Waste Isolation Pilot Plant – 2014 ACO Penalty Narrative – Violation # 1

Failure to maintain and operate the facility to minimize the possibility of a fire - On February 5, 2014, an underground fire involving a salt haul truck occurred at WIPP. On February 7, 2014, the DOE Accident Investigation Board ("AIB") was appointed to investigate the fire. On March 13, 2014, the AIB released its report ("AIB Fire Report") regarding the fire. The Report, titled *Underground Salt Haul Truck Fire at the Waste Isolation Pilot Plant February 5, 2014*, concluded that the "accident was preventable."

Violation # 1: The Respondents' failure to maintain and operate WIPP to minimize the possibility of a fire which could threaten human health or the environment is a violation of Permit Condition 2.1, Design and Operation of the Facility, and 20.4.1.500 NMAC, incorporating 40 C.F.R. § 264.31.

PC 2.1. Design and Operation of Facility

The Permittees shall design, construct, maintain, and operate WIPP to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of transuranic (TRU) mixed waste or mixed waste constituents to air, soil, groundwater, or surface water which could threaten human health or the environment, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.31).

40 CFR § 264.31 Design and operation of facility.

Facilities must be designed, constructed, maintained, and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

BACKGROUND:

- The Permit provides that the Respondents shall design, construct, maintain, and operate WIPP to minimize the possibility of a fire that could threaten human health or the environment. See Permit Condition 2.1, Design and Operation of the Facility; 20.4.1.500 NMAC, incorporating 40 CFR §264.31.
- On February 5, 2014, as a result of a fire the previous day, the Respondents reported that multiple employees were being transported to a local hospital for potential smoke inhalation.
- The AIB Fire Report identified the root cause of the accident to be "...the failure of the NWP and the previous management and operations contractor to adequately recognize and mitigate the hazard regarding a fire in the underground." See AIB Fire Report, pages ES-3 and D-2.
- The AIB Fire Report identified numerous contributing causes of the salt truck fire, including: salt haul truck combustible buildup; conversion of the truck's automatic fire suppression system to manual; removal of the automatic fire detection capability; and not using fire resistant hydraulic fluid in the truck.
- The AIB Fire Report identified numerous concerns associated with the fire not directly related to the salt haul truck, including; an ineffective emergency/preparedness and response program;

- chaining of ventilation doors and an out-of-service regulator and fans; and inoperable mine phones.
- The AIB Fire Report identified numerous additional fire safety concerns, including: insufficiently
 rigorous equipment inspections; large quantities of material staged haphazardly throughout the
 mine negatively impacting worker egress; numerous components of the mine ventilation system
 were out-of-service or impaired for an extended period of time; alarm systems were impaired;
 and water hydrants being out of service.

1. GRAVITY-BASED COMPONENT

a) Potential for Harm: Major

MAJOR: The violation poses a substantial potential for harm to human receptors.

The Respondent's failure to maintain and operate WIPP to minimize the possibility of a fire resulted in a fire that exposed numerous workers to considerable harm. AIB findings reveal numerous other fire preparedness and prevention inadequacies.

Furthermore, NMED utilized the following table to quantify the harm caused by this violation.

POTENTIAL FOR HARM RANKING SYSTEM FOR HAZARDOUS WASTE VIOLATIONS

Violation	Description	Nature of Waste	Waste Volume	Releases	Affected Population	Total Score
PC 2.1 40 CFR 264.31	Failure of a TSD to maintain, and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment	8	8	1	2 (86 workers underground at the time of the fire)	19

SCORING SYSTEM

Nature of Waste		Waste Volume	Receptors		
			Releases	Affected Population	
	F, P, U wastes with "H" designation	8 - > 25 drums	6 - Actual Discharge	4 - > 1,000	
Category 1 8	D003 reactive wastes; F, K, U, P wastes with "R" designation	5 - 6-25 drums	4 - Potential for Discharge	3 - 100 - 1,000	
	Other waste which may present a significantly greater hazard due to extreme ignitability, corrosivity, toxicity, or acutely toxic or reactive	2 - < 6 drums	1 - No Discharge	2 - 10 - 100	
Category 2	Any other waste not meeting Category 1			1 - < 10	

TOTAL POTENTIAL FOR HARM

19-26	Major
13-18	Moderate
6-12	Minor

a) Extent of Deviation: Major

MAJOR: The violation violates the most important element of the requirement to such an extent that substantial noncompliance results.

The AIB Fire Report identifies multidisciplinary concerns and contributing causes of the salt truck fire, including truck maintenance, circumventing of safety measures, ineffective emergency preparedness and response program, and numerous fire safety concerns.

NMED therefore deems this a major deviation from the regulatory and statutory requirement.

b) Number of Counts: 12

The AIB Fire Report identified twelve contributing causes and associated concerns related to the fire incident, including: salt haul truck combustible buildup; conversion of the truck's automatic fire suppression system to manual; removal of the automatic fire detection capability; and not using fire resistant hydraulic fluid in the truck; an ineffective emergency preparedness and response program; and an out-of-service regulator and fans; and inoperable mine phones; insufficiently rigorous equipment inspections; large quantities of material staged haphazardly throughout the mine negatively impacting worker egress; numerous components of the mine ventilation system being out-of-service or impaired for an extended period of time; impaired alarm systems; and out of service water hydrants. Therefore, NMED considers this as twelve (12) counts.

2. MULTIPLE-DAY COMPONENT

Multiple-Day Penalty Application

Per the HWB Penalty Policy, application of a multi-day penalty for violations of major-major gravity is mandatory. The AIB Fire Report identified the root cause of this accident to be the failure of Nuclear Waste Partnership LLC (NWP) and the previous management and operations (M&O) contractor to adequately recognize and mitigate the hazard regarding a fire in the underground. Given the failure attribution addresses current facility management and dates back to previous management, NMED deems a multi-day penalty of 60 days to be appropriate.

3. ADJUSTMENT FACTORS

a) Effort to Comply

Findings associated with the AIB Fire Report demonstrate that the Respondents did not maintain or operate WIPP to minimize the possibility of a fire which could threaten human health or the environment. The Respondents did not self-disclose any of the violations incorporated into Order HWB 14-21. Instead, the Respondents chose to delay disclosure of known Permit violations and delay implementation of certain contingencies contained in the Permit, even after being prompted by NMED to take action. Further, since the February 4, 2014, truck fire, the Department of Energy Headquarters have worked to chill communications between the Respondents and NMED which constitutes bad faith in support of the upward adjustment. NMED deems the Respondents' actions constitute recalcitrant cooperation per the HWB Penalty Policy, Appendix B, and deems the appropriate adjustment to the penalty to be upward by 5%.

b) Negligence / Willfulness

NMED considers there to have been substantial negligence on the part of the facility in association with this violation. The primary factors considered in making this determination include:

- The Respondents have a high degree of control over the circumstances leading to this violation, e.g., ability to operate and maintain the facility to minimize the potential for fire.
- The Respondents could have readily foreseen the need for an effective emergency response program, as the nation's only repository for TRU wastes generated within the DOE complex.
- The Respondents could have readily taken precautions to avoid this violation by evaluating and implementing adequate maintenance measures for vehicles used in the underground.
- The Respondents could have readily taken precautions to avoid this violation by disallowing the circumventing of safety measures.
- The Respondents have the knowledge and obligation to mitigate the numerous additional fire safety concerns, including inadequate inspections, poor housekeeping, and impaired response equipment.
- The Respondents' level of sophistication regarding hazardous waste compliance is considerable and among the top tier of waste generators both state and nationwide.

Therefore, NMED deems the appropriate adjustment to the penalty per the HWB Penalty Policy to be upward by 15%.

c) History of Noncompliance

Respondents have not been cited for violating this requirement in the past. However, Respondents have a minor history of noncompliance with different Hazardous Waste Management Regulations (HWMR) and Permit requirements within the last ten years (2004, and 2006-2009). Therefore, the adjustment to

the penalty per the policy is upward 5%.

Other Factors

1) Self-Reporting

WIPP did not self-report the noncompliance with PC 2.1.

Therefore; NMED deems that no penalty adjustment is warranted.

2) <u>Small Businesses</u>

WIPP is a large federal government facility and not a small business, therefore, no penalty adjustment is warranted.

3) Unique Factors

There are no known unique factors in this case; therefore, no penalty adjustment is warranted.

4. FINANCIAL CONDITION

Due to the facility's demonstrated ability to abide with the hazardous waste requirements and to rectify problems identified, NMED considers the financial condition of the facility to be an unwarranted consideration and therefore deems the penalty as calculated to be an appropriate deterrent.

5. **ECONOMIC BENEFIT OF NONCOMPLIANCE**

NMED does not consider economic benefit to have been a factor associated with this violation.

<u>Waste Isolation Pilot Plant – 2014 ACO</u> Penalty Narrative – Violation # 2

Failure to submit a written notice within 5 days of a noncompliance that may threaten human health or the environment - WIPP is required to provide written notification within 5 days of a noncompliance that may endanger human health and the environment. The underground fire posed a threat to human health, and a potential threat of a release of hazardous waste, which constitutes a noncompliance of the Permit. WIPP failed to submit a written notification of the fire within 5 days of the event.

Violation # 2: The Respondents' failure to submit a written notice concerning the fire within five calendar days of the time the Respondents became aware of the circumstances is a violation of Permit Condition 1.7.13.3, Written Notice, and 20.4.1.900 NMAC, incorporating 40 CFR § 270.30(I)(6)(iii); and 1.7.13.2, Description of Occurrence; 20.4.1.900 NMAC, incorporating 40 CFR §270.30(I)(6)(ii).

PC 1.7.13.3. Written Notice

As required by 20.4.1.900 NMAC (incorporating 40 CFR §270.30(I)(6)(iii)), the Permittees shall submit a written notice within five calendar days of the time the Permittees become aware of the circumstances. The written notice shall contain the information required in Permit Section 1.7.13.2 and the following information:

- i. A description of the noncompliance and its cause;
- ii. The period(s) of the noncompliance including exact dates and times and, if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
- iii. Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

40 CFR §270.30(I)(6)(iii) Contents of part B: General requirements.

(iii) A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The Director may waive the five day written notice requirement in favor of a written report within fifteen days.

PC 1.7.13.2 Description of Occurrence

The description of the occurrence and its cause shall include:

- i. Name, address, and telephone number of the Permittees;
- ii. Name, address, and telephone number of the facility;
- iii. Date, time, and type of incident;
- iv. Name and quantity of materials involved;
- iv. The extent of injuries, if any;
- v. An assessment of actual or potential hazards to the environment and human

- health outside the facility, where this is applicable; and
- vi. Estimated quantity and disposition of recovered material that resulted from the incident. [20.4.1.900 NMAC (incorporating 40 CFR §270.30(I)(6)(ii))]

40 CFR §270.30(I)(6)(ii) Contents of part B: General requirements.

- (ii) The description of the occurrence and its cause shall include:
 - (A) Name, address, and telephone number of the owner or operator;
 - (B) Name, address, and telephone number of the facility;
 - (C) Date, time, and type of incident;
 - (D) Name and quantity of material(s) involved;
 - (E) The extent of injuries, if any;
 - (F) An assessment of actual or potential hazards to the environment and human health outside the facility, where this is applicable; and
 - (G) Estimated quantity and disposition of recovered material that resulted from the incident.

BACKGROUND:

- The Permit provides that the Respondents shall, within five (5) calendar days from the time the Respondents become aware of the circumstances, submit a written notice to the Secretary of Environment, providing specific information regarding a noncompliance that may endanger human health or the environment. See the following two Permit Conditions: 1.7.13.3, Written Notice; and 1.7.13.2. Description of Occurrence; 20.4.1.900 NMAC, incorporating 40 CFR §270.30(I)(6)(ii).
- The February 5, 2014 fire is an event that would have necessitated written notice under Permit Condition 1.7.13.3.
- For the five day period after February 5, 2014, NMED did not receive written notice from the Respondents of the underground fire at WIPP.

1. GRAVITY-BASED COMPONENT

a) Potential for Harm: Major

MAJOR: The violation: 1) poses a substantial potential for harm to human or environmental receptors; and 2) substantially undermines the regulatory program.

The underground fire posed a threat to worker health and a potential threat of a release of hazardous waste, which by extension would threaten human health outside the facility. Failure to notify NMED, and by extension the State of NM, precludes the state from preparing its resources to respond to an emergency should it have been necessary.

NMED considers the lack of timely reporting of a noncompliance that endangered human health and the

environment to constitute a substantial potential for exposure and substantially undermines the regulatory program.

a) Extent of Deviation: Major

MAJOR: The violation violates the most important element of the requirement to such an extent that substantial noncompliance results.

The purpose of the 5-day written report is for the facility to provide written notification and status of the noncompliance, in this case an underground fire. WIPP failed to provide this written notification.

NMED therefore deems this a major deviation from the regulatory and statutory requirement.

b) Number of Counts: 1

This violation is associated with a single reporting event; therefore NMED considers this as one (1) count.

2. MULTIPLE-DAY COMPONENT

Multiple-Day Penalty Application

Per the HWB Penalty Policy, application of a multi-day penalty for violations of major-major gravity is mandatory. Respondents failed to submit a written notification of the fire within 5 days of the event, or at any time thereafter, therefore NMED deems a multi-day penalty of 60 days to be appropriate.

3. ADJUSTMENT FACTORS

a) Effort to Comply

For the five day period after February 5, 2014, the NMED Hazardous Waste Bureau did not receive written notice of the underground fire at WIPP. To date, Respondents have not submitted a written notice of the incident per PC 1.7.13.3. The Respondents did not self-disclose any of the violations incorporated into Order HWB 14-21. Instead, the Respondents chose to delay disclosure of known Permit violations and delay implementation of certain contingencies contained in the Permit, even after being prompted by NMED to take action. Further, since the February 4, 2014, truck fire, the Department of Energy Headquarters worked to chill communications from Respondents to NMED which constitutes bad faith in support of the upward adjustment. NMED deems the Respondents' actions constitute recalcitrant cooperation per the HWB Penalty Policy, Appendix B, and deems the appropriate adjustment to the penalty to be upward by 5%.

b) Negligence / Willfulness

NMED considers there to have been substantial negligence on the part of the facility in association with this violation. The primary factor considered in making this determination includes:

- The Respondents have a high degree of control over the circumstances leading to this
 violation, e.g., the obligation to report the endangerment to human health and the
 environment posed by the fire in the underground.
- The Respondents could have readily foreseen that the fire caused endangerment, as six workers were transferred to the Carlsbad Medical Center for possible smoke inhalation.
- The Respondents could have readily foreseen the 5-day written reporting requirement, having complied with the 24-hour oral notification requirement, both in PC 1.7.13.
- The Respondents have staff with the knowledge that would have prevented this
 violation. The Respondents have committed resources dedicated solely to permit
 compliance that possess the required compliance expertise to recognize that the fire
 posed an endangerment to human health and the environment that required
 notification to NMED.
- The Respondents' level of sophistication regarding hazardous waste compliance is considerable and among the top tier of waste generators both state and nationwide.

Therefore, NMED deems the appropriate adjustment to the penalty per the HWB Penalty Policy to be upward by 15%.

c) History of Noncompliance

Respondents were cited for violating this same requirement [former PC 1.E.13.C and 270.30(1)(6)(iii)] during the compliance evaluation inspections conducted on July 23, 2004 and September 29, 2008. However, Respondents have a significant minor history of noncompliance with different Hazardous Waste Management Regulations (HWMR) and Permit requirements within the last ten years (2004, and 2006-2009). Therefore, the adjustment to the penalty per the policy is upward 5%.

Other Factors

1) Self-Reporting

WIPP did not self-report the noncompliance with PCs 1.7.13.3 and 1.7.13.2, 40 CFR §270.30(I)(6)(iii), and 40 CFR §270.30(I)(6)(iii).

Therefore; NMED deems that no penalty adjustment is warranted.

2) Small Businesses

WIPP is a large federal government facility and not a small business, therefore, no penalty adjustment is

warranted.

3) <u>Unique Factors</u>

There are no known unique factors in this case; therefore, no penalty adjustment is warranted.

4. FINANCIAL CONDITION

Due to the facility's demonstrated ability to abide with the hazardous waste requirements and to rectify problems identified, the NMED considers the financial condition of the facility to be an unwarranted consideration and therefore deems the penalty as calculated to be an appropriate deterrent.

5. **ECONOMIC BENEFIT OF NONCOMPLIANCE**

NMED does not consider economic benefit to have been a factor associated with this violation.

Waste Isolation Pilot Plant – 2014 ACO Penalty Narrative – Violation # 3

Failure to conduct personnel training - The AIB Fire Report considers inadequate training and /or preparedness drills for emergency response to be contributing causes to the improper response to the underground vehicle fire.

Violation # 3: The Respondents' failure to conduct adequate personnel training is a violation of Permit Condition 2.8, Personnel Training; 2.8.2, Personnel Training Requirements, referencing 20.4.1.500 NMAC, incorporating 40 CFR § 264.16; and F-1e, Training for Emergency Response.

PC 2.8 Personnel Training

The Permittees shall conduct personnel training, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.16).

2.8.1. Personnel Training Content

The personnel training program shall include the requirements specified in Permit Attachment F (Personnel Training) and Permit Attachment F2 (Training Course and Qualification Card Outlines), as required by 20.4.1.500 NMAC (incorporating 40 CFR § 264.16).

2.8.2. Personnel Training Requirements

The Permittees shall train all persons involved in the management of mixed and hazardous waste in procedures relevant to the positions in which they are employed, as specified in Permit Attachment F1 (RCRA Hazardous Waste Management Job Titles and Descriptions), and as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.16).

40 CFR §264.16 Personnel training.

- (a)(1) Facility personnel must successfully complete a program of classroom instruction or onthe-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of this part. The owner or operator must ensure that this program includes all the elements described in the document required under paragraph (d)(3) of this section.
 - (2) This program must be directed by a person trained in hazardous waste management procedures, and must include instruction which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed.
 - (3) At a minimum, the training program must be designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems, including, where applicable:
 - (i) Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment;
 - (ii) Key parameters for automatic waste feed cut-off systems;
 - (iii) Communications or alarm systems;

- (iv) Response to fires or explosions;
- (v) Response to ground-water contamination incidents; and
- (vi) Shutdown of operations.
- (4) For facility employees that receive emergency response training pursuant to Occupational Safety and Health Administration (OSHA) regulations 29 CFR 1910.120(p)(8) and 1910.120(q), the facility is not required to provide separate emergency response training pursuant to this section, provided that the overall facility training meets all the requirements of this section.

PC F-1e Training for Emergency Response

The WIPP facility training program ensures that personnel are able to respond appropriately and effectively to emergency situations. WIPP facility employees receive GET-19X/GET-20X/GET-21X, which includes instruction on hazard awareness, emergency preparedness, spill control, and the WIPP RCRA Contingency Plan (Permit Attachment D). This training ensures that every employee understands how to recognize real or potential emergencies and how to report such incidents to the proper WIPP facility officials. It also ensures that employees will not endanger themselves or others by taking actions beyond their ability. Emergency response personnel receive more extensive training in emergency response procedures as described in the next paragraph.

The WIPP facility emergency response organization is capable of providing emergency response services both above ground and underground. The Emergency Response Team (ERT), under the supervision of the Emergency Services Technician, has primary responsibility for above ground emergency response activities, and the First Line Initial Response Team (FLIRT) and the Mine Rescue Team (MRT) are responsible for underground emergency response activities. The responsibilities of these units are described in the WIPP RCRA Contingency Plan; Permit Attachment D. Members of these teams are volunteers from the WIPP organization. These teams receive thorough emergency response training before they are called upon to perform in real emergencies. This training includes firefighting elements, such as fire behavior, ladders, fire hose, fire streams, and ventilation. The FLIRT includes current qualification for unescorted underground access, National Fire Protection Association (NFPA) 600 Industrial Fire Brigades requirements, and additional qualifications pertaining to the team.

MRT training includes current qualification for unescorted underground access, at least one year of underground work, Mine Safety and Health Administration requirements for medical and mine rescue, and additional qualifications pertaining to the team. ERT training includes NFPA 600 Industrial Fire Brigade requirements, and additional training pertaining to the team. In addition, all teams receive lifesaving elements, such as rescue, cardiopulmonary resuscitation and first aid, and other specific elements, such as self-contained breathing apparatus. A list of required training for these positions is included in each job position description in Permit Attachment F1.

Because these response teams are used for unusual occurrences and not routine hazardous

waste handling, a RCRA position title is not included. A duty description is included which summarizes basic anticipated duties of these positions. Training records for these individuals are maintained in each individual's training file in Technical Training located at the WIPP site. These training requirements must be met prior to an individual serving in an emergency response function.

Hazardous waste handling and emergency response personnel receive training that ensures their familiarity with emergency procedures, emergency equipment, and emergency systems including:

- Procedures for using and inspecting facility emergency and monitoring equipment
- Repairing and replacing facility emergency and monitoring equipment (RADCON only)
- Communications and alarm systems
- Response to fires or explosions
- •Shutdown of operations.

Course outlines for emergency response training courses are provided in Permit Attachment F2.

The RCRA Emergency Coordinator receives training relevant to the RCRA Contingency Plan and must be familiar with the contents of the RCRA Contingency Plan prior to serving as RCRA Emergency Coordinator. Documentation of this training is maintained in the RCRA Emergency Coordinator's training file. All individuals qualified to serve as RCRA Emergency Coordinators are required to complete Contingency Plan training (SAF-645). The RCRA Emergency Coordinator is provided with updated copies of the Contingency Plan in accordance with permit Attachment D, Section D-9 whenever changes are made. Office wardens receive Office Warden Training (SAF-632) and are required to take an annual refresher. In addition, the training requirements of the Central Monitoring Room (CMR) operator are included in Permit Attachment F1. The CMR operator is listed in Permit Attachment D as an emergency response related position.

As there are no automatic waste feed systems at the WIPP facility, training on parameters for waste feed cut-off systems is not required. Similarly, as there is no potential for groundwater contamination incidents at the WIPP facility, training for responding to such incidents is not required.

BACKGROUND:

- The Permit provides that the Respondents shall train all persons involved in the management of TRU mixed and hazardous waste in procedures relevant to the positions in which they are employed to perform their duties in a way that ensures the Facility's compliance. *See* Permit Conditions: 2.8, *Personnel Training*; 2.8.2, *Personnel Training Requirements*, referencing 20.4.1.500 NMAC, incorporating 40 C.F.R. § 264.16; and F-1e, *Training for Emergency Response*.
- The AIB Fire Report specified that "[t]he training and qualification of the operator was

inadequate to ensure proper response to a vehicle fire." *See* AIB Fire Report, pages ES-4 and D-3.

- The AIB Fire Report discussed examples of inadequate training for the proper response to a
 vehicle fire: workers were unable to don personal protective equipment; fully integrated
 emergency exercises had not been conducted; individuals identified as coordinating the Facility's
 response to fires had not received Incident Command System training; and the individual
 operating the salt haul truck had not received hands-on training in the use of portable fire
 extinguishers. See AIB Fire Report, page 26.
- The AIB Fire Report concluded that Facility personnel did not fully follow the procedures for response to a fire in the underground due in part to "the lack of effective drills and training." See AIB Fire Report, page ES-5.
- Facility personnel involved in the management of TRU mixed and hazardous waste were not trained in procedures relevant to the position in which they were employed and in a manner to perform their duties in a way that ensured the Facility's compliance.

1. GRAVITY-BASED COMPONENT

a) Potential for Harm: Moderate

MODERATE: The violation poses a significant potential for harm to human or environmental receptors.

The AIB Fire Report concluded that inadequate training was a contributing cause for the lack of a proper response to the vehicle fire. Deficiencies were identified in training, qualifications, and drills. Examples included the lack of basic fire extinguisher training, Incident Command System training for those expected to perform in that capacity, and evacuation drills that did not integrate full procedural response. 506 personnel had been granted unescorted mine access, although many possessed only the minimum required training. The Respondent's failure to conduct adequate personnel training contributed to a fire that exposed numerous workers, and potentially the environment, to considerable harm.

NMED considers this noncompliance to pose a significant potential for exposure.

a) Extent of Deviation: Moderate

MODERATE: The violation significantly deviates from an important aspect of a regulatory or statutory requirement, but the violator implements most of the important aspects of the requirements.

Inadequate training contributed to the improper response to the underground vehicle fire. The level of that inadequacy identified by the AIB illustrates a moderate deviation from the regulatory and statutory requirement.

b) Number of Counts: 1

NMED considers this as one (1) count.

2. MULTIPLE-DAY COMPONENT

Multiple-Day Penalty Application

The AIB Fire Report identified multiple pervasive deficiencies indicating that inadequate training was an ongoing problem at the Facility; therefore NMED deems a multiday penalty of 60 days to be appropriate.

3. ADJUSTMENT FACTORS

a) Effort to Comply

By failing to conduct adequate readiness and response drills, WIPP should have been aware of potential training deficiencies. The Respondents did not self-disclose any of the violations incorporated into Order HWB 14-21. Instead, the Respondents chose to delay disclosure of known Permit violations and delay implementation of certain contingencies contained in the Permit, even after being prompted by NMED to take action. Further, since the February 4, 2014, truck fire, the Department of Energy Headquarters worked to chill communications from Respondents to NMED which constitutes bad faith in support of the upward adjustment. NMED deems the Respondents' actions constitute recalcitrant cooperation per the HWB Penalty Policy, Appendix B, and deems the appropriate adjustment to the penalty to be upward by 5%.

b) Negligence / Willfulness

NMED considers there to have been substantial negligence on the part of the facility in association with this violation. The primary factor considered in making this determination includes:

- The Respondents have a high degree of control over the circumstances leading to this violation, e.g., ability to provide training that teaches workers to perform their duties in a way that ensures the facility's compliance with emergency response procedures.
- The Respondents could have readily foreseen the need for an effective emergency response program, as the nation's only repository for TRU wastes generated within the DOE complex.
- The Respondents could have readily taken precautions to avoid this violation by evaluating the training program and conducting necessary drills.
- The Respondents have staff with the knowledge that would have prevented this

violation. The Respondents have committed resources dedicated solely to permit compliance that possess the required compliance expertise to recognize that the facility personnel involved in the management of TRU mixed and hazardous waste required training in procedures relevant to the position in which they were employed and in a manner to perform their duties in a way that ensured the Facility's compliance.

 The Respondents' level of sophistication regarding hazardous waste compliance is considerable and among the top tier of waste generators both state and nationwide.

Therefore, NMED deems the appropriate adjustment to the penalty per the HWB Penalty Policy to be upward by 15%.

c) History of Noncompliance

Respondents have not been cited for violating this requirement in the past. However, Respondents have a minor history of noncompliance with different Hazardous Waste Management Regulations (HWMR) and Permit requirements within the last ten years (2004, and 2006-2009). Therefore, the adjustment to the penalty per the policy is upward 5%.

Other Factors

1) Self-Reporting

WIPP did not self-report the noncompliance with PC 2.8 and F-1e.

Therefore, NMED deems that no penalty adjustment is warranted.

2) <u>Small Businesses</u>

WIPP is a large federal government facility and not a small business, therefore, no penalty adjustment is warranted.

3) Unique Factors

There are no known unique factors in this case; therefore, no penalty adjustment is warranted.

4. FINANCIAL CONDITION

Due to the facility's demonstrated ability to abide with the hazardous waste requirements and to rectify problems identified, the NMED considers the financial condition of the facility to be an unwarranted consideration and therefore deems the penalty as calculated to be an appropriate deterrent.

5. <u>ECONOMIC BENEFIT OF NONCOMPLIANCE</u>

NMED does not consider economic benefit to have been a factor associated with this violation.

Waste Isolation Pilot Plant – 2014 ACO Penalty Narrative – Violations # 4-5

Failure to provide, maintain and test emergency equipment - The AIB Fire Report concluded that during the underground fire incident, internal alarm and communication systems were impaired, and not fully maintained to assure its proper operation in time of emergency.

Violation # 4: The Respondents' failure to have an internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to Facility personnel is a violation of Permit Conditions: 2.10.1, Required Equipment; and 2.10.1.1, Internal Communications, referencing 20.4.1.500 NMAC, incorporating 40 CFR §264.32(a).

PC 2.10.1 Required Equipment

The Permittees shall maintain at the facility the equipment specified in the Contingency Plan, Permit Attachment D (RCRA Contingency Plan), as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.32).

PC 2.10.1.1 Internal Communications

The Permittees shall have an internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.32(a)). The internal communication systems shall include two-way communication by the public address (PA) system and its intercom phones and paging channels, an internal telephone system, mine phones, pagers and plectrons, and portable two-way radios. The alarm system shall include local and facility-wide alarm systems.

40 CFR §264.32 Required equipment.

All facilities must be equipped with the following, unless it can be demonstrated to the Regional Administrator that none of the hazards posed by waste handled at the facility could require a particular kind of equipment specified below:

(a) An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel.

Violation # 5: The Respondents' failure to test and maintain the equipment specified in Permit Section 2.10.1, as necessary, to assure its proper operation in time of emergency, as specified in Permit Attachment E is a violation of Permit Conditions: 2.10.2, Testing and Maintenance of Equipment; and E-1a, General Inspection Requirements, referencing 20.4.1.500 NMAC, incorporating 40 C.F.R. § 264.33.

PC 2.10.2 Testing and Maintenance of Equipment

The Permittees shall test and maintain the equipment specified in Permit Section 2.10.1, as necessary, to assure its proper operation in time of emergency, as specified in Permit Attachment E and as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.33).

PC E-1a General Inspection Requirements

Tables E-1, E-1a, and E-2 of this Permit Attachment list the major categories of monitoring

equipment, safety and emergency systems, security devices, and operating and structural equipment that are important to the prevention or detection of, or the response to, environmental or human health hazards caused by hazardous waste. These systems may include numerous subsystems. These systems are inspected according to the frequency listed in Tables E-1 and E-1a, a copy of which is maintained at the WIPP facility. The frequency of inspections is based on the nature of the equipment or the hazard and regulatory requirements. When in use, daily inspections are made of areas subject to spills, such as TRU mixed waste loading and unloading areas in the WHB Unit, looking for deterioration in structures, mechanical items, floor coatings, equipment, malfunctions, etc., in accordance with 20.4.1.500 NMAC (incorporating 40 CFR §264.15(b)(4)).

As required in 20.4.1.500 NMAC (incorporating 40 CFR §264.33), the WIPP facility inspection procedures for communication and alarm systems, fire-protection equipment, and spill control and decontamination equipment include provisions for testing and maintenance to ensure that the equipment will be operable in an emergency.

40 CFR §264.33 Testing and maintenance of equipment.

All facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, must be tested and maintained as necessary to assure its proper operation in time of emergency.

40 CFR §264.15 General inspection requirements

(b)(4) The frequency of inspection may vary for the items on the schedule. However, the frequency should be based on the rate of deterioration of the equipment and the probability of an environmental or human health incident if the deterioration, malfunction, or operator error goes undetected between inspections. Areas subject to spills, such as loading and unloading areas, must be inspected daily when in use, except for Performance Track member facilities, that must inspect at least once each month, upon approval by the Director, as described in paragraph (b)(5) of this section. At a minimum, the inspection schedule must include the items and frequencies called for in §§ 264.174, 264.193, 264.195, 264.226, 264.254, 264.278, 264.303, 264.347, 264.602, 264.1033, 264.1052, 264.1053, 264.1058, and 264.1083 through 264.1089 of this part, where applicable.

BACKGROUND:

- The Permit provides that the Respondents shall have an internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel. The internal communications system shall include, among other things, two-way communication through the public address system. See the following two Permit Conditions: 2.10.1, Required Equipment; and 2.10.1.1, Internal Communications; and 20.4.1.500 NMAC, incorporating 40 CFR §264.32(a).
- The AIB Fire Report described the extent to which the emergency alarm system failed. The

evacuation alarm and associated announcement over the public address system "was not heard throughout the underground" and "some workers learned of the fire and need to evacuate through the 'chatter' on the mine phone, through co-workers, or through their supervisors." See AIB Fire Report, page ES-2.

- The AIB Fire Report specifies that 12 of 40 mine phones were non-functional. See AIB Fire Report, page 34
- Facility emergency communication equipment was not fully capable of providing emergency instruction to facility personnel.
- The Permit provides that the Respondents shall test and maintain equipment as necessary to assure its proper operation in time of emergency. See Permit Conditions: 2.10.2, Testing and Maintenance of Equipment; and E-1a, General Inspection Requirements; 20.4.1.500 NMAC, incorporating 40 C.F.R. §264.33.
- The AIB Fire Report identified the following maintenance program inadequacies: alarm systems were impaired; and water hydrants were out of service. See AIB Fire Report, pages 34, 35, and 36.
- The AIB Fire Report concluded that, with regard to equipment, "there is a significant difference between the preventative maintenance prescribed in the service manual and what is performed" and "that management has not taken prompt action to resolve longstanding deficiencies." See AIB Fire Report, pages 36 and 37.
- Emergency equipment was not fully maintained to assure its proper operation in time of emergency.

1. GRAVITY-BASED COMPONENT

a) Potential for Harm: Major

MAJOR: The violation poses a substantial potential for harm to human or environmental receptors.

Failure to provide, maintain and test emergency equipment to assure its proper operation in time of emergency poses a substantial potential for harm to human or environmental receptors.

Furthermore, NMED utilized the following table to quantify the harm caused by this violation.

POTENTIAL FOR HARM RANKING SYSTEM FOR HAZARDOUS WASTE VIOLATIONS

Violation	Description	Nature of Waste	Waste Volume	Releases	Affected Population	Total Score
PC 2.1.10 PC 2.10.1.1 40 CFR 264.32(a)	Failure to have an internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel	8	8	1	2 (86 workers underground at the time of the fire)	19

Violation	Description	Nature of Waste	Waste Volume	Releases	Affected Population	Total Score
PC 2.10.2 PC E-1a 40 CFR 264.33	Failure to test and maintain emergency equipment as necessary to assure its proper operation in time of emergency.	8	8	1	2 (86 workers underground at the time of the fire)	19

SCORING SYSTEM

Nature of Waste		Waste Volume	Receptors		
			Releases	Affected Population	
	F, P, U wastes with "H" designation	8 - > 25 drums	6 - Actual Discharge	4 - > 1,000	
Category 1	D003 reactive wastes; F, K, U, P wastes with "R" designation	5 - 6-25 drums	4 - Potential for Discharge	3 - 100 - 1,000	
8	Other waste which may present a significantly greater hazard due to extreme ignitability, corrosivity, toxicity, or acutely toxic or reactive	2 - < 6 drums	1 - No Discharge	2 - 10 - 100	
Category 2	Any other waste not meeting Category 1			1 - < 10	

TOTAL POTENTIAL FOR HARM

19-26	Major
13-18	Moderate
6-12	Minor

a) Extent of Deviation: Moderate

MODERATE: The violation significantly deviates from an important aspect of a regulatory or statutory requirement, but the violator implements most of the important aspects of the requirements.

Incapable communications and alarm systems contributed to the improper response to the underground vehicle fire. NMED therefore deems this a moderate deviation from the regulatory and statutory requirement.

b) Number of Counts: Violation Specific

Violation 4: The AIB Report identified the following faulty communications equipment: the PA system, evacuation alarm, and 12 mine phones; therefore NMED considers this as fourteen (14) counts.

Violation 5: The AIB Fire Report identified 43 instances of failure to test and maintain required equipment at the Facility. Therefore, NMED considers this as forty-three (43) counts.

2. MULTIPLE-DAY COMPONENT

Multiple-Day Penalty Application

Per the HWB Penalty Policy, application of a multi-day penalty for violations of major-moderate gravity is mandatory. Based on the AIB Report, testing and maintenance issues have been constant and outstanding longer than 60 days, therefore, NMED deems that a multi-day penalty of 60 days is appropriate.

3. ADJUSTMENT FACTORS

a) Effort to Comply

Facility emergency communication equipment was not fully capable of providing emergency instruction to facility personnel, and was not fully maintained to assure its proper operation in time of emergency. The Respondents did not show a good faith effort to comply with the requirements, to mitigate and prevent potential harm, to self report the violation, or to implement corrective action. The Respondents did not self-disclose any of the violations incorporated into Order HWB 14-21. Instead, the Respondents chose to delay disclosure of known Permit violations and delay implementation of certain contingencies contained in the Permit, even after being prompted by NMED to take action. Further, since the February 4, 2014, truck fire, the Department of Energy Headquarters worked to chill communications from Respondents to NMED which constitutes bad faith in support of the upward adjustment. NMED deems the Respondents' actions constitute recalcitrant cooperation per the HWB Penalty Policy, Appendix B, and deems the appropriate adjustment to the penalty to be upward by 5%.

b) Negligence / Willfulness

NMED considers there to have been substantial negligence on the part of the facility in association with this violation. The primary factor considered in making this determination includes:

- The Respondents have a high degree of control over the circumstances leading to this violation, e.g., ability to provide and maintain communications and equipment at the Facility to ensure readiness in the event of an emergency.
- The Respondents could have readily foreseen the need for effective communications and emergency equipment, as the nation's only repository for TRU wastes generated within the DOE complex.
- The Respondents could have readily taken precautions to avoid this violation by performing required inspections and correcting deficiencies in a timely manner.
- The Respondents have staff with the knowledge that would have prevented this violation.
- The Respondents have committed resources dedicated solely to permit compliance that possess the required compliance expertise to recognize the requirement for communications and emergency equipment readiness.
- The Respondents' level of sophistication regarding hazardous waste compliance is considerable and among the top tier of waste generators both state and

nationwide.

Therefore, NMED deems the appropriate adjustment to the penalty per the HWB Penalty Policy to be upward by 15%.

c) <u>History of Noncompliance</u>

Respondents have not been cited for violating this requirement in the past. However, Respondents have a minor history of noncompliance with different Hazardous Waste Management Regulations (HWMR) and Permit requirements within the last ten years (2004, and 2006-2009). Therefore, the adjustment to the penalty per the policy is upward 5%.

Other Factors

Self-Reporting

WIPP did not self-report the noncompliance with PCs 2.10.1.1 and 2.10.2, and E-1a.

Therefore, NMED deems that no penalty adjustment is warranted.

2) <u>Small Businesses</u>

WIPP is a large federal government facility and not a small business, therefore, no penalty adjustment is warranted.

3) <u>Unique Factors</u>

There are no known unique factors in this case; therefore, no penalty adjustment is warranted.

4. FINANCIAL CONDITION

Due to the facility's demonstrated ability to abide with the hazardous waste requirements and to rectify problems identified, the NMED considers the financial condition of the facility to be an unwarranted consideration and therefore deems the penalty as calculated to be an appropriate deterrent.

5. ECONOMIC BENEFIT OF NONCOMPLIANCE

NMED does not consider economic benefit to have been a factor associated with this violation.

<u>Waste Isolation Pilot Plant – 2014 ACO</u> Penalty Narrative – Violation # 6

Failure to immediately implement the Contingency Plan - The Permit requires implementation of the Contingency Plan whenever there is a fire that could threaten human health or the environment. The Contingency Plan requires implementation in the event of a Level II or Level II incident, which includes, among other things, an incident requiring evacuation for life safety. Evacuation was ordered for the underground fire, which occurred on February 5, 2014. The Respondents failed to implement the Contingency Plan at that time, and instead implemented the Plan during on April 11, 2014 to support investigation and assessment efforts associated with the February 14, 2014 release (see April 28, and July 7, 2014, Implementation of Contingency Plan Reports).

Violation # 6: The Respondents' failure to immediately implement the Contingency Plan found in Permit Attachment D when there was a fire that threatened human health or the environment is a violation of Permit Conditions: 2.12.1, Implementation of [Contingency] Plan, referencing 20.4.1.500 NMAC, incorporating 40 C.F.R. §264.51(b); D-3, Implementation, referencing 20.4.1.500 NMAC, incorporating 40 C.F.R. §264.51(b); and D-4a(1), Initial Emergency Response and Alerting the RCRA Emergency Coordinator.

PC 2.12.1 Implementation of Plan

The Permittees shall immediately implement the Contingency Plan as specified in Permit Attachment D whenever there is a fire, explosion, or release of mixed or hazardous waste or hazardous waste constituents which could threaten human health or the environment, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.51(b)).

40 CFR § 264.51 Purpose and implementation of contingency plan.

(b) The provisions of the plan must be carried out immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.

PC D-3 Implementation

The provisions of this Contingency Plan will be implemented immediately whenever there is an emergency event (e.g., a fire, an explosion, or a natural occurrence that involves or threatens hazardous or TRU mixed wastes or a release of hazardous substances, hazardous materials, or hazardous wastes) that could threaten human health or the environment, or whenever the potential for such an event exists as determined by the RCRA Emergency Coordinator, as required under 20.4.1.500 NMAC (incorporating 40 CFR §264.51(b)). . .

PC D-4a(1) Initial Emergency Response and Alerting the RCRA Emergency Coordinator
The first person to become aware of an incident shall immediately report the situation to the
CMRO, and provide the following information, as appropriate:

- Name and telephone number of the caller
- Location of the incident and the caller

- Time and type of incident
- Severity of the incident
- Magnitude of the incident
- Cause of the incident
- Assistance needed to deal with or control the incident
- Areas or personnel affected by the incident

In addition to receiving incident reports, the Central Monitoring Room Operator (CMRO) continuously monitors (24 hours a day) the status of mechanical, electrical, and/or radiological conditions at selected points on the site, both above and below ground. Alarms to indicate abnormal conditions are located throughout the WIPP facility. The alarm(s) (e.g., fire, radiation) may be the first notification of an emergency situation received by the CMRO. The CMRO monitors alarms, takes telephone calls and radio messages, and initiates outgoing calls to emergency staff and outside agencies.

Once the CMRO is notified of a fire, explosion, or a release anywhere in the facility (either by eyewitness or an alarm), the RCRA Emergency Coordinator is immediately notified. Once notified, the RCRA Emergency Coordinator assumes responsibility for the management of activities related to the assessment, abatement, and/or cleanup of the incident.

A RCRA Emergency Coordinator is on site at all times and, therefore, can be reached at any time via a two-way radio or over the public address (PA) and plectrons on-site. If the RCRA Emergency Coordinator is unavailable or unable to perform these duties, a qualified alternate RCRA Emergency Coordinator is available.

The Emergency Services Technician (EST)/Fire Protection Technician (FPT) is also notified in case of fire, explosion, or release. The RCRA Emergency Coordinator, as incident commander, determines if supplemental emergency responders are necessary. Notification of the Emergency Response Team (ERT) (surface) is made by using the ERT pagers and/or the public announcement system. Notification of the First Line Initial Response Team (FLIRT) is by using the Mine Page Phone System. If the Mine Rescue Team (MRT) is needed the RCRA Emergency Coordinator will instruct the CMRO to make a PA announcement for the MRT to assemble in the Mine Rescue Room, located in a predetermined location.

Off-shift personnel may be notified using the on-call list, which is updated weekly by the Permittees. The FSM/CMRO, each individual on the on-call list, and WIPP Security receive copies of the on-call list. The CMRO may direct Security to make the notifications. The response to an unplanned event will be performed in accordance with procedures based on the applicable Federal, State, or local regulations and/or guidelines for that response. These include the U.S. Mine Safety and Health Administration (MSHA); NMAC; CERCLA; Chapter 74, Article 4B, New Mexico Statutes Annotated 1978, New Mexico Emergency Management Act; and agreements between the Permittees and local authorities (Section D-6) for emergencies throughout the

WIPP facility.

After notification by the CMRO, the EST/FPT shall immediately investigate to determine pertinent information relevant to the actual or potential threat posed to human health or the environment. The information will include the location of release, type, and quantity of spilled or released material (or potential for release due to fire, explosion, weather conditions, or other naturally occurring phenomena), source, areal extent, and date and time of release. The EST/FPT shall provide information for classification of the incident, according to the emergency response guidelines, to the RCRA Emergency Coordinator. The RCRA Emergency Coordinator then classifies the incident after evaluation of all pertinent information. This classification will consider both direct and indirect effects of the release, fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water run-off from water or chemical agents used to control fire and heat-induced explosions).

When the RCRA Emergency Coordinator determines that an Incident Level II or III has occurred, the Contingency Plan is implemented. The RCRA Emergency Coordinator then may choose to activate the EOC for additional support (Figure D-4). If the RCRA Emergency Coordinator determines that due to extenuating circumstances the potential to upgrade to an incident Level II or III exists, the RCRA Emergency Coordinator also may activate the EOC. The EOC will assist the RCRA Emergency Coordinator in mitigation of the incident with use of communications equipment and technical expertise from any WIPP organization (see Section D-4c).

The EOC staff will assess opportunities for coordination and the use of mutual-aid agreements with local outside agencies making additional emergency personnel and equipment available (Section D-6), as well as the use of specialized response teams available through various State and Federal agencies.

As a DOE-owned facility, the WIPP facility may use the resources available from the Federal Response Plan, signed by 27 Federal departments and agencies in April 1987, and developed under the authorities of the Earthquake Hazards Reduction Act of 1977 (42 U.S.C. 7701 et seq.) and amended by the Stafford Disaster Relief Act of 1988. Most resources are available within 24 hours. The WIPP facility maintains its own emergency response capabilities on-site. In addition to the supplemental emergency responders, radiological control technicians, environmental sampling technicians, wildlife biologists, and various other technical experts are available for use on an as-needed basis.

BACKGROUND:

• The Permit provides that the Respondents shall immediately implement the Contingency Plan whenever there is a fire that could threaten human health or the environment. The Contingency Plan specifies that it is to be implemented any time there is a Level II or Level III incident. Level II or Level III incidents are categorized as incidents involving, among other things, evacuation for

life safety. See the following three Permit Conditions: 2.12.1, Implementation of [Contingency] Plan; D-3, [Contingency Plan] Implementation; 20.4.1.500 NMAC, incorporating 40 C.F.R. §264.51(b); 20.4.1.500 NMAC, incorporating 40 C.F.R. §264.51(b); and D-4a(1), Initial Emergency Response and Alerting the RCRA Emergency Coordinator.

- The AIB Fire Report described the fire as "a facility evacuation in response to an actual occurrence that required time-urgent response by specialist personnel." See AIB Fire Report, page 25.
- Though the fire was associated with an evacuation for life safety, the Facility Contingency Plan was not implemented.

1. GRAVITY-BASED COMPONENT

a) Potential for Harm: Major

MAJOR: The violation poses: 1) a substantial potential for harm to human or environmental receptors, and 2) a substantial harm to the regulatory program.

Failure to implement a RCRA facility Contingency Plan during a fire described as requiring "a facility evacuation in response to an actual occurrence that required time-urgent response by specialist personnel" poses a substantial potential for harm to human or environmental receptors.

Regarding harm to the regulatory program, failure to implement a RCRA facility Contingency Plan during the fire precluded the implementation of the notification and reporting requirements of the Plan, excluding NMED of critically important information necessary to perform its duties.

Furthermore, NMED utilized the following table to quantify the harm caused by this violation.

POTENTIAL FOR HARM RANKING SYSTEM FOR HAZARDOUS WASTE VIOLATIONS

Violation	Description	Nature of Waste	Waste Volume	Releases	Affected Population	Total Score
PC 2.12.1 PC D-3 PC D-4a(1) 40 CFR 264.51(b)	Failure to implement the Contingency Plan whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.	8	8	1	2 (86 workers underground at the time of the fire)	19

SCORING SYSTEM

Nature of Waste		Waste Volume	Receptors		
			Releases	Affected Population	
	F, P, U wastes with "H" designation	8 - > 25 drums	6 - Actual Discharge	4 - > 1,000	
Category 1	D003 reactive wastes; F, K, U, P wastes with "R" designation	5 - 6-25 drums	4 - Potential for Discharge	3 - 100 - 1,000	
8	Other waste which may present a significantly greater hazard due to extreme ignitability, corrosivity, toxicity, or acutely toxic or reactive	2 - < 6 drums	1 - No Discharge	2 - 10 - 100	
Category 2	Any other waste not meeting Category 1			1 - < 10	

TOTAL POTENTIAL FOR HARM

19-26	Major
13-18	Moderate
6-12	Minor

a) Extent of Deviation: Major

MAJOR: The violation violates the most important element of the requirement to such an extent that substantial noncompliance results.

NMED considers failure to implement the Contingency Plan during a fire event that "represented a facility evacuation in response to an actual occurrence that required time-urgent response by specialist personnel," and resulted in an actual threat to human health (six workers were transported to the Carlsbad Medical Center and an additional seven were treated on-site) to constitute a major deviation from the requirement.

b) Number of Counts: 1

NMED considers this as one (1) count.

2. <u>MULTIPLE-DAY COMPONENT</u>

Multiple-Day Penalty Application

Per the HWB Penalty Policy, application of a multi-day penalty for violations of major-major gravity is mandatory. The elapsed time between the date of the fire (February 5, 2014) and the date the Plan was implemented (April 11, 2014) is 65 days. Therefore, NMED deems a multi-day penalty of 60 days to be appropriate for this violation.

3. ADJUSTMENT FACTORS

a) Effort to Comply

Though the fire was associated with an evacuation for life safety, the Facility Contingency Plan was not implemented. The Respondents did not show a good faith effort to comply with the requirements, to mitigate and prevent potential harm, to self report the violation, or to implement corrective action. The Respondents did not self-disclose any of the violations incorporated into Order HWB 14-21. Instead, the Respondents chose to delay disclosure of known Permit violations and delay implementation of certain contingencies contained in the Permit, even after being prompted by NMED to take action. Further, since the February 4, 2014, truck fire, the Department of Energy Headquarters worked to chill communications from Respondents to NMED which constitutes bad faith in support of the upward adjustment. NMED deems the Respondents' actions constitute recalcitrant cooperation per the HWB Penalty Policy, Appendix B, and deems the appropriate adjustment to the penalty to be upward by 5%.

b) Negligence / Willfulness

NMED considers there to have been substantial negligence on the part of the facility in association with this violation. The primary factors considered in making this determination include:

- The Respondents have a high degree of control over the circumstances leading to this violation, e.g., the ability to implement the contingency plan in the event of a fire.
- The Respondents could have readily foreseen that the fire was a qualifying event requiring response per the Permit, having complied with PC 1.7.13.1 and 1.7.13.2, which required an oral notification within 24 hours "...of a fire or explosion from the facility which could threaten the environment or human health outside the facility."
- The Respondents could have readily foreseen the need for implementation; the Contingency Plan itself requires implementation during an event that requires evacuation for life safety, and
- The Respondents have staff with the knowledge that would have prevented this
 violation. The Respondents have committed resources dedicated solely to
 permit compliance that possess the required compliance expertise to recognize
 the contingency plan must be implemented in the event of a fire.
- The Respondents' level of sophistication regarding hazardous waste compliance is considerable and among the top tier of waste generators both state and nationwide.

Therefore, NMED deems the appropriate adjustment to the penalty per the HWB Penalty Policy to be upward by 15%.

c) <u>History of Noncompliance</u>

Respondents have not been cited for violating this requirement in the past. However, Respondents have a minor history of noncompliance with different Hazardous Waste Management Regulations (HWMR) and Permit requirements within the last ten years (2004, and 2006-2009). Therefore, the adjustment to the penalty per the policy is upward 5%.

Other Factors

1) Self-Reporting

WIPP did not self-report the noncompliance with PCs 2.12.1, D-3, D-4a(1), and 40 CFR § 264.51(b).

Therefore, NMED deems that no penalty adjustment is warranted.

2) Small Businesses

WIPP is a large federal government facility and not a small business, therefore, no penalty adjustment is warranted.

3) <u>Unique Factors</u>

There are no known unique factors in this case; therefore, no penalty adjustment is warranted.

4. **FINANCIAL CONDITION**

Due to the facility's demonstrated ability to abide with the hazardous waste requirements and to rectify problems identified, the NMED considers the financial condition of the facility to be an unwarranted consideration and therefore deems the penalty as calculated to be an appropriate deterrent.

5. <u>ECONOMIC BENEFIT OF NONCOMPLIANCE</u>

NMED does not consider economic benefit to have been a factor associated with this violation.

Waste Isolation Pilot Plant – 2014 ACO Penalty Narrative – Violation # 7

Failure to operate the Facility to prevent exposure and release. On February 14, 2014, an incident in the underground at WIPP resulted in the release of radioactive material into the environment. An Accident Investigation Board (AIB) was appointed to investigate the release. The AIB concluded that an insufficient hazard analysis and inadequately designed, tested, and maintained exhaust ventilation system directly contributed to the unfiltered above-ground release.

Violation # 7: The Respondents' failure to design, maintain, and operate the Facility in a manner to minimize the possibility of a release to the atmosphere of TRU mixed waste or mixed waste constituents and to prevent undue exposure of personnel to hazardous waste is a violation of Permit Conditions: 2.1, Design and Operation of Facility, referencing 20.4.1.500 NMAC, incorporating 40 CFR §264.31; and 2.11, Hazards Prevention, referencing 20.4.1.900 NMAC, incorporating 40 C.F.R. § 270.14(b)(8).

PC 2.1 Design and Operation of a Facility

The Permittees shall design, construct, maintain, and operate WIPP to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of transuranic (TRU) mixed waste or mixed waste constituents to air, soil, groundwater, or surface water which could threaten human health or the environment, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.31).

40 CFR §264.31 Design and operation of facility

Facilities must be designed, constructed, maintained, and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

PC 2.11 Hazards Prevention

The Permittees shall operate the WIPP facility to fully meet each of the requirements of 20.4.1.900 NMAC (incorporating 40 CFR §270.14(b)(8)), to prevent hazards associated with unloading operations, prevent runoff from hazardous waste handling areas, prevent contamination of water supplies, mitigate the effects of equipment and power failures, prevent undue exposure of personnel to hazardous waste, and prevent releases to the atmosphere, as specified in Permit Attachments A (General Facility Description and Process Information), A1 (Container Storage), and A2 (Geologic Repository).

40 CFR § 270.14 Contents of part B: General requirements.

- (b) General information requirements. The following information is required for all HWM facilities, except as § 264.1 provides otherwise:
 - (8) A description of procedures, structures, or equipment used at the facility to:
 - (i) Prevent hazards in unloading operations (for example, ramps, special forklifts);
 - (ii) Prevent runoff from hazardous waste handling areas to other areas of the

facility or environment, or to prevent flooding (for example, berms, dikes, trenches);

- (iii) Prevent contamination of water supplies;
- (iv) Mitigate effects of equipment failure and power outages;
- (v) Prevent undue exposure of personnel to hazardous waste (for example, protective clothing); and
- (vi) Prevent releases to atmosphere.

BACKGROUND:

- The Permit provides that the Respondents shall design, maintain, and operate the Facility to
 minimize the possibility of any unplanned sudden or non-sudden release of TRU mixed waste or
 mixed waste constituents to air which could threaten human health or the environment. See
 Permit Condition 2.1, Design and Operation of Facility, referencing 20.4.1.500 NMAC,
 incorporating 40 C.F.R. § 264.31.
- The Permit provides that the Respondents shall operate the Facility to prevent undue exposure
 of personnel to hazardous waste and to prevent releases to the atmosphere. See Permit
 Conditions: 2.11, Hazards Prevention, referencing 20.4.1.900 NMAC, incorporating 40 C.F.R. §
 270.14(b)(8).
- The Permit provides that a measured release of radionuclides is an indication of a release of hazardous waste constituents. "Regardless of how [a] release occurs, the nature of the waste and the processes that generated it is such that the radioactive and hazardous components are intimately mixed. A release of one without the other is not likely...." See Permit Condition G3-3a, Nature of the Hazardous Waste Portion of TRU Mixed Waste.
- The Permit provides items that are radiologically contaminated are also assumed to be contaminated with the hazardous wastes that are in the container involved in the spill or release. See Permit Condition A1-1d(2), CH TRU Mixed Waste Handling.
- The AIB Phase 1 Report provided the following examples of undue exposure of personnel to hazardous waste and releases to the atmosphere: the off-site detection of americium and plutonium; and 21 individuals identified as testing positive for low level amounts of internal contamination. See AIB Phase 1 Report.
- The AIB Phase 1 Report provided the following examples of maintenance procedures that were not protective of human health and the environment: the condition of critical equipment and components, including continuous air monitors, ventilation dampers, fans, sensors, and the primary system status display was degraded. See AIB Phase 1 Report, page ES-7.
- The AIB Phase 1 Report provided the following example of a design feature that was not protective of human health and the environment: "a measurable portion [of the Release] bypassed the HEPA filters via design leakage through two ventilation system dampers and was discharged directly to the environment from an exhaust duct." See AIB Phase 1 Report, page ES-1.
- The AIB determined that "this damper selection is inappropriate for isolation dampers that are part of a confinement barrier." *See* AIB Phase 1 Report, page 104.

- The AIB Phase 1 Report provided the following example of an operational practice that was not protective of human health and the environment: the filter bypass airflow, i.e., damper leakage, had not been tested; standards specify that dampers be leak tested every two years; and monitoring damper leakage is essential to maintaining isolation integrity. See AIB Phase 1 Report, page 104.
- The evidence provided in the AIB Phase 1 Report indicates that the Respondents did not design, maintain, or operate the Facility in a manner ensuring protection of human health and the environment and the prevention of release.

1. GRAVITY-BASED COMPONENT

a) Potential for Harm: Major

MAJOR: The violation poses a substantial potential for harm to human or environmental receptors.

The Respondents' failure to appropriately design, maintain, and operate the Facility resulted in both an actual and potential incident in the underground causing the release of radioactive material into the environment and posing considerable potential harm to human health.

Furthermore, NMED utilized the following table to quantify the harm caused by this violation.

POTENTIAL FOR HARM RANKING SYSTEM FOR HAZARDOUS WASTE VIOLATIONS

Violation	Description	Nature of Waste	Waste Volume	Releases	Affected Population	Total Score
PC 2.1 40 CFR 264.31 PC 2.11 40 CFR 270.14	Failure to design, maintain, and operate the Facility in a manner to minimize the possibility of a release to the atmosphere of TRU mixed waste or mixed waste constituents and to prevent undue exposure of personnel to hazardous waste	8	8	1	3 (150 workers participated in bioassay monitoring)*	20

See Confirmatory Bioassay Schedule 19 March 2014 and AIB Radiological Phase I Report, p. ES-5.

SCORING SYSTEM

Nature of Waste		Waste Volume	Receptors		
			Releases	Affected Population	
	F, P, U wastes with "H" designation	8 - > 25 drums	6 - Actual Discharge	4 - > 1,000	
Category 1	D003 reactive wastes; F, K, U, P wastes with "R" designation	5 - 6-25 drums	4 - Potential for Discharge	3 - 100 - 1,000	
0	Other waste which may present a significantly greater hazard due to extreme ignitability, corrosivity, toxicity, or acutely toxic or reactive	2 - < 6 drums	1 - No Discharge	2 - 10 - 100	
Category 2	Any other waste not meeting Category 1			1 - < 10	

TOTAL POTENTIAL FOR HARM

19-26	Major
13-18	Moderate
6-12	Minor

b) Extent of Deviation: Major

MAJOR: The violation violates the most important element of the requirement to such an extent that substantial noncompliance results.

NMED deems the AIB conclusions that the Facility's design, maintenance and operations procedures were not protective of human health and the environment to constitute a major deviation from the requirement.

c) Number of Counts: 5

The AIB Phase 1 Report provided the following examples of maintenance procedures that were not protective of human health and the environment: the condition of critical equipment and components, including: 1) continuous air monitors, 2) ventilation dampers, 3) fans, 4) sensors, and 5) the primary system status display was degraded. Therefore, NMED considers this as five (5) counts.

2. MULTIPLE-DAY COMPONENT

Multiple-Day Penalty Application

Per the HWB Penalty Policy, application of a multi-day penalty for violations of major-major gravity is mandatory. One critical AIB finding notes that dating back to 2005, the HEPA ventilation system and associated bypass isolation dampers were not designated as credited safety related equipment meaning the damper design was not required to meet requirements of the nuclear industry ventilation code (See AIB Radiological Phase I Report, p. ES-1). The HEPA ventilation system misclassification resulted in a less stringent design, testing, and maintenance protocol followed for years that failed to prevent a radiological release to the environment. Therefore, NMED considers a 60-day multiday penalty to be appropriate.

3. ADJUSTMENT FACTORS

a) Effort to Comply

The evidence provided in the AIB Radiological Phase 1 Report indicates that the Respondents did not design, maintain or operate the Facility in a manner ensuring protection of human health and the environment and in a manner ensuring the prevention of releases. The Respondents did not self-disclose any of the violations incorporated into Order HWB 14-21. Instead, the Respondents chose to delay disclosure of

known Permit violations and delay implementation of certain contingencies contained in the Permit, even after being prompted by NMED to take action. Further, since the February 4, 2014, truck fire, the Department of Energy Headquarters worked to chill communications from Respondents to NMED which constitutes bad faith in support of the upward adjustment. NMED deems the Respondents' actions constitute recalcitrant cooperation per the HWB Penalty Policy, Appendix B, and deems the appropriate adjustment to the penalty to be upward by 5%.

b) Negligence / Willfulness

NMED considers there to have been substantial negligence on the part of the facility in association with this violation. The primary factors considered in making this determination include:

- The Respondents have a high degree of control over the circumstances leading to this
 violation, e.g., ability to design, maintain, and operate the Facility to minimize the
 possibility of any unplanned sudden or non-sudden release of TRU mixed waste.
- The Respondents could have readily foreseen the need for facility design and maintenance to be protective of human health and the environment, as the nation's only repository for TRU wastes generated within the DOE complex.
- The Respondents could have readily taken precautions to avoid this violation by implementing adequate ventilation system design and operability.
- The Respondents could have readily taken precautions to avoid this violation by disallowing the degradation of key safety management programs and safety culture.
- The Respondents have staff with the knowledge that would have prevented this
 violation. The Respondents have committed resources dedicated solely to permit
 compliance that possess the required compliance expertise to recognize that improper
 facility design and operation posed an endangerment to human health and the
 environment.
- The Respondents' level of sophistication regarding hazardous waste compliance is considerable and among the top tier of waste generators both state and nationwide.

Therefore, NMED deems the appropriate adjustment to the penalty per the HWB Penalty Policy to be upward by 15%.

c) <u>History of Noncompliance</u>

Respondents have not been cited for violating this requirement in the past. However, Respondents have a minor history of noncompliance with different Hazardous Waste Management Regulations (HWMR) and Permit requirements within the last ten years (2004, and 2006-2009). Therefore, the adjustment to the penalty per the policy is upward 5%.

Other Factors

1) <u>Self-Reporting</u>

WIPP did not self-report the noncompliance with PCs 2.1 and 2.11, and 40 CFR § 264.31, and 40 CFR § 270.14.

Therefore, NMED deems that no penalty adjustment is warranted.

2) Small Businesses

WIPP is a large federal government facility and not a small business, therefore, no penalty adjustment is warranted.

3) <u>Unique Factors</u>

There are no known unique factors in this case; therefore, no penalty adjustment is warranted.

4. **FINANCIAL CONDITION**

Due to the facility's demonstrated ability to abide with the hazardous waste requirements and to rectify problems identified, the NMED considers the financial condition of the facility to be an unwarranted consideration and therefore deems the penalty as calculated to be an appropriate deterrent.

5. <u>ECONOMIC BENEFIT OF NONCOMPLIANCE</u>

NMED does not consider economic benefit to have been a factor associated with this violation.

Waste Isolation Pilot Plant – 2014 ACO Penalty Narrative – Violations # 8-9

Failure to provide timely notification of the radiological release - On February 14, 2014, an incident in the underground at WIPP resulted in the release of radioactive material into the environment. An Accident Investigation Board (AIB) was appointed to investigate the radiological release. The AIB concluded that an insufficient hazard analysis and inadequately designed, tested, and maintained exhaust ventilation system directly contributed to the unfiltered above-ground release.

Violation # 8: The Respondents' failure to provide oral notification to NMED within 24 hours of becoming aware of the Release is a violation of Permit Conditions: 1.7.13.1.ii, Oral Reporting, referencing 20.4.1.900 NMAC, incorporating 40 C.F.R. §270.30(I)(6)(i); and 1.7.13.2, Description of Occurrence, referencing 20.4.1.900 NMAC, incorporating 40 C.F.R. §270.30(I)(6)(ii).

PC 1.7.13.1 Oral Report

As required by 20.4.1.900 NMAC (incorporating 40 CFR § 270.30(I)(6)(i)), within 24 hours from the time the Permittees become aware of the circumstances, the Permittees shall report orally to the Secretary any noncompliance which may endanger human health or the environment, including:

(ii) Any information of a release or discharge of TRU mixed or hazardous waste, or of a fire or explosion from the facility, which could threaten the environment or human health outside the facility.

40 CFR §270.30(I)(6)(i) Contents of part B: General requirements.

- (i) The permittee shall report any noncompliance which may endanger health or the environment orally within 24 hours from the time the permittee becomes aware of the circumstances, including:
 - (A) Information concerning release of any hazardous waste that may cause an endangerment to public drinking water supplies.
 - (B) Any information of a release or discharge of hazardous waste or of a fire or explosion from the HWM facility, which could threaten the environment or human health outside the facility.

PC 1.7.13.2 Description of Occurrence

The description of the occurrence and its cause shall include:

- i. Name, address, and telephone number of the Permittees;
- ii. Name, address, and telephone number of the facility;
- iii. Date, time, and type of incident;
- iv. Name and quantity of materials involved;
- iv. The extent of injuries, if any;
- v. An assessment of actual or potential hazards to the environment and human health outside the facility, where this is applicable; and
- vi. Estimated quantity and disposition of recovered material that resulted from the

40 CFR §270.30(I)(6)(ii) Contents of part B: General requirements.

- (ii) The description of the occurrence and its cause shall include:
 - (A) Name, address, and telephone number of the owner or operator;
 - (B) Name, address, and telephone number of the facility;
 - (C) Date, time, and type of incident;
 - (D) Name and quantity of material(s) involved;
 - (E) The extent of injuries, if any;
 - (F) An assessment of actual or potential hazards to the environment and human health outside the facility, where this is applicable; and
 - (G) Estimated quantity and disposition of recovered material that resulted from the incident.

Violation # 9: The Respondents' failure to submit a written notice regarding the Release within five (5) calendar days of the time the Respondents became aware of the circumstances is a violation of Permit Conditions: 1.7.13.3, Written Notice, referencing 20.4.1.900 NMAC, incorporating 40 C.F.R. § 270.30(I)(6)(iii); and 1.7.13.2, Description of Occurrence, referencing 20.4.1.900 NMAC, incorporating 40 C.F.R. § 270.30(I)(6)(ii).

PC 1.7.13.3. Written Notice

As required by 20.4.1.900 NMAC (incorporating 40 CFR §270.30(I)(6)(iii)), the Permittees shall submit a written notice within five calendar days of the time the Permittees become aware of the circumstances. The written notice shall contain the information required in Permit Section 1.7.13.2 and the following information:

- i. A description of the noncompliance and its cause;
- ii. The period(s) of the noncompliance including exact dates and times and, if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
- iii. Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

40 CFR §270.30(I)(6)(iii) Reporting requirements.

A written submission shall also be provided within 5 days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The Director may waive the five day written notice requirement in favor of a written report within fifteen days.

PC 1.7.13.2 Description of Occurrence

The description of the occurrence and its cause shall include:

- i. Name, address, and telephone number of the Permittees;
- ii. Name, address, and telephone number of the facility;
- iii. Date, time, and type of incident;
- iv. Name and quantity of materials involved;
- iv. The extent of injuries, if any;
- v. An assessment of actual or potential hazards to the environment and human health outside the facility, where this is applicable; and
- vi. Estimated quantity and disposition of recovered material that resulted from the incident. [20.4.1.900 NMAC (incorporating 40 CFR §270.30(I)(6)(ii))]

40 CFR §270.30(I)(6)(ii) Contents of part B: General requirements.

- (ii) The description of the occurrence and its cause shall include:
 - (A) Name, address, and telephone number of the owner or operator;
 - (B) Name, address, and telephone number of the facility;
 - (C) Date, time, and type of incident;
 - (D) Name and quantity of material(s) involved;
 - (E) The extent of injuries, if any;
 - (F) An assessment of actual or potential hazards to the environment and human health outside the facility, where this is applicable; and
 - (G) Estimated quantity and disposition of recovered material that resulted from the incident.

BACKGROUND:

- The Permit provides that the Respondents shall report orally to the Secretary within 24 hours from the time the Permittees become aware of the circumstances of any noncompliance which may endanger human health or the environment, including any information of a release or discharge of TRU mixed or hazardous waste, which could threaten the environment or human health outside the facility. The oral report is to be made by calling the HWB. See the following two Permit Conditions: 1.7.13.1.ii, Oral Report; 20.4.1.900 NMAC, incorporating 40 C.F.R. §270.30(I)(6)(i); and 1.7.13.2. Description of Occurrence; 20.4.1.900 NMAC, incorporating 40 CFR §270.30(I)(6)(ii).
- The Permit provides that the Respondents shall submit a written notice within five (5) calendar days of the time the Permittees become aware of the circumstances. See the following two Permit Conditions: 1.7.13.3, Written Notice; 20.4.1.900 NMAC, incorporating 40 C.F.R. §270.30(I)(6)(iii); and 1.7.13.2. Description of Occurrence; 20.4.1.900 NMAC, incorporating 40 CFR §270.30(I)(6)(ii).
- On February 15, 2014, the Respondents reported through a DOENews Release, that operations
 personnel were responding to a possible radiological event at WIPP. See February 15, 2014,
 249pm DOENews Release.
- On February 19, 2014, the Respondents verbally informed NMED of the Release, and that Station B filter readings taken on February 15, 2014, indicated the Release escaped into the

atmosphere past the HEPA filtration system.

- The Respondents did not notify NMED orally within 24 hours of becoming aware of the Release which threatened human health and the environment outside the facility.
- The Respondents did not notify NMED in writing within five (5) days of the Release.

1. **GRAVITY-BASED COMPONENT**

a) Potential for Harm: Major

MAJOR: The violation: 1) poses a substantial potential for harm to human or environmental receptors; and 2) substantially undermines the regulatory program.

NMED considers the lack of timely reporting of a noncompliance, i.e., a release, which endangered human health and the environment to constitute a substantial potential for exposure and substantially undermines the regulatory program. Non-timely notification to NMED precludes the agency from initiating a state response to a potentially critical emergency situation.

Regarding harm to the regulatory program, the purpose of the requirement to notify NMED of any noncompliance with Permit requirements is to ensure regulatory review and oversight of the process for the safe management of hazardous wastes. By failing to provide the notification, Respondents precluded the regulatory authority from providing that necessary review and oversight.

b) Extent of Deviation: Major

MAJOR: The violation violates the most important element of the requirement to such an extent that substantial noncompliance results.

The purpose 24-hour oral and 5-day written report is for the facility to provide notification and status of the noncompliance, in this case a radiological (TRU mixed) release. WIPP failed to provide this critical notification.

NMED therefore deems this a major deviation from the regulatory and statutory requirement.

c) Number of Counts: 1

NMED considers this as one (1) count, applied to each Violation 8-9.

2. MULTIPLE-DAY COMPONENT

Multiple-Day Penalty Application

Per the HWB Penalty Policy, application of a multi-day penalty for violations of major-major gravity is mandatory.

Violation 8: On February 15, 2014 at 8:50 am, external rad release detected aboveground. Respondents should have submitted the 24-hour oral notice by 8:51 a.m. on February 16, 2014, however did not notify until 5:15 p.m. on February 21. Therefore, NMED deems a multi-day penalty of 6 days is appropriate.

Violation 9: Respondents failed to submit a written notification of the fire within 5 days of the event, or at any time thereafter, therefore NMED deems a multi-day penalty of 60 days to be appropriate.

3. <u>ADJUSTMENT FACTORS</u>

a) Effort to Comply

The Respondents did not notify NMED orally within 24 hours or in writing within five (5) days of the release. The Respondents chose to withhold vital information from NMED and the citizens of New Mexico in an effort to control the message and manage the information. The Respondents did not self-disclose any of the violations incorporated into Order HWB 14-21. Instead, the Respondents chose to delay disclosure of known Permit violations and delay implementation of certain contingencies contained in the Permit, even after being prompted by NMED to take action. Further, since the February 4, 2014, truck fire, the Department of Energy Headquarters worked to chill communications from Respondents to NMED which constitutes bad faith in support of the upward adjustment. NMED deems the Respondents' actions constitute recalcitrant cooperation per the HWB Penalty Policy, Appendix B, and deems the appropriate adjustment to the penalty to be upward by 5%.

b) Negligence / Willfulness

NMED considers there to have been substantial negligence on the part of the facility in association with this violation. The primary factors considered in making this determination include:

- The Respondents have a high degree of control over the circumstances leading to this violation, e.g., the obligation to report the container breach that posed endangerment to human health and the environment.
- The Respondents could readily have foreseen the requirement to notify of a
 noncompliance that endangered human health and the environment that resulted in
 150 workers subjected to bioassay and the detection of the release at an external air
 monitoring station.
- The Respondents could readily have foreseen that the nitrate salt wastes posed an
 endangerment to human health and the environment upon being ordered by NMED to
 isolate those wastes.
- The Respondents could readily have taken precautions to avoid this violation by expanding and ensuring communication between operations and regulatory compliance programs to recognize and prevent this noncompliance.
- The Respondents have staff with the knowledge that would have prevented this
 violation. The Respondents have committed resources dedicated solely to permit
 compliance that possess the required compliance expertise to recognize that release

posed an endangerment to human health and the environment that required notification to NMED.

• The Respondents' level of sophistication regarding hazardous waste compliance is considerable and among the top tier of waste generators both state and nationwide.

Therefore, NMED deems the appropriate adjustment to the penalty per the HWB Penalty Policy to be upward by 15%.

c) History of Noncompliance

Respondents were cited for violating this same requirement [former PC 1.E.13.C and 270.30(1)(6)(iii)] during the compliance evaluation inspections conducted on July 23, 2004 and September 29, 2008. However, Respondents have a significant minor history of noncompliance with different Hazardous Waste Management Regulations (HWMR) and Permit requirements within the last ten years (2004, and 2006-2009). Therefore, the adjustment to the penalty per the policy is upward 5%.

Other Factors

1) Self-Reporting

WIPP did not self-report the noncompliance with PCs 1.7.13.1, 1.7.13.2, or 1.7.13.3, 40 CFR §270.30(I)(6)(ii), or 40 CFR §270.30(I)(6)(iii).

Therefore, NMED deems that no penalty adjustment is warranted.

2) <u>Small Businesses</u>

WIPP is a large federal government facility and not a small business, therefore, no penalty adjustment is warranted.

3) <u>Unique Factors</u>

There are no known unique factors in this case; therefore, no penalty adjustment is warranted.

4. FINANCIAL CONDITION

Due to the facility's demonstrated ability to abide with the hazardous waste requirements and to rectify problems identified, the NMED considers the financial condition of the facility to be an unwarranted consideration and therefore deems the penalty as calculated to be an appropriate deterrent.

5. <u>ECONOMIC BENEFIT OF NONCOMPLIANCE</u>

NMED does not consider economic benefit to have been a factor associated with this violation.

Waste Isolation Pilot Plant – 2014 ACO Penalty Narrative – Violation # 10

Failure to immediately implement the Contingency Plan - The Permit requires implementation of the Contingency Plan whenever there is a release of mixed or hazardous waste or hazardous waste constituents which could threaten human health or the environment. The Respondents failed to implement the Contingency Plan immediately upon the February 14, 2014 release, instead implementing the Plan on April 11, 2014 to support investigation and assessment efforts associated with the release (see April 28, and July 7, 2014, Implementation of Contingency Plan Reports).

Violation # 10: The Respondents' failure to immediately implement the Contingency Plan found in Permit Attachment D when there was a release of TRU mixed or hazardous waste or hazardous waste constituents which threatened human health or the environment, is a violation of Permit Conditions: 2.12.1, *Implementation of [Contingency] Plan*, referencing 20.4.1.500 NMAC, incorporating 40 C.F.R. § 264.51(b); D-3, *Implementation*, referencing 20.4.1.500 NMAC, incorporating 40 C.F.R. § 264.51(b); and D-4a(1), *Initial Emergency Response and Alerting the RCRA Emergency Coordinator*.

PC 2.12.1 Implementation of Plan

The Permittees shall immediately implement the Contingency Plan as specified in Permit Attachment D whenever there is a fire, explosion, or release of mixed or hazardous waste or hazardous waste constituents which could threaten human health or the environment, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.51(b)).

40 CFR § 264.51 Purpose and implementation of contingency plan.

(b) The provisions of the plan must be carried out immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.

PC D-3 Implementation

The provisions of this Contingency Plan will be implemented immediately whenever there is an emergency event (e.g., a fire, an explosion, or a natural occurrence that involves or threatens hazardous or TRU mixed wastes or a release of hazardous substances, hazardous materials, or hazardous wastes) that could threaten human health or the environment, or whenever the potential for such an event exists as determined by the RCRA Emergency Coordinator, as required under 20.4.1.500 NMAC (incorporating 40 CFR §264.51(b)). . .

PC D-4a(1) Initial Emergency Response and Alerting the RCRA Emergency Coordinator
The first person to become aware of an incident shall immediately report the situation to the CMRO, and provide the following information, as appropriate:

- Name and telephone number of the caller
- Location of the incident and the caller
- Time and type of incident
- Severity of the incident

- Magnitude of the incident
- Cause of the incident
- Assistance needed to deal with or control the incident
- Areas or personnel affected by the incident

In addition to receiving incident reports, the Central Monitoring Room Operator (CMRO) continuously monitors (24 hours a day) the status of mechanical, electrical, and/or radiological conditions at selected points on the site, both above and below ground. Alarms to indicate abnormal conditions are located throughout the WIPP facility. The alarm(s) (e.g., fire, radiation) may be the first notification of an emergency situation received by the CMRO. The CMRO monitors alarms, takes telephone calls and radio messages, and initiates outgoing calls to emergency staff and outside agencies.

Once the CMRO is notified of a fire, explosion, or a release anywhere in the facility (either by eyewitness or an alarm), the RCRA Emergency Coordinator is immediately notified. Once notified, the RCRA Emergency Coordinator assumes responsibility for the management of activities related to the assessment, abatement, and/or cleanup of the incident.

A RCRA Emergency Coordinator is on site at all times and, therefore, can be reached at any time via a two-way radio or over the public address (PA) and plectrons on-site. If the RCRA Emergency Coordinator is unavailable or unable to perform these duties, a qualified alternate RCRA Emergency Coordinator is available.

The Emergency Services Technician (EST)/Fire Protection Technician (FPT) is also notified in case of fire, explosion, or release. The RCRA Emergency Coordinator, as incident commander, determines if supplemental emergency responders are necessary. Notification of the Emergency Response Team (ERT) (surface) is made by using the ERT pagers and/or the public announcement system. Notification of the First Line Initial Response Team (FLIRT) is by using the Mine Page Phone System. If the Mine Rescue Team (MRT) is needed the RCRA Emergency Coordinator will instruct the CMRO to make a PA announcement for the MRT to assemble in the Mine Rescue Room, located in a predetermined location.

Off-shift personnel may be notified using the on-call list, which is updated weekly by the Permittees. The FSM/CMRO, each individual on the on-call list, and WIPP Security receive copies of the on-call list. The CMRO may direct Security to make the notifications. The response to an unplanned event will be performed in accordance with procedures based on the applicable Federal, State, or local regulations and/or guidelines for that response. These include the U.S. Mine Safety and Health Administration (MSHA); NMAC; CERCLA; Chapter 74, Article 4B, New Mexico Statutes Annotated 1978, New Mexico Emergency Management Act; and agreements between the Permittees and local authorities (Section D-6) for emergencies throughout the WIPP facility.

After notification by the CMRO, the EST/FPT shall immediately investigate to determine pertinent information relevant to the actual or potential threat posed to human health or the environment. The information will include the location of release, type, and quantity of spilled or released material (or potential for release due to fire, explosion, weather conditions, or other naturally occurring phenomena), source, areal extent, and date and time of release. The EST/FPT shall provide information for classification of the incident, according to the emergency response guidelines, to the RCRA Emergency Coordinator. The RCRA Emergency Coordinator then classifies the incident after evaluation of all pertinent information. This classification will consider both direct and indirect effects of the release, fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water run-off from water or chemical agents used to control fire and heat-induced explosions).

When the RCRA Emergency Coordinator determines that an Incident Level II or III has occurred, the Contingency Plan is implemented. The RCRA Emergency Coordinator then may choose to activate the EOC for additional support (Figure D-4). If the RCRA Emergency Coordinator determines that due to extenuating circumstances the potential to upgrade to an incident Level II or III exists, the RCRA Emergency Coordinator also may activate the EOC. The EOC will assist the RCRA Emergency Coordinator in mitigation of the incident with use of communications equipment and technical expertise from any WIPP organization (see Section D-4c).

The EOC staff will assess opportunities for coordination and the use of mutual-aid agreements with local outside agencies making additional emergency personnel and equipment available (Section D-6), as well as the use of specialized response teams available through various State and Federal agencies.

As a DOE-owned facility, the WIPP facility may use the resources available from the Federal Response Plan, signed by 27 Federal departments and agencies in April 1987, and developed under the authorities of the Earthquake Hazards Reduction Act of 1977 (42 U.S.C. 7701 et seq.) and amended by the Stafford Disaster Relief Act of 1988. Most resources are available within 24 hours. The WIPP facility maintains its own emergency response capabilities on-site. In addition to the supplemental emergency responders, radiological control technicians, environmental sampling technicians, wildlife biologists, and various other technical experts are available for use on an as-needed basis.

BACKGROUND:

• The Permit provides that the Respondents shall immediately implement the Contingency Plan found in Permit Attachment D whenever there is a release of TRU mixed or hazardous waste, or hazardous waste constituents, which could threaten human health or the environment, as required by 20.4.1.500 NMAC, incorporating 40 C.F.R. § 264.51(b). See Permit Conditions: 2.12.1, Implementation of [Contingency] Plan; D-3, Implementation, referencing 20.4.1.500 NMAC, incorporating 40 C.F.R. § 264.51(b); and D-4a(1), Initial Emergency Response and Alerting

- the RCRA Emergency Coordinator.
- The Contingency Plan specifies that it is to be implemented any time there is a Level II or Level III incident. See Permit Conditions: D-3, [Contingency Plan] Implementation, referencing 20.4.1.500 NMAC, incorporating 40 C.F.R. § 264.51(b); and D-4a(1), Initial Emergency Response and Alerting the RCRA Emergency Coordinator.
- On February 14, 2014, there was an incident in the underground which resulted in the release of americium and plutonium from one or more TRU mixed waste containers into the environment.
- On February 19, 2014, a Carlsbad Environmental Monitoring and Research Center portable radiation monitor detected transuranic radionuclides approximately 0.6 miles northeast of the Facility, outside of the Facility boundary. The levels detected at this sampling station indicated a release of radioactive particles from WIPP.
- The AIB Phase 1 Report stated that the "RCRA Contingency Plan was not implemented." See AIB Phase 1 Report, page 51.
- The AIB Phase 1 Report stated that the "RCRA Contingency Plan Incident Level II definition should have been triggered." See AIB Phase 1 Report, page 58.
- The AIB Phase 1 Report concluded that NWP's implementation of DOE's Comprehensive Emergency Management System was ineffective: "Personnel did not adequately recognize, categorize, or classify the emergency and did not implement adequate protective actions in a timely manner." See AIB Phase 1 Report, page ES-7.
- The AIB Phase 1 Report concluded that NWP must correct its activation, notification, classification and categorization protocols to be in full compliance with the Permit Contingency Plan. See AIB Phase 1 Report, page ES-12, JONs 16 and 18.
- The Respondents did not immediately implement the Contingency Plan as required by the Permit after the Release.

1. GRAVITY-BASED COMPONENT

a) Potential for Harm: Major

MAJOR: The violation: 1) poses a substantial potential for harm to human or environmental receptors; and 2) substantially undermines the regulatory program.

Failure to implement a RCRA facility Contingency Plan during an incident in which a release of americium and plutonium from one or more TRU mixed waste containers enters the environment and is measured outside the facility boundary poses a substantial potential for harm to human or environmental receptors.

Regarding harm to the regulatory program, failure to implement a RCRA facility Contingency Plan during the release precluded the implementation of the notification and reporting requirements of the Plan, excluding NMED of critically important information necessary to perform its duties.

Furthermore, NMED utilized the following table to quantify the harm caused by this violation.

POTENTIAL FOR HARM RANKING SYSTEM FOR HAZARDOUS WASTE VIOLATIONS

Violation	Description	Nature of Waste	Waste Volume	Releases	Affected Population	Total Score
PC 2.12.1 PC D-3 PC D-4a(1) 40 CFR 264.51(b)	Failure to implement the Contingency Plan whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.	8	8	6	3 (150 workers participated in bioassay monitoring)*	25

See Confirmatory Bioassay Schedule 19 March 2014 and AIB Radiological Phase I Report, p. ES-5.

SCORING SYSTEM

Nature of Waste		Waste Volume	Receptors		
			Releases	Affected Population	
	F, P, U wastes with "H" designation	8 - > 25 drums	6 - Actual Discharge	4 - > 1,000	
Category 1 8	D003 reactive wastes; F, K, U, P wastes with "R" designation	5 - 6-25 drums	4 - Potential for Discharge	3 - 100 - 1,000	
	Other waste which may present a significantly greater hazard due to extreme ignitability, corrosivity, toxicity, or acutely toxic or reactive	2 - < 6 drums	1 - No Discharge	2 - 10 - 100	
Category 2	Any other waste not meeting Category 1			1 - < 10	

TOTAL POTENTIAL FOR HARM

19-26	Major		
13-18	Moderate		
6-12	Minor		

a) Extent of Deviation: Major

MAJOR: The violation violates the most important element of the requirement to such an extent that substantial noncompliance results.

NMED considers failure to properly classify the radiological release as a Level II incident and failure to implement the Contingency Plan constitutes a major deviation from the requirement.

b) Number of Counts: 1

NMED considers this as one (1) count.

2. MULTIPLE-DAY COMPONENT

Multiple-Day Penalty Application

Per the HWB Penalty Policy, application of a multi-day penalty for violations of major-major gravity is mandatory. The elapsed time between the date of the fire (February 14, 2014) and the date the Plan was implemented (April 11, 2014) is 56 days. Therefore, NMED deems a multi-day penalty of 56 days to be appropriate for this violation.

3. ADJUSTMENT FACTORS

a) Effort to Comply

The AIB Radiological Phase I Report concluded that "RCRA Contingency Plan Incident Level II definition should have been triggered," which would have required implementation of the Contingency Plan. The Respondents did not self-disclose any of the violations incorporated into Order HWB 14-21. Instead, the Respondents chose to delay disclosure of known Permit violations and delay implementation of certain contingencies contained in the Permit, even after being prompted by NMED to take action. Further, since the February 4, 2014, truck fire, the Department of Energy Headquarters worked to chill communications from Respondents to NMED which constitutes bad faith in support of the upward adjustment. NMED deems the Respondents' actions constitute recalcitrant cooperation per the HWB Penalty Policy, Appendix B, and deems the appropriate adjustment to the penalty to be upward by 5%.

b) Negligence / Willfulness

NMED considers there to have been substantial negligence on the part of the facility in association with this violation. The primary factors considered in making this determination include:

- The Respondents have a high degree of control over the circumstances leading to this violation, e.g., the ability to implement the contingency plan whenever there is a release of mixed or hazardous waste or hazardous waste constituents which could threaten human health or the environment.
- The Respondents could have readily foreseen the need to be able to adequately recognize, categorize, or classify the emergencies and implement adequate protective actions in a timely manner.
- The Respondents could have readily foreseen the need for implementation; the Contingency Plan itself requires implementation for this type of release.
- The Respondents have staff with the knowledge that would have prevented this
 violation. The Respondents have committed resources dedicated solely to
 permit compliance that possess the required compliance expertise to recognize
 the contingency plan must be implemented in the event of this type of release.
- The Respondents' level of sophistication regarding hazardous waste compliance is considerable and among the top tier of waste generators both state and

nationwide.

Therefore, NMED deems the appropriate adjustment to the penalty per the HWB Penalty Policy to be upward by 15%.

c) <u>History of Noncompliance</u>

Respondents have not been cited for violating this requirement in the past. However, Respondents have a minor history of noncompliance with different Hazardous Waste Management Regulations (HWMR) and Permit requirements within the last ten years (2004, and 2006-2009). Therefore, the adjustment to the penalty per the policy is upward 5%.

Other Factors

Self-Reporting

WIPP did not self-report the noncompliance with PCs 2.12.1, D-3, D-4a(1), and 40 CFR § 264.51(b).

Therefore, NMED deems that no penalty adjustment is warranted.

2) <u>Small Businesses</u>

WIPP is a large federal government facility and not a small business, therefore, no penalty adjustment is warranted.

3) <u>Unique Factors</u>

There are no known unique factors in this case; therefore, no penalty adjustment is warranted.

4. FINANCIAL CONDITION

Due to the facility's demonstrated ability to abide with the hazardous waste requirements and to rectify problems identified, the NMED considers the financial condition of the facility to be an unwarranted consideration and therefore deems the penalty as calculated to be an appropriate deterrent.

5. ECONOMIC BENEFIT OF NONCOMPLIANCE

NMED does not consider economic benefit to have been a factor associated with this violation.

Waste Isolation Pilot Plant – 2014 ACO Penalty Narrative – Violations # 11-12

Acceptance, management, storage, and disposal of prohibited wastes - The Permit requires that Permittees shall not accept, manage, store, or dispose ignitable waste within the permitted units. Permittees accepted 508 containers from waste streams LA-MIN02-V.001, LA-CIN01.001, LA-MIN04-S.001, and LA-MHD01.001 that have or potentially have nitrate salts, which are an oxidizer. 503 of the 508 containers contained a combination of nitrate salts and an organic kitty litter, which are incompatible materials.

Violation # 11: The Respondents' acceptance, management, storage, and disposal of 508 containers of ignitable wastes is a violation of Permit Conditions: B, (*Part A Application*); 2.9, *General Requirements for Handling Ignitable, Corrosive, Reactive, or Incompatible Wastes*, referencing 20.4.1.200 NMAC, incorporating 40 C.F.R. §§ 261.21 and 261.22, and referencing 20.4.1.500 NMAC, incorporating 40 C.F.R. Part 264, Appendix V; 2.3.1, *Waste Analysis Plan*, referencing 20.4.1.500 NMAC, incorporating 40 C.F.R. § 264.13; 2.3.3. *Treatment, Storage, and Disposal Facility Waste Acceptance Criteria (TSDF-WAC)*; 2.3.3.7, *Ignitable, Corrosive, and Reactive Wastes*; 2.3.4, *Permitted TRU Mixed Wastes*; 3.2.1.3, *Hazardous Waste Numbers*; C-1b, *Waste Summary Category Groups and Hazardous Waste Accepted at the WIPP Facility*; and C-1c, *Waste Prohibited at the WIPP Facility*.

Violation # 12: The Respondents' acceptance, management, storage, and disposal of 503 containers of incompatible wastes is a violation of Permit Conditions: 2.9, *General Requirements for Handling Ignitable, Corrosive, Reactive, or Incompatible Wastes*, referencing 20.4.1.200 NMAC, incorporating 40 C.F.R. §§ 261.21 and 261.22, and referencing 20.4.1.500 NMAC, incorporating 40 C.F.R. Part 264, Appendix V; 2.3.1, *Waste Analysis Plan*, referencing 20.4.1.500 NMAC, incorporating 40 C.F.R. § 264.13; 2.3.3, *Treatment, Storage, and Disposal Facility Waste Acceptance Criteria (TSDF-WAC)*; 2.3.3.4, *Chemical Incompatibility*; and C-1c, *Waste Prohibited at the WIPP Facility*.

PC 2.9 General Requirements for Handling Ignitable, Corrosive, Reactive, or Incompatible Wastes The Permittees shall not manage, store or dispose of ignitable, corrosive, reactive, or incompatible wastes, as defined in 20.4.1.200 NMAC (incorporating 40 CFR §§261.21, 261.22, and 261.23) and 20.4.1.500 NMAC (incorporating 40 CFR §264 Appendix V) within the permitted units. The Permittees shall comply with the procedures to prevent acceptance of ignitable, corrosive, reactive, and incompatible waste specified in Permit Sections 2.3.1 and 2.3.3.

PC 2.3.1 Waste Analysis Plan

The Permittees shall not manage, store, or dispose TRU mixed waste at WIPP which fails to meet the characterization requirements of 20.4.1.500 NMAC (incorporating 40 CFR §264.13), as specified by this Permit.

40 CFR § 264 Appendix V Examples of Potentially Incompatible Waste

40 CFR § 264.13 General Waste Analysis

PC 2.3.3 Treatment, Storage, and Disposal Facility Waste Acceptance Criteria (TSDF-WAC)

The Permittees shall not accept TRU mixed wastes at WIPP for storage, management, or disposal which fail to meet the treatment, storage, and disposal facility waste acceptance criteria as presented in Permit Sections 2.3.3.1 through 2.3.3.10 of this Permit.

PC 2.3.3.7 Ignitable, Corrosive, and Reactive Wastes

Wastes exhibiting the characteristic of ignitability, corrosivity, or reactivity (EPA Hazardous Waste Numbers of D001, D002, or D003) are not acceptable at WIPP.

PC 2.3.4 Permitted TRU Mixed Wastes

The Permittees shall accept containers which contain only those TRU mixed wastes listed in Permit Attachment B (Hazardous Waste Permit Application Part A). Allowable TRU mixed wastes are specified in Table 2.3.4. . .

PC 3.2.1.3 Hazardous Waste Numbers

The TRU mixed waste hsall contain only hazardous waste numbers specified in Permit Section 2.3.4.

PC C-1b Waste Summary Category Groups and Hazardous Waste Accepted at the WIPP Facility

Once a waste stream has been delineated, generator/storage sites will assign a Waste Matrix Code to the waste stream based on the physical form of the waste. Waste streams are then assigned to one of three broad Summary Category Groups; S3000-Homogeneous Solids, 4S4000-Soils/Gravel, and S5000-Debris Wastes. These Summary Category Groups are used to 5 determine further characterization requirements.

The Permittees will only allow generators to ship those TRU mixed waste streams with EPA hazardous waste numbers listed in Table C-5. Some of the waste may also be identified by unique state hazardous waste codes or numbers. These wastes are acceptable at WIPP as long as the TSDF-WAC are met. The Permittees will require sites to perform characterization of all waste streams as required by this WAP. If during the characterization process, new EPA hazardous waste numbers are identified, those wastes will be prohibited for disposal at the WIPP facility until a permit modification has been submitted to and approved by NMED for these new EPA hazardous waste numbers. Similar waste streams at other generator/storage sites will be examined by the Permittees to ensure that the newly identified EPA hazardous waste numbers do not apply to those similar waste streams. If the other waste streams also require new EPA hazardous waste numbers, shipment of these similar waste streams will also be prohibited for disposal until a permit modification has been submitted to and approved by NMED.

PC C-1c Wastes Prohibited at the WIPP Facility

The following TRU mixed waste are prohibited at the WIPP facility:

- liquid waste is not acceptable at WIPP. Liquid in the quantities delineated below is acceptable:
 - Observable liquid shall be no more than 1 percent by volume of the outermost container at the time of radiography or visual examination
 - Internal containers with more than 60 milliliters or 3 percent by volume observable liquid, whichever is greater, are prohibited
 - Containers with Hazardous Waste Number U134 assigned shall have no observable liquid
 - Overpacking the outermost container that was examined during radiography or visual examination or redistributing untreated liquid within the container shall not be used to meet the liquid volume limits
- non-radionuclide pyrophoric materials, such as elemental potassium hazardous wastes not
 occurring as co-contaminants with TRU mixed wastes (non-mixed hazardous wastes) wastes
 incompatible with backfill, seal and panel closures materials, container and packaging materials,
 shipping container materials, or other wastes
- wastes containing explosives or compressed gases
- wastes with polychlorinated biphenyls (PCBs) not authorized under an EPA PCB waste disposal authorization
- wastes exhibiting the characteristic of ignitability, corrosivity, or reactivity (EPA Hazardous Waste Numbers of D001, D002, or D003)
- waste that has ever been managed as high-level waste and waste from tanks specified in Table
- C-4, unless specifically approved through a Class 3 permit modification
- any waste container from a waste stream (or waste stream lot) which has not undergone either radiographic or visual examination of a statistically representative subpopulation of the waste stream in each shipment, pursuant to Permit Attachment 10C7
- any waste container from a waste stream which has not been preceded by an appropriate, certified WSPF (see Section C-1d)

Before accepting a container holding TRU mixed waste, the Permittees will perform waste confirmation activities pursuant to Permit Attachment C7 on each waste stream shipment to confirm that the waste does not contain ignitable, corrosive, or reactive waste and the assigned

EPA hazardous waste numbers are allowed for storage and disposal by this Permit. Waste confirmation activities will be performed on at least 7 percent of each waste stream shipped, equating to examination of at least one of fourteen containers in each waste stream shipment. If a waste stream shipment contains fewer than fourteen containers, one container will be examined to satisfy waste confirmation requirements. Section C-4 and Permit Attachment C721 include descriptions of the waste confirmation processes that the Permittees will conduct prior to receiving a shipment at the WIPP facility.

Containers are vented through filters, allowing any gases that are generated by radiolytic and microbial processes within a waste container to escape, thereby preventing over pressurization or development of

conditions within the container that would lead to the development of ignitable, corrosive, reactive, or other characteristic wastes.

To ensure the integrity of the WIPP facility, waste streams identified to contain incompatible materials or materials incompatible with waste containers cannot be shipped to WIPP unless they are treated to remove the incompatibility. Only those waste streams that are compatible or have been treated to remove incompatibilities will be shipped to WIPP.

Associated applicable requirement - PC C1 Waste Characterization Testing Methods

BACKGROUND:

Accepting, Managing, Storing, Disposing Ignitable Wastes

- The Permit provides that the Respondents shall not accept, manage, store, or dispose of ignitable waste within the permitted units. See Permit Conditions: B, Application Part A; 2.9, General Requirements for Handling Ignitable, Corrosive, Reactive, or Incompatible Wastes, referencing 20.4.1.200 NMAC, incorporating 40 C.F.R. §§ 261.21 and 261.22, and referencing 20.4.1.500 NMAC, incorporating 40 C.F.R. Part 264, Appendix V; 2.3.1, Waste Analysis Plan, referencing 20.4.1.500 NMAC, incorporating 40 C.F.R. § 264.13; 2.3.3, Treatment, Storage, and Disposal Facility Waste Acceptance Criteria (TSDF-WAC); 2.3.3.7, Ignitable, Corrosive, and Reactive Wastes; 2.3.4, Permitted TRU Mixed Wastes; 3.2.1.3, Hazardous Waste Numbers; C-1b, Waste Summary Category Groups and Hazardous Waste Accepted at the WIPP Facility; and C-1c, Waste Prohibited at the WIPP Facility.
- On July 7, 2014, the Respondents notified NMED that EPA Hazardous Waste Code D001 had been added to container LA00000068660. See July 7, 2014 Supplement-Implementation of Contingency Plan Report.
- On July 30, 2014, the Respondents notified NMED of the provisional application of Hazardous
 Waste Number D001 to 368 nitrate salt-bearing waste containers in the LA-MIN02-V.001 waste
 stream, including previously labeled container LA00000068660, disposed in the underground, in
 a letter to the NMED titled Written Notice Regarding Application of EPA Hazardous Waste
 Number D001 to Some Nitrate Salt Bearing Containers.
- In a letter dated September 5, 2014, the Respondents stated, "The LA-MIN02-V.001 AK documentation clearly indicates that nitrate salts are present in the waste. Nitrate salts are classified as a Hazard Class 5.1 DOT oxidizer per 49 CFR §173.21. Additionally 40 CFR §261.21(a)(4) states that a solid waste exhibits the characteristic of ignitability if a representative sample of the waste is an oxidizer and defines an oxidizer as 'a substance such as . . . a nitrate, that yields oxygen readily to stimulate the combustion of organic matter.'

 [D]ocumentation obtained during the AK re-evaluation indicates that an organic absorbent . . . was used in the repackaging of nitrate salts, and the proportions used to remediate the nitrate salts were not clearly documented during repackaging. Therefore, there is no assurance that potential for the characteristic of ignitability (D001) was mitigated." See Response to D001 RFI,

page 6.

- On July 30, 2014, LANL notified NMED that it had assigned D001 for ignitibility to 57 remediated nitrate salt-bearing waste containers and to 29 un-remediated nitrate salt-bearing waste containers in isolation at LANL. See July 30, 2014, Written Notice Regarding Application of EPA Hazardous Waste Number D001 to Certain Nitrate Salt-Bearing Waste Containers at LANL.
- In a letter dated September 5, 2014, LANL informed NMED that they had assigned D001 for ignitibility to all nitrate salt-bearing waste containers in storage at LANL because analytical results from tests conducted on May 22, 2014, and July 29, 2014 indicated that LANL could not exclude the application of D001, and that the nitrate salt-bearing waste containers could be classified as oxidizers. Also, LANL failed to mitigate the ignitability characteristic when it remediated the nitrate salt-bearing waste containers using organic absorbents instead of the zeolite-based absorbents recommended by the LANL Difficult Waste Team on May 8, 2012. See LANL's September 5, 2014, Response to NMED's Information Request Regarding LANL's Nitrate Salt-Bearing Waste Container Isolation Plan, pages 3-4.
- The nitrate salt-bearing waste containers are in waste streams LA-MHD01.001, LA-CIN01.001, LA-MIN02-V.001, and LA-MIN04-S.001. See CCP-AK-LANL-006 Rev 13, pages 16-27; and Nitrate Suspect WIPP Containers (spreadsheet), submitted by the Respondents on September 30, 2014.
- The Respondents accepted 508 nitrate salt-bearing waste containers from waste streams LA-MIN02-V.001, LA-CIN01.001, LA-MIN04-S.001, and LA-MHD01.001. See Nitrate Suspect WIPP Containers (spreadsheet), submitted by the Respondents on September 30, 2014, and September 30, 2014 LANL Response to the August 26, 2014 Request for Information, Attachments 2 and 3.
- Therefore, nitrate salts in waste streams LA-MIN02-V.001, LA-CIN01.001, LA-MIN04-S.001, and LA-MHD01.001 are ignitable and should be assigned D001 in accordance with 40 CFR § 261.21(a)(4).

Incompatible Waste

- The Permit provides that the Respondents shall not accept, manage, store, or dispose incompatible waste within the permitted units. See Permit Conditions: 2.9, General Requirements for Handling Ignitable, Corrosive, Reactive, or Incompatible Wastes, referencing 20.4.1.200 NMAC, incorporating 40 C.F.R. §§ 261.21 and 261.22, and referencing 20.4.1.500 NMAC, incorporating 40 C.F.R. Part 264, Appendix V; 2.3.1, Waste Analysis Plan, referencing 20.4.1.500 NMAC, incorporating 40 C.F.R. § 264.13; 2.3.3, Treatment, Storage, and Disposal Facility Waste Acceptance Criteria (TSDF-WAC); 2.3.3.4, Chemical Incompatibility; and C-1c, Waste Prohibited at the WIPP Facility.
- The HWMR state that mixing "nitrates" with "other flammable and combustible wastes" could lead to fire, explosion, or violent reaction. See 20.4.1.500 NMAC, incorporating Appendix V to 40 C.F.R. Part 264.
- U.S. Department of Transportation regulations defines a Division 5.1 "oxidizer" as "a material that may, generally by yielding oxygen, cause or enhance the combustion of other materials." See 49 C.F.R. § 173.127.
- The nitrate salt-bearing waste containers are in waste streams LA-MHD01.001, LA-CIN01.001,

- LA-MIN02-V.001, and LA-MIN04-S.001. See CCP-AK-LANL-006 Rev 13, pages 16-27; and Nitrate Suspect WIPP Containers (spreadsheet), submitted by the Respondents on September 30, 2014.
- In a letter dated September 5, 2014, LANL notified NMED that according to analytical results, nitrate salts are an oxidizer. See September 5, 2014, Response to Information Request Regarding the Los Alamos National Laboratory Nitrate Salt Bearing Waste Container Isolation Plan, pages 3- 4.
- On September 5, 2014, the Respondents notified NMED that on May 2, 2014, the Respondents were verbally notified by LANL of the use of an organic absorbent to remediate nitrate salt-bearing waste containers, a process that combined incompatible materials. See Response to D001 RFI, page 4.
- The organic LANL used is comprised of mostly cellulose, which is combustible and is a polymer of
 glucose monomers. Under certain conditions, glucose and sodium nitrate packaged together can
 auto-ignite at ambient temperatures. See PNNL-16677, Evaluation of Exothermic Reactions
 from Bulk-Vitrification Melter Feeds Containing Cellulose; PNNL-12144, Denitration of High
 Nitrate Salts Using Reductants.
- On September 5, 2014, the Respondents notified NMED that on May 2, 2014, the Respondents were verbally notified by LANL of the use of organic absorbent to remediate nitrate salt waste containers, a process that combined incompatible materials. See Response to D001 RFI, page 4.

Neutralizer/TEA/Color Safe

- In a process that combined incompatible materials, LANL added an organic neutralizer to liquid from at least 208 nitrate salt waste containers during remediation and repackaging. This neutralized liquid was then absorbed with an organic absorbent and placed into containers that were shipped to WIPP. See September 30, 2014, Response to the August 26, 2014 Request for Information, Treatment of Waste without a Permit and Failure to Reevaluate Acceptable Knowledge, Attachments 2 and 3.
- An ingredient in one of the organic neutralizers used is triethanolamine, which is incompatible with strong oxidizers. See Material Safety Data Sheet (MSDS) for Triethanolamine 99%, Dow Chemical Company; MSDS for Triethanolamine, Fisher Scientific.
- The Respondents accepted 503 nitrate salt waste containers that contained organic (carbon based) absorbent, including at least 208 containers that contained organic neutralizer that was added by LANL prior to shipment. See September 30, 2014, Response to the August 26, 2014 Request for Information, Treatment of Waste without a Permit and Failure to Reevaluate Acceptable Knowledge, Attachments 2 and 3.
- Based on the information provided by the Respondents and LANL, the Respondents accepted, managed, stored, and disposed of 503 containers that contained incompatible materials at WIPP.

1. **GRAVITY-BASED COMPONENT**

a) Potential for Harm: Major

MAJOR: The violation poses a substantial potential for harm to human or environmental receptors.

Respondents inappropriately accepted 508 containers containing oxidizers and 503 containers with incompatible materials. The February 14, 2014, radiological release was associated with a breached drum from waste stream which resulted in the actual exposure of 21 personnel, and an actual radiological release to the environment.

Therefore, NMED deems this violation to pose substantial potential for harm to human and environmental receptors.

a) Extent of Deviation: Major

MAJOR: The violation violates the most important element of the requirement to such an extent that substantial noncompliance results.

NMED considers the facility's acceptance and storage of prohibited wastes to constitute a direct and major deviation from the requirement.

b) Number of Counts: Violation Specific

Violation 11 is associated with the acceptance, management, storage, and disposal of 508 containers of ignitable waste; therefore NMED considers this as five hundred and eight (508) counts.

Violation 12 is associated with the acceptance, management, storage, and disposal of 503 containers of waste composed of incompatible materials; therefore NMED considers this as five hundred and three (503) counts.

2. MULTIPLE-DAY COMPONENT

Multiple-Day Penalty Application

Per the HWB Penalty Policy, application of a multi-day penalty for violations of major-major gravity is mandatory. Documentation indicates that 508 containers containing prohibited waste have been received at WIPP (See Nitrate Suspect WIPP Containers (spreadsheet), submitted by the Respondents September 30, 2014, and LANL Response to the August 26, 2014 Request for Information, Attachments 2 and 3). On the date of the radiological incident, February 14, 2014, 264 containers had been stored over 60 days, 46 containers had been stored over 30 days, and 58 containers had been stored for less than 30 days; storage dates were not provided for the remaining 140 containers (see Aug14 Correction of Waste Manifests – WIPP). As a majority of containers are documented to be stored for a period exceeding 60 days, NMED deems a multiday penalty of 60 days to be appropriate for each Violation 11 and 12.

3. ADJUSTMENT FACTORS

a) Effort to Comply

Respondents failed to verify the waste stream profile forms for LA-MIN02-V.001, LA-CIN01.001, LA-MIN04-S.001, and LA-MHD01.001, but instead relied on LANL's characterization of the four parent waste streams. The Respondents did not self-disclose any of the violations incorporated into Order HWB 14-21. Instead, the Respondents chose to delay disclosure of known Permit violations and delay implementation of certain contingencies contained in the Permit, even after being prompted by NMED to take action. Further, since the February 4, 2014, truck fire, the Department of Energy Headquarters worked to chill communications from Respondents to NMED which constitutes bad faith in support of the upward adjustment. NMED deems the Respondents' actions constitute recalcitrant cooperation per the HWB Penalty Policy, Appendix B, and deems the appropriate adjustment to the penalty to be upward by 5%.

b) Negligence / Willfulness

NMED considers there to have been substantial negligence on the part of the facility in association with this violation. The primary factors considered in making this determination include:

- The Respondents have a high degree of control over the circumstances leading to this violation, e.g., the acceptance, management, storage, and disposal of prohibited wastes.
- The Respondents could readily have foreseen the need for thorough review of the characterization given the availability of data on the subject wastes streams so prevalent within the DOE complex.
- The Respondents could readily have taken precautions to avoid this violation by expanding and ensuring communication to ensure that the available subject waste stream data within the DOE complex was included in the characterization and review process.
- The Respondents have staff with the knowledge that would have prevented this
 violation. The Respondents have committed resources dedicated solely to permit
 compliance that possess the required compliance expertise to recognize insufficient
 characterization and/or the acceptance and storage of prohibited waste as a
 noncompliance.
- The Respondents' level of sophistication regarding hazardous waste compliance is considerable and among the top tier of waste generators both state and nationwide.

Therefore, NMED deems the appropriate adjustment to the penalty per the HWB Penalty Policy to be upward by 15%.

c) History of Noncompliance

Respondents notified NMED of the violation of this same requirement (former PC II.C.1 [incorporating 40

CFR 264.13(b)], PC B-1d, PC II.C.3.i, and PC II.C.3) on July 17, 2007 and September 29, 2008. Respondents have not been cited for violating this requirement in the past. However, Respondents have a minor history of noncompliance with different Hazardous Waste Management Regulations (HWMR) and Permit requirements within the last ten years (2004, and 2006-2009). Therefore, the adjustment to the penalty per the policy is upward 5%.

Other Factors

Self-Reporting

WIPP did not self-report the noncompliance with PCs 2.9, 2.33, 2.3.3.7, 2.3.4, 3.2.1.3, C-1b, C-1c, 40 CFR §§ 261.21, 261.22, and 244.13.

Therefore, NMED deems that no penalty adjustment is warranted.

2) <u>Small Businesses</u>

WIPP is a large federal government facility and not a small business, therefore, no penalty adjustment is warranted.

3) <u>Unique Factors</u>

There are no known unique factors in this case; therefore, no penalty adjustment is warranted.

4. FINANCIAL CONDITION

Due to the facility's demonstrated ability to abide with the hazardous waste requirements and to rectify problems identified, the NMED considers the financial condition of the facility to be an unwarranted consideration and therefore deems the penalty as calculated to be an appropriate deterrent.

5. <u>ECONOMIC BENEFIT OF NONCOMPLIANCE</u>

NMED does not consider economic benefit to have been a factor associated with this violation.

Waste Isolation Pilot Plant – 2014 ACO Penalty Narrative – Violation # 13

Failure to verify completeness and accuracy of Waste Stream Profile Forms - Permittees are required to verify Waste Stream Profile Forms for completeness and accuracy to ensure only qualifying wastes are accepted at WIPP. The Permittees failed to verify the applicability of EPA hazardous waste number D001 in the Waste Stream Profile Forms for four waste streams (LA-MIN02-V.001, LA-CIN01.001, LA-MIN04-S.001, and LA-MHD01.001) which were accepted at WIPP. The Permittees' failure to perform the required verification resulted in the acceptance and disposal of prohibited wastes at WIPP.

Violation # 13: The Respondents' failure to verify the completeness and accuracy of the Waste Stream Profile Form is a violation of Permit Condition C-5a(2), *Examination of the Waste Stream Profile Form and Container Data Checks*.

PC C-5a(2) Examination of the Waste Stream Profile Form and Container Data Checks
The Permittees will verify the completeness and accuracy of the Waste Stream Profile Form (Section C3 – 6b(1)). Figure C-2 includes the waste characterization and waste stream approval process. The assignment of the waste stream description, Waste Matrix Code Group, and Summary Category Groups; the acceptable knowledge summary documentation; the methods used for characterization; the DOE certification, and appropriate designation of EPA hazardous waste number(s) will be examined by the Permittees. If the WSPF is inaccurate, efforts will be made to resolve discrepancies by contacting the generator/storage site in order for the waste stream to be eligible for shipment to the WIPP facility. If discrepancies in the waste stream are detected at the generator/storage site, the generator/storage site will implement a non-conformance program to identify, document, and report discrepancies (Permit Attachment C3).

The WSPF shall pass all verification checks by the Permittees in order for the waste stream to be approved by DOE for shipment to the WIPP facility. The WSPF check against waste container data will occur during the initial WSPF approval process (Section C-5a).

The EPA hazardous waste numbers for the wastes that appear on the Waste Stream Profile Form will be compared to those in Table C-5 to ensure that only approved wastes are accepted for management, storage, or disposal at WIPP. Some of the waste may also be identified by unique state hazardous waste codes or numbers. These wastes are acceptable at WIPP as long as the TSDF-WAC are met. The CIS will be reviewed by the Permittees to verify that the waste has been classified correctly with respect to the assigned EPA hazardous waste numbers. The Permittees will verify that the applicable requirements of the TSDF-WAC have been met by the generator/storage site.

Waste data transferred via the WWIS after WSPF approval will be compared with the approved WSPF. Any container from an approved hazardous waste stream with a description different from its WSPF will not be managed, stored, or disposed at WIPP.

The Permittees will also verify that three different types of data specified below are available for every container holding TRU mixed waste before that waste is managed, stored, or disposed at WIPP: 1) an assignment of the waste stream's waste description (by Waste Matrix Codes) and Waste Matrix Code Group; 2) a determination of ignitability, reactivity, and corrosivity; and 3) a determination of compatibility. The verification of waste stream description will be performed by reviewing the WWIS for consistency in the waste stream description and WSPF. The CIS will indicate if the waste has been checked for the characteristics of ignitability, corrosivity, and reactivity. The final verification of waste compatibility will be performed using Appendix C1 of the WIPP RCRA Part B Permit Application (DOE, 1997), the compatibility study.

Any container with unresolved discrepancies associated with hazardous waste characterization will not be managed, stored, or disposed at the WIPP facility until the discrepancies are resolved. If the discrepancies cannot be resolved, DOE will revoke the approval status of the waste stream, suspend shipments of the waste stream, and notify NMED. Waste stream approval will not be reinstated until the generator/storage site demonstrates all corrective actions have been implemented and the generator/storage site waste characterization program is reassessed by DOE.

Associated applicable requirement - PC C1 Waste Characterization Testing Methods

BACKGROUND:

- The Permit requires the Respondents to verify the completeness and accuracy of the Waste Stream Profile Form, including the appropriate designation of EPA waste number(s). See Permit Condition C-5a(2), Examination of the Waste Stream Profile Form and Container Data Checks.
- The Respondents did not verify the designated EPA waste number(s) in the Waste Stream Profile Forms associated waste streams LA-MIN02-V.001, LA-CIN01.001, LA-MIN04-S.001, and LA-MHD01.001. Had the Respondents verified the applicability of EPA waste number D001 in the Waste Stream Profile Forms for these wastes, the waste would not have been shipped to WIPP.

1. GRAVITY-BASED COMPONENT

a) Potential for Harm: Major

MAJOR: The violation: 1) poses a substantial potential for harm to human or environmental receptors; and 2) substantially undermines the regulatory program.

Failure to perform waste stream profile verification contributed to the facility's failure to identify wastes that did not conform to the WIPP Waste Acceptance Criteria (WAC) (which prohibits EPA hazardous waste number D001 and D002) prior to receipt and acceptance of the prohibited wastes to that facility. The February 14, 2014 radiological release was associated with a breached drum from waste stream LA-MIN02-V.001, which resulted in the actual exposure of 21 personnel, and an actual radiological release

to the environment.

Regarding harm to the regulatory program, the Respondents' failure to verify the waste characterization caused the acceptance of prohibited wastes, which in turn resulted in numerous other Permit violations, the entirety of which was unbeknownst to the regulatory authority.

Therefore, NMED deems this violation to pose substantial potential for harm to human and environmental receptors, and substantially undermines the regulatory program.

b) Extent of Deviation: Major

MAJOR: The violation violates the most important element of the requirement to such an extent that substantial noncompliance results.

Failure to perform waste stream profile verification may have contributed to the facility's failure to identify wastes that did not conform to the WIPP Waste Acceptance Criteria (WAC) (which prohibits EPA hazardous waste number D001) prior to acceptance and storage of the prohibited wastes to that facility.

NMED considers the facility's acceptance and storage of prohibited wastes to constitute a major deviation from the requirement.

c) Number of Counts: 4

This violation is associated with four waste streams (LA-MIN02-V.001, LA-CIN01.001, LA-MIN04-S.001, and LA-MHD01.001); therefore NMED considers this as four (4) counts.

2. <u>MULTIPLE-DAY COMPONENT</u>

Multiple-Day Penalty Application

Per the HWB Penalty Policy, application of a multi-day penalty for violations of major-major gravity is mandatory. Respondents approved incomplete waste stream profile forms for LA-MIN02-V.001 on August 14, 2013, LA-CIN01.001 on June 17, 2010, LA-MIN04-S.001 on August 24, 2012, and LA-MHD01.001 on May 28, 2013); therefore NMED deems a multi-day period of 60 days to be appropriate. *See* DOE Review of Los Alamos National Laboratory – Central Characterization Program Waste Stream Profile for each of the respective waste streams.

3. <u>ADJUSTMENT FACTORS</u>

a) Effort to Comply

Respondents failed to verify the waste stream profile forms for LA-MIN02-V.001, LA-CIN01.001, LA-MIN04-S.001, and LA-MHD01.001, but instead relied on LANL's characterization of the four parent waste streams. LANL's subsequent sampling and analysis of parent containers identified the initial

mischaracterization and led to the application of EPA hazardous waste numbers D001 to all remediated nitrate salt-bearing waste containers. The Respondents did not self-disclose any of the violations incorporated into Order HWB 14-21. Instead, the Respondents chose to delay disclosure of known Permit violations and delay implementation of certain contingencies contained in the Permit, even after being prompted by NMED to take action. Further, since the February 4, 2014, truck fire, the Department of Energy Headquarters worked to chill communications from Respondents to NMED which constitutes bad faith in support of the upward adjustment. NMED deems the Respondents' actions constitute recalcitrant cooperation per the HWB Penalty Policy, Appendix B, and deems the appropriate adjustment to the penalty to be upward by 5%.

b) Negligence / Willfulness

NMED considers there to have been substantial negligence on the part of the facility in association with this violation. The primary factors considered in making this determination include:

- The Respondents have a high degree of control over the circumstances leading to this
 violation, e.g., ability to verify the waste stream profile forms data to identify wastes
 that did not conform to the WIPP WAC prior to acceptance, storage and disposal of
 those wastes.
- The Respondents could readily have foreseen the need for thorough review of the
 profiles given the availability of data on the subject wastes streams so prevalent within
 the DOE complex.
- The Respondents could readily have taken precautions to avoid this violation by expanding and ensuring communication to ensure that the available subject waste stream data within the DOE complex was included in the review process.
- The Respondents have staff with the knowledge that would have prevented this
 violation. The Respondents have committed resources dedicated solely to permit
 compliance that possess the required compliance expertise to recognize insufficient
 profile review and/or the acceptance and storage of prohibited waste as a
 noncompliance.
- The Respondents' level of sophistication regarding hazardous waste compliance is considerable and among the top tier of waste generators both state and nationwide.

Therefore, NMED deems the appropriate adjustment to the penalty per the HWB Penalty Policy to be upward by 15%.

c) History of Noncompliance

Respondents were cited for violating this same requirement [former PC B-4b(1)(ii)] during the compliance evaluation inspection conducted on July 23, 2004. However, Respondents have a minor history of noncompliance with different Hazardous Waste Management Regulations (HWMR) and Permit requirements within the last ten years (2004, and 2006-2009). Therefore, the adjustment to the penalty per the policy is upward 5%.

Other Factors

1) <u>Self-Reporting</u>

WIPP did not self-report the noncompliance with PC C-5a(2).

Therefore, NMED deems that no penalty adjustment is warranted.

2) <u>Small Businesses</u>

WIPP is a large federal government facility and not a small business, therefore, no penalty adjustment is warranted.

3) <u>Unique Factors</u>

There are no known unique factors in this case; therefore, no penalty adjustment is warranted.

4. **FINANCIAL CONDITION**

Due to the facility's demonstrated ability to abide with the hazardous waste requirements and to rectify problems identified, the NMED considers the financial condition of the facility to be an unwarranted consideration and therefore deems the penalty as calculated to be an appropriate deterrent.

5. <u>ECONOMIC BENEFIT OF NONCOMPLIANCE</u>

NMED does not consider economic benefit to have been a factor associated with this violation.