agencies in the development of systems and methods for the prevention, control, suppression and prescribed use of fires on rural lands and within rural communities, and

**WHEREAS**, the Director of the EMNRD Mining and Minerals Division is authorized by Section 69-36-9 NMSA 1978: to exercise all powers of enforcement and administration arising under the New Mexico Mining Act, Sections 69-36-1 through 69-36-20 NMSA 1978, not otherwise expressly delegated therein to the New Mexico Mining Commission (Mining Commission), Section 69-36-6 NMSA 1978; to execute and administer the Mining Commission's regulations; and to coordinate the review and issuance of permits for new and existing mining operations and exploration with all other state or federal permit processes applicable to the proposed operations, and

**WHEREAS**, the EMNRD Oil Conservation Division has, pursuant to the Oil and Gas Act, Sections 70-2-1 through 70-2-36 NMSA 1978, jurisdiction and authority over all matters relating to the conservation of oil and gas and the prevention of waste of potash as a result of oil and gas operations in New Mexico, and

**WHEREAS**, the OCA State Historic Preservation Division is authorized under the Cultural Properties Act, Sections 18-6-1 through 18-6-17 NMSA 1978, to conduct investigations and establish programs, within the limits of its authority, relating to the identification, acquisition, restoration and protection of historic and cultural properties in New Mexico, and

**WHEREAS**, the SLO has, by virtue of the power vested in the Commissioner of Public Lands under Article XIII of the New Mexico Constitution and Chapter 19, NMSA

1978, jurisdiction and authority over all matters relating to the management, care, custody, control and disposition of State Trust Lands in New Mexico, including the leasing of such lands for exploration, development, and production of natural resources, and

**WHEREAS**, the WIPP is authorized under Section 213 of the Department of Energy National Security and Military Applications of Nuclear Energy Authorization Act of 1980, P.L. 96-164, 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 exempted from regulation by the Nuclear Regulatory Commission, and

**WHEREAS**, the WIPP Land Withdrawal Act of 1922, P.L. 102-579 as amended (LWA), withdrew 10,240 acres of federal land in Eddy County, New Mexico (WIPP withdrawal area), from all forms of entry, appropriation, and disposal under the public land laws and reserved those lands for the use of the DOE Secretary for various authorized activities associated with the purposes of the WIPP as set forth in Section 213 of P.L. 96-164, and the LWA, and

**WHEREAS**, Section 4 of the LWA makes the DOE Secretary responsible for the management of the WIPP withdrawal area, consistent with the Federal Land Policy and Management Act of 1976, as amended, and

**WHEREAS**, the DOE Secretary has developed, pursuant to the LWA and in consultation with the Secretary of the U.S. Department of the Interior (DOI) and the State of New Mexico, a WIPP Land Management Plan (DOE/WIPP-93-004), which provides a comprehensive framework for the management and coordination of land uses within and adjacent to the WIPP withdrawal area until the end of the WIPP Project's decommissioning phase, and

**WHEREAS**, DOE and the DOI have executed, pursuant to the LWA, a Memorandum of Understanding (MOU), effective July 19, 1994, to assist in implementing the WIPP Land Management Plan, and

**WHEREAS**, all parties recognize significant advantage in executing a similar Agreement to establish formal relationships and specify responsibilities and protocols between DOE and New Mexico State government with respect to WIPP land management,

**NOW, THEREFORE, IT IS MUTUALLY AGREED AMONG THE PARTIES:**

Section 1. Scope of Work

a. Management/Administration of the Agreement

This Agreement envisions and encourages direct communication among the parties and with other appropriate federal and state agencies involved in managing the resources within, or activities impacting the areas adjacent to, the WIPP withdrawal area. It sets forth cooperative arrangements and procedures for addressing land management within and adjacent to the withdrawal area. These cooperative arrangements and procedures are intended to enhance implementation of the WIPP Land Management Plan, and to complement the corresponding Memorandum of Understanding executed between DOE and the DOI.

The lead agency for the State of New Mexico is the EMNRD. As lead agency, EMNRD shall have as its responsibility:

- (1) Overall management of the Agreement to provide assurance of compliance.
- (2) Organization of appropriate meetings for consultation on issues of land management in the WIPP withdrawal area.
- (3) Provision of emergency consultation between the state and federal agencies party to the Agreement.
- (4) Record keeping with respect to the Agreement.
- (5) Serving as the single point-of-contact for the State of New Mexico regarding implementation of the Agreement.

This Agreement will be administered by the respective representatives of each party as specified in Appendix I to this Agreement. Appendix I will be reviewed and, as necessary, updated annually by EMNRD beginning in January 1998, with copies distributed to the other parties by January 31 of each year. An amendment to this Agreement will not be required in order to update Appendix I on an annual basis.

b. Funding

No funding is associated with this Agreement. The Agreement shall not be used to obligate or commit funds or as the basis for the transfer of funds.

c. Cultural Resources

It is the intent of the DOE to manage cultural resources within the WIPP withdrawal area pursuant to Sections 106 and 110 of the National Historic Preservation Act, Archaeological Resource Protection Act, Native American Graves Protection and Repatriation Act, and applicable DOE orders to ensure that scientific, educational, and sociocultural use by present and future generations shall not be diminished.

(1) The DOE agrees to:

- (A) Retain responsibility for management of cultural resources within the WIPP withdrawal area.
- (B) To the maximum extent possible, use avoidance as the primary mitigation measure within the WIPP withdrawal area.
- (C) Notify the OCA Historic preservation Division of plans to conduct surface disturbing activities in the WIPP withdrawal area, at least sixty (60) days prior to commencement of such activities, on properties that have not received prior archaeological clearance.
- (D) Inventory and evaluate, in consultation with the OCA Historic Preservation Division, cultural resources prior to commencement of surface disturbing activities within the WIPP withdrawal area.

(2) The OCA Historic Preservation Division agrees to:

- (A) Consult with and assist the DOE in its efforts to inventory, evaluate, and benchmark cultural resources within the WIPP withdrawal area.
- (B) Provide to the DOE, within thirty (30) days of request, comments and recommendations on archaeological reports, including the development of mitigation measures when avoidance of a historic property within the WIPP withdrawal area is not possible.

d. Range Management

The WIPP withdrawal area includes portions of two grazing allotments administered by the DOI Bureau of Land Management. DOE intends to continue current range management practices.

- (1) The DOE agrees to:
    - (A) Retain responsibility for range management decisions within the WIPP withdrawal area, including those affecting the two grazing allotments therein. As stipulated in the Memorandum of Understanding between DOE and the DOI, the DOI Bureau of Land Management will provide for management of the grazing allotments within the WIPP withdrawal area in accordance with applicable grazing laws, including the Taylor Grazing Act, 43 U.S.C.315 et seq., the Federal Land Policy and Management Act, 43 U.S.C. 1751 et seq., and the Public Rangelands Improvement Act, 43 U.S.C. 1901 et seq.
    - (B) Provide to the EMNRD Forestry Division, upon receipt or development, grazing management changes and/or plans proposed for the WIPP withdrawal area.
  - (2) The EMNRD Forestry Division will:
    - (A) Provide to the DOE, within thirty (30) days of request, comments on grazing management changes and/or plans proposed for the WIPP withdrawal area. With respect to deliberations on such grazing management changes and/or plans, the EMNRD Forestry and Resources Conservation Division will be asked to serve on the WIPP Land Management Council.
- e. Wildlife (Fauna and Flora)
- The DOE intends to manage all habitat within the WIPP withdrawal area for ungulates, raptors, upland game, and any state and/or federally listed species of plant or animal occupying the WIPP withdrawal area.
- (1) The DOE agrees to:
    - (A) Retain responsibility for management decisions affecting wildlife habitat and the habitat of any state and/or federally listed species of plant or animal occupying the WIPP withdrawal area.
    - (B) Notify the EMNRD Forestry Division and the DGF, at least thirty (30) days prior to implementation, of any proposed projects or other activities that have been determined by the Land Management

Council to pose substantial risks to state and/or federally listed species of plant or animal occupying the WIPP withdrawal area.

- (2) The EMNRD Forestry Division will:
  - (A) Consult with and provide to the DOE, within thirty (30) days of request, comments on any proposed projects or other planned activities that have been determined by the Land Management Council to pose substantial risks to special status plant species occupying the WIPP withdrawal area.
- (3) The DGF agrees to:
  - (A) Consult with and provide to the DOE, within thirty (30) days of request, comments on any proposed projects or other planned activities that have been determined by the Land Management Council to pose substantial risks to special status animal species occupying the WIPP withdrawal area.
  - (B) Provide to the DOE, within the time frame specified under existing applicable laws and regulations, decisions on permit applications relating to wildlife research and education. Such decisions shall be based on sound scientific principles and include written justifications for any denials, modifications, or stipulations/limitations to permit requests.

f. Fire Management

The DOE will provide a fire management program that can coordinate a timely, well-integrated, and effective response to wildfires within the WIPP withdrawal area as resources and conditions will permit. Nothing in this Agreement will prevent the DOE from implementing prescribed fires in the WIPP withdrawal area, provided there is advance consultation with EMNRD Forestry Division.

- (1) The DOE agrees to:
  - (A) Make a good-faith effort to acquire and maintain in a state of readiness the necessary resources to affect appropriate response to wildfire incidents in the WIPP withdrawal area.
  - (B) Provide notice to EMNRD Forestry Division, as soon as practicable, of wildfire that require response within the WIPP withdrawal area.

(2) The EMNRD Forestry Division will:

- (A) Provide, as requested and as it determines to be appropriate and available, fire suppression resources for any wildfire within the WIPP withdrawal area.

g. Mining and Oil & Gas Activities

It is the intent of the DOE to ensure that mining and oil & gas activities do not encroach upon the WIPP withdrawal area. Adherence to the Memorandum of Understanding executed between DOE and the DOI for implementation of the WIPP Land Management Plan and adherence to this Agreement are crucial to protecting the repository from inadvertent human intrusion. The DOE is an offset owner to all oil and gas leases in sections immediately adjacent to the WIPP withdrawal area boundary and will exercise the right to provide input on proposed activities of adjacent offset operators requesting an exception to applicable EMNRD Oil Conservation Division rules and regulations.

In accordance with Section 4(b) (5) (A) of the LWA, no surface or subsurface mining or oil or gas production, including slant drilling from outside the boundaries of the WIPP withdrawal area, shall be permitted at any time (including after decommissioning) on lands on or under the WIPP withdrawal area.

In accordance with Section 4(b)(5)(B) of the LWA, existing rights under Federal Oil and Gas Leases No. NM 02953 and No. NM 02953C shall not be affected unless the Administrator of the U.S. Environmental Protection Agency determines, after consultation with the DOE Secretary and the Secretary of the Interior, that the acquisition of such leases by the DOE Secretary is required to comply with the final disposal regulations (40 CFR 191, Subparts B & C).

(1) The DOE agrees to:

- (A) Forward to the EMNRD Oil Conservation Division, within one (1) week of receipt from or submittal to the DOI Bureau of Land Management:
  - (i) any Applications for Permit to Drill (APDs) or other requests for approval of oil or gas exploration, development and

- production activities on federal lands located within one mile of the WIPP withdrawal area boundary;
  - (ii) any DOE comments developed on APDS and other requests alluded to in subsection (i), above;
  - (iii) any non-proprietary drill site downhole vertical deviation surveys and corresponding calculations of well bore deviation for each 500-foot drilling interval for oil or gas well bores located on federal lands at 330 feet or closer to the WIPP withdrawal area boundary;
  - (iv) any non-proprietary directional surveys performed to establish bottom hole location for oil or gas well bores located on federal lands at 330 feet or closer to the WIPP withdrawal area boundary which could deviate to within 100 feet of that boundary; and
  - (v) any non-proprietary sundry reports, including completion, alternate use, and/or plugging and abandonment reports, for oil or gas well bores located on federal lands at 330 feet or closer to the WIPP withdrawal area boundary.
- (B) Forward to the EMNRD Mining and Minerals Division, within one (1) week of receipt from or submittal to the DOI Bureau of Land Management:
- (i) any subsurface mining or reclamation plans applicable to federal lands located within one mile of the WIPP withdrawal area boundary; and
  - (ii) any DOE comments developed on such mining or reclamation plans applicable to federal lands located within one (1) mile of the WIPP withdrawal area boundary.
- (C) Review and, as it determines to be appropriate, comment on any lease or permit applications, as well as proposed modifications to existing leases and permits, for the exploration, development or production of minerals, including potash, on lands located within one (1) mile of the WIPP withdrawal area boundary, to the SLO Oil, Gas

- & Minerals Division and the EMNRD Mining and Minerals Division within thirty (30) days of receipt.
- (D) Review and, as it determines to be appropriate, comment on any lease or permit applications, as well as proposed modifications to existing leases and permits, for the exploration, development or production of oil or gas on State Trust lands located within one (1) mile of the WIPP withdrawal area boundary, to the SLO Oil, Gas & Minerals Division and the EMNRD Oil Conservation Division, within thirty (30) days of receipt.
- (2) The EMNRD Oil Conservation Division agrees to:
- (A) Forward to the DOE, within one (1) week of receipt or development:
- (i) any Applications for Permit to Drill (APDs) or other requests for approval of oil or gas exploration, development and production activities on State Trust Lands located within one (1) mile of the WIPP withdrawal area boundary. Final action on any such APDs or other requests will not be taken until DOE has been provided an opportunity to develop and submit comments thereon.
  - (ii) any state agency comments on such APDs or other requests alluded to in subsection (i), above;
  - (iii) any directional surveys for oil or gas well bores located on State Trust Lands at 330 feet or closer to the WIPP withdrawal area boundary; and
  - (iv) any completion, alternate use, including production enhancement activities such as waterflooding and pressure fracturing, and/or plugging and abandonment reports for oil or gas well bores located on State Trust Lands within one (1) mile of the WIPP withdrawal area boundary.
- (B) Include the following as a Special Condition of Approval for oil or gas activities on State Trust Lands at 330 feet or closer to the WIPP withdrawal area:

- (i) Ensure that the operator provides to the EMNRD Oil Conservation Division, within seven (7) days of acquiring the information, drill site downhole vertical deviation surveys for each 500-foot drilling interval;
  - (ii) Provide the technical expertise to calculate well bore deviation at each 500-foot interval of drilling to determine the degree of deviation and forward these results to the DOE for review and verification of calculations;
  - (iii) Require the operator, in accordance with EMNRD Oil Conservation Division Rule 111, to perform and provide to the EMNRD Oil Conservation Division a directional survey to establish bottom hole location on well bores that experience deviation angles of more than five (5) degrees from vertical in any 500-foot interval; and
  - (iv) Require the operator to perform and provide to the EMNRD Oil Conservation Division a directional survey to establish bottom hole location on well bores when the total cumulative degree of displacement, independent of direction, indicate that the well bore could deviate to within 100 feet of the WIPP withdrawal area boundary. Should the directional survey indicate deviation is toward that boundary, EMNRD Oil Conservation Division will require a directional survey at 100-foot intervals until such time as data would indicate the bottom hole location at total depth would not exceed the (10) degrees from vertical or could result in a bottom hole location less than 100 feet from the WIPP withdrawal area boundary. Should deviation direction continue toward that boundary during its monitoring of the 100-foot directional survey intervals, the EMNRD Oil Conservation Division will require the operator to take corrective action (e.g., side tracking) or cease drilling activity.
- (3) The EMNRD Mining and Minerals Division agrees to:

- (A) Notify the DOE and the SW Oil, Gas & Minerals Division, within one (1) week of receipt, of any permit applications for the exploration, development or production of minerals on State Trust Lands located within one (1) mile of the WIPP withdrawal area boundary. Final action on any such permit applications will not be taken until DOE and the SLO Oil, Gas & Minerals Division have been provided an opportunity to develop and submit comments thereon.
  - (B) Review and, as it determines to be appropriate, comment on any lease or permit applications as well as proposed modifications to existing leases and permits, for the exploration, development or production of minerals, including potash, on State Trust Lands located within one mile of the WIPP withdrawal area boundary, to the SLO Oil, Gas & Minerals Division, within thirty (30) days of receipt.
- (4) The SLO Oil, Gas & Minerals Division agrees to:
  - (A) Notify the DOE and the EMNRD Office of the Secretary, within one (1) week of receipt, of any lease or permit applications, as well as proposed modifications to existing leases and permits, for the exploration, development or production of oil, gas, or minerals, including potash, on State Trust Lands located within one (1) mile of the WIPP withdrawal area boundary.
  - (B) Review and, as it determines to be appropriate, comment on any permit applications, as well as proposed modifications to existing permits, or other requests for approval of oil, gas, or mineral exploration, development or production activities on State Trust Lands located within (1) mile of the WIPP withdrawal area boundary, to the EMNRD Mining and Minerals Division or Oil Conservation Division, as applicable, within thirty (30) days of receipt.
- h. Realty/Lands/Rights-of-way

The DOE will monitor any land use proposal affecting the WIPP withdrawal area.

  - (1) The DOE agrees to:

- (A) Review and comment on applications or proposals received from the DOI Bureau of Land Management for any land uses affecting, but not solely contained within, the WIPP withdrawal area boundary.
  - (B) Forward to the EMNRD Office of the Secretary, within one (1) week of receipt from or submittal to the DOI Bureau of Land Management:
    - (i) applications or proposals for any land uses affecting, but not solely contained within, the WIPP withdrawal area boundary; and
    - (ii) any DOE comments developed on such applications or proposals.
  - (2) The EMNRD Office of the Secretary agrees to:
    - (A) Review and, as determined to be appropriate, coordinate the development of State agency comments on applications or proposals received from the DOE for any land uses affecting, but not solely contained within, the WIPP withdrawal area boundary.
- i. Environmental Restoration and Reclamation

The DOE intends to reclaim lands disturbed or contaminated by WIPP-related activities, or by those activities taking place prior to DOE ownership or control. Regulatory driven requirements to mark the WIPP site after decommissioning with a system of passive institutional controls shall not be construed as failure to comply with this aspect of the Agreement.

  - (1) The DOE agrees to:
    - (A) Reclaim land disturbed by WIPP-related activities and operations in accordance with the WIPP Land Management Plan (93-004) and other applicable laws, regulations and requirements in effect at the time of reclamation of the WIPP land withdrawal area.
    - (B) Notify and consult with the EMNRD Mining and Minerals Division at least thirty (30) days in advance of initiating any NEPA (National Environmental Policy Act) Category II or III reclamation activities within or adjacent to the WIPP withdrawal area.[Consider deleting this section.]
- j. Patents and Technical Data

Appropriate patent and other intellectual property provisions shall be included in interagency agreements and any other agreements entered into by the parties in order to implement this Agreement. DOE patent and intellectual property policies shall apply to any such work performed by a contractor (including any subcontractor) which is funded in whole or in part by the DOE. Rights to inventions made by U.S. Government employees shall be determined by the employing agency.

Section 2. Term.

**THIS AGREEMENT SHALL NOT BECOME EFFECTIVE UNTIL APPROVED BY THE SECRETARY OF THE NEW MEXICO DEPARTMENT OF FINANCE AND ADMINISTRATION (DFA).** It shall expire one (1) year after the end of the decommissioning phase of the WIPP, as that phase is defined in the LWA, unless terminated earlier pursuant to Section 3, below.

Section 3. Termination.

This Agreement may be terminated by any party upon delivery of a written notice to all other parties at least ninety (90) days prior to the intended date of termination. By such termination, no party may nullify nor avoid any obligation required to have been performed prior to the actual date of termination.

Section 4. Annual Review and Amendment.

This Agreement shall be reviewed by the parties on an annual basis, beginning in 1998, to determine whether it remains current and whether it effectively and appropriately enhances implementation of the WIPP Land Management Plan. The annual review will be conducted by meeting or conference call, as may mutually be agreed to by the parties.

The Agreement shall not be altered, changed, or amended except by written instrument executed by the parties and approved by the Secretary of DFA.

Section 5. Subcontracting.

Any party may subcontract any portion of the services to be performed under this Agreement to any third party in order to meet its obligations and requirements contained herein.

Section 6. Equal Rights.

Benefits and obligations of this Agreement shall be executed without discrimination on account of race, color, religion, creed, sex, age, handicap or national origin.

Section 7. Appropriations.

The terms of this Agreement are contingent upon sufficient appropriations and authorization being made by the New Mexico State Legislature and/or the United States Congress for the performance hereof. If sufficient appropriation or authorization is not granted, this Agreement shall terminate upon written notice from EMNRD or DOE, as appropriate, to the other parties.

Section 8. Tort Claims.

Each party shall be solely responsible for the acts and omissions of its officers and employees resulting in damage or injuries to the same extent and limits that such party is responsible for under applicable law. Nothing herein shall be construed as a waiver of the New Mexico Tort Claims Act of the Federal Tort Claims Act.

Section 9. Waiver.

Each party does hereby waive all claims in performance of its respective tasks under this Agreement against every other party for compensation for any loss, damage, personal injury, or death.

IN WITNESS WHEREOF, the parties have herein below set their hand.

FOR:  
ENERGY, MINERALS and NATURAL  
RESOURCES DEPARTMENT

FOR:  
ENVIRONMENT DEPARTMENT

By: Signature on File

By: N/A

(Authorized Representative/Title)

Date: 4/25/97

FOR:  
DEPARTMENT OF GAME AND FISH

By: Signature on File  
(Authorized Representative/Title)

Date: 5/5/97

FOR:  
STATE LAND OFFICE

By: Signature on File  
(Authorized Representative/Title)

Date: 6/11/97

Approved by the Secretary of the New Mexico Department of Finance & Administration:

By: Signature on File

(Authorized Representative/Title)

Date: N/A

FOR:  
OFFICE OF CULTURAL AFFAIRS

By: Signature on File  
(Authorized Representative/Title)

Date: 5/9/97

FOR:  
U.S. DEPARTMENT OF ENERGY  
CARLSBAD AREA OFFICE

By: Signature on File  
(Authorized Representative/Title)

Date: 6/17/97

Date: 6/26/97

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## APPENDIX H

### STATE/FEDERAL CONTACTS FOR THE JOINT POWERS AGREEMENT ON MANAGEMENT OF THE WIPP WITHDRAWAL AREA

Contact information for the list of stakeholders below is maintained by the LUC.

#### New Mexico Energy, Minerals and Natural Resources Department

Eletha Trujillo  
New Mexico Radioactive Waste Consultation Task Force  
EMNRD Energy Conservation and Management Division

Laura McCarthy  
Forestry Division

Holland Shepherd  
New Mexico Energy, Minerals, and Natural Resources Department

Raymond Podany  
New Mexico Energy, Minerals and Natural Resources Department

#### New Mexico Department of Game and Fish

Matt Wunder, Ph.D.  
Chief, Ecological and Environmental Planning  
New Mexico Department of Game and Fish

George Farmer (Alternate)

#### New Mexico State Land Office

Stephen Wust, Chief Geologist  
NM State Land Office

Melissa Armijo  
Surface Resources Division Manager  
Right-of-Way Leasing

State Historic Preservation Office

Jeff Pappas, Ph.D.  
State Historic Preservation Officer  
Director, Historic Preservation Division  
New Mexico Department of Cultural Affairs

Michelle Ensey  
Deputy State Historic Preservation Officer and State Archaeologist  
NM State Historic Preservation Office

U.S. Department of Energy and Nuclear Waste Partnership LLC

George Basabilvazo  
U.S. Department of Energy  
Carlsbad Field Office  
P.O. Box 3090  
Carlsbad, NM 88221-3090  
Phone: 575/234-7488  
Fax: 575/234-7061  
Email: [george.basabilvazo@cbfo.doe.gov](mailto:george.basabilvazo@cbfo.doe.gov)

Michael Brown  
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Joshua Adkins  
U.S. Department of Energy  
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Fax: 575/234-7061  
Email: [joshua.adkins@cbfo.doe.gov](mailto:joshua.adkins@cbfo.doe.gov)

David Ganaway  
WIPP Land Use Coordinator  
Nuclear Waste Partnership LLC  
P.O. Box 2078  
Carlsbad, NM 88221-3090  
Phone: 575/234-8449  
Fax: 575/234-6062  
Email: [david.ganaway@wipp.ws](mailto:david.ganaway@wipp.ws)