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DEC 2 9 2014

Mr. John E. Kieling, Bureau Chief
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87508-6303

Mr. Butch Tongate
Deputy Secretary and Acting Division Director
Environmental Health Division
New Mexico Environment Department
Harold Runnels Building
1190 Saint Francis Drive, Room 4050
Santa Fe, NM 87502-5469

Subject: Monthly Report for the Reporting Period ending November 30, 2014, as required by NMED Administrative Orders dated February 27, 2014, May 12, 2014, and May 20, 2014, as amended by NMED Directives dated August 29, 2014 and December 9, 2014

Dear Mr. Kieling and Mr. Tongate:

The purpose of this letter is to transmit the monthly report for the reporting period ending November 2014, as requested by the February 27, 2014, May 12, 2014, and May 20, 2014 Administrative Orders, issued under the authority of the New Mexico Hazardous Waste Act § 74-4-13 from Mr. Ryan Flynn to Messrs. Hellstrom, Franco, Cook, and McQuinn, and as amended by the August 29, 2014, and December 9, 2014, directives from Mr. Ryan Flynn to Messrs. Franco and McQuinn. This report is enclosed along with a compact disc containing the electronic version of the report.

We certify under penalty of law that this document and all attachments were prepared under our direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on our inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of our knowledge and belief, true, accurate, and complete. We are aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions, please contact Mr. George T. Basabilvazo at (575) 234-7488.

Sincerely,

Jose R. Franco, Manager
Carlsbad Field Office

for Jose R. Franco

Jamie Reynolds for R. L. McQuinn

Robert L. McQuinn, Project Manager
Nuclear Waste Partnership LLC

Enclosure

cc: w/enclosure

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Monthly Status Report for the New Mexico Environment Department Administrative Orders

Reporting Period November 1, 2014, through November 30, 2014

Introduction

On February 5, 2014, a vehicle fire occurred in the Waste Isolation Pilot Plant (WIPP) underground, resulting in normal operations and waste shipments from generator sites being temporarily suspended. On February 14, 2014, while the fire investigation was still underway, a continuous air monitor detected airborne radiation in the WIPP underground facility, causing the ventilation exhaust to automatically shift to high efficiency particulate air (HEPA) filtration mode. The ventilation system has been operating in filtration mode since that time. Entries into Panel 7 in the underground have confirmed that at least one container from a nitrate salt bearing waste stream from Los Alamos National Laboratory has been breached and is most likely the source of the release. Further investigations are currently ongoing as part of Project REACH to collect additional information regarding the release. Shipments of waste to the WIPP facility have been suspended.

The New Mexico Environment Department (NMED) has issued two Administrative Orders (AOs) to address certain activities relative to the WIPP Hazardous Waste Facility Permit (Permit) that cannot be performed because the underground is inaccessible for normal activities. The AOs provide requirements for monitoring and reporting to the NMED concerning the status of recovery from the two events. The first administrative order (AO1) issued on February 27, 2014, addressed above-ground compliance, and required a weekly report to be submitted with regard to surface-related requirements of the Permit. On May 12, 2014, a second administrative order (AO2) was issued to address, in part, Permit-required activities that cannot currently be performed due to restriction on access to the underground. The second administrative order changed the reporting period from weekly to biweekly, with additional information required to supplement the information required by AO1. A directive from the Secretary of the NMED was issued on August 29, 2014, which amended the reporting frequency from biweekly to monthly for reporting required under AO1 and AO2 with the submittal being due to NMED no later than the 15th of the month for activities conducted during the previous month. A new directive from the Secretary of the NMED was issued on December 9, 2014, which amended the submittal frequency for this report. The new due date for the monthly submittal shall be the last day of the subsequent month for activities conducted during the previous month. This revised schedule is effective immediately, with the monthly report for November 2014 due by December 31, 2014.

This report serves to fulfill the reporting requirements set forth by AO1 and AO2, as amended by the NMED directive dated August 29, 2014. The following sections combine the information required by both orders, as appropriate, and provide references to the applicable paragraphs from AO1 and AO2.

In accordance with Paragraph 17(a) of AO2, and a subsequent letter from the NMED dated September 24, 2014, the Permittees submitted a revised draft of the underground compliance plan (UCP) on October 30, 2014, for NMED's review and comments. Pertinent elements of the WIPP Recovery Plan were integrated into the UCP as these elements pertain to the Permit-related requirements addressed by the AOs. The monthly reports serve to provide a status of recovery-related activities, as outlined in AO1 and AO2. In accordance with Paragraph 18(a) of AO2, subsequent reports will identify new information since the previous reporting period.

1.0 Status of Permit-related surface and underground inspections for this reporting period, as requested per Paragraph 14(a) of AO1 and Paragraphs 18(c) and 18(e)(iii) of AO2, including the accessibility for personnel performing these Permit-required activities per Paragraph 18(e)(i) of AO2 and the status of recovery activities per Paragraph 18(e)(ii) of AO2:

See Attachment 1, *Surface and Underground Inspections*, for the current status of each Permit-required inspection, including accessibility of underground equipment for personnel performing the inspections. This list is taken from Permit Attachment E, Table E-1. The surface and underground inspections required by Table E-1a related to remote-handled (RH) transuranic (TRU) waste are pre-operational. Because the WIPP facility has not been handling RH TRU waste, and there is no RH TRU waste being stored at the WIPP facility at this time, these pre-operational inspections do not currently apply. Inspections and preventative maintenance (PM) are not required for equipment that is out of service. Prior to commencing RH TRU waste handling operations, PMs and/or inspections will be brought into a current/compliant status.

As indicated in Attachment 1, numerous underground inspections cannot currently be performed due to the inaccessibility to those portions of the underground where inspections are required. Some inspections are being completed in order to facilitate recovery. In accordance with Paragraph 17(a) of AO2 and an NMED letter dated September 24, 2014, the Permittees were required to submit a revised UCP to the NMED by October 30, 2014. The order requires that the UCP shall include a detailed compliance schedule for those requirements described in Paragraph 13 of AO2. The compliance schedule includes a proposed timeline, including dates, for achieving underground recovery and attaining compliance with these Permit-required activities. Before these activities can resume, however, certain prerequisite activities must be performed in order to establish the safety and habitability of the work areas in the underground. The UCP will be updated as information becomes available, and these updates will be provided to the NMED for review and comment prior to being incorporated. Future updates to the UCP, will be reflected in the monthly reports, as required by Paragraph 18(c) of AO2.

2.0 Status of Permit-related monitoring activities for this reporting period, as requested per Paragraph 14(a) of AO1 and Paragraph 18(c) of AO2, including the accessibility for personnel performing these Permit-required activities per Paragraph 18(e)(i) of AO2 and the status of recovery activities per Paragraph 18(e)(ii) of AO2:

In accordance with Paragraph 17(a) of AO2, the draft UCP to the NMED was submitted to the NMED by June 26, 2014. On September 24, 2014, the NMED notified the Permittees that review of the draft UCP had been suspended pending the release of the WIPP Recovery Plan. Currently, certain monitoring activities cannot be performed due to the

inaccessibility to those portions of the underground where monitoring activities occur. The UCP contains a compliance schedule including a proposed timeline, including dates, for achieving underground recovery and attaining compliance with these Permit-required activities. Before these activities can resume, however, certain prerequisite activities must be performed in order to establish the safety and habitability of the work areas in the underground. A status of these activities, as described in future updates to the UCP, will be reflected in the monthly reports, as required by Paragraph 18(c) of AO2.

Volatile Organic Compound (VOC) Monitoring

Repository VOC monitoring activities (required by Permit Part 4, Section 4.6.2, including Table 4.6.2.3, and associated requirements in Attachment N) are not currently being performed due to the inaccessibility of those portions of the underground required to perform these activities. Additionally, room-based VOC monitoring activities (required by Permit Part 4, Sections 4.4.3 and 4.6.3, Tables 4.4.1 and 4.6.3.2, and associated requirements in Attachment N) cannot currently be performed due to the inaccessibility of those portions of the underground needed to perform these activities.

Surface VOC monitoring is being conducted in lieu of underground monitoring during re-entry and recovery operations utilizing portable passive air sampling kits. Surface monitoring is being performed to assure that the Permit environmental performance standards (i.e., carcinogenic and non-carcinogenic risk due to VOC emissions from the disposed waste) for surface-based non-waste workers are met. Samples are being collected twice each week at three locations on-site and one location off-site. These samples are 24-hour VOC samples collected on the surface southeast (Training Building), west (Building 489 Intake), and north (Building 489 North Air Intake) of the Training Building, with an off-site location approximately a mile southeast of the Training Building at location WQSP-4. These samples are used to quantify VOC exposure to a receptor in the Training Building. The samples on-site and at location WQSP-4 are used to quantify background VOC concentrations in the ambient air. In accordance with Paragraph 19 of AO2, the Permittees began monitoring for trichloroethylene as a target analyte on May 12, 2014.

Disposal room VOC monitoring is not being conducted in the underground as stated above. This does not pose a threat to underground waste workers because waste handling is not underway in the underground, and no emplacement rooms are active. Disposal room monitoring will have to be restarted prior to resuming waste emplacement activities.

Geomechanical Monitoring

The purpose of geomechanical monitoring is to confirm the structural integrity of the underground repository. Geomechanical monitoring data are currently being transmitted electronically via remote instruments located in Rooms 6 and 7 of Panel 7 in accordance with Permit Part 4, Section 4.6.1, associated requirements in Attachment A2-5b(2), and Attachment E, Table E-2. Not all geomechanical monitoring activities that require the manual reading of underground equipment can currently be performed due to the inaccessibility of those portions of the underground where these activities are performed. However, visual inspections of the underground areas during recent re-entries have provided information regarding the stability of the underground and identified those areas that require bolting. Bolting has been resumed as part of recovery activities in the underground.

Hydrogen and Methane Monitoring

Hydrogen and methane monitoring activities (required by Permit Part 4, Section 4.6.5 and associated requirements in Attachment N1) cannot currently be performed due to the inaccessibility of those portions of the underground where these activities are performed. This does not pose a threat to underground waste workers because underground activities are not underway in the vicinity of Panels 3 and 4. Hydrogen and methane monitoring will be restarted during recovery.

Mine Ventilation Rate Monitoring

Mine ventilation rate monitoring activities (required by Permit Part 4, Section 4.6.4 and associated requirements of Attachment O) are currently being performed. However, due to reduced air flow in the underground because of operating in filtration mode, the minimum running annual average ventilation rate set forth by the Permit cannot be maintained. The ventilation system has been operating in filtration mode since February 14, 2014, with a flow rate of approximately 60,000 standard cubic feet per minute (SCFM). During this reporting period, the calculated running annual average ventilation flow rate was approximately 126,068 SCFM. Surface VOC monitoring is being used to assure the reduced flow rate does not pose a threat to the surface non-waste worker.

3.0 Summary of waste shipment information and any other relevant records that document the site of origin, volumes and receipt dates of TRU waste that is currently located at the facility WHB and parking area unit, as requested per Paragraph 14(c) of AO1, and information specifying the deadlines for each individual waste assembly as it relates to AO1, as requested per Paragraph 14(d) of AO1:

Waste is currently being stored in the WHB. Since the submittal of the last monthly report, there has been no additional waste placed in storage in the WHB. Attachment 2, TRU Mixed Waste Currently in Storage at the WIPP Facility, has been updated to reflect the new storage deadline pursuant to the November 7, 2014, letter granting an additional 180 day storage extension for the CH TRU mixed waste in the WHB. This fourth extension for all TRU mixed waste in the WHB expires on May 6, 2015.

4.0 Location of any environmental monitoring equipment, including the identification of whether they are stationary, mobile, or permanent. This includes, but is not limited to, VOC monitoring stations, radiological monitoring stations, meteorological monitoring, surface water monitoring, vegetation sampling. The reports shall include dates of deployment and sampling, and all data that has been produced by these monitoring stations for his reporting period, as requested per Paragraph 14(f) of AO1:

See Attachment 3, *Environmental Monitoring,* which includes tables with the locations of environmental monitoring equipment (including identification whether they are stationary, mobile, or permanent) and new data for this reporting period. Aerial photos and diagrams displaying monitoring locations are included. The following briefly describes the monitoring information in Attachment 3, *Environmental Monitoring*.

- VOC monitoring stations – Portable surface monitoring equipment has been deployed since February 25, 2014. Samples are being collected twice each week at the locations indicated in Attachment 3. The results are included in Attachment 3, *Environmental Monitoring*.
- Radiological monitoring – During this reporting period, monitoring results were below minimum detectable concentrations for all surface and subsurface water samples. Laboratory results from air samplers located on and around the WIPP facility following the restart of the 860A Fan on October 21, 2014, showed minimal levels of radionuclide activity detected at one of the on-site environmental low volume air sampling locations located approximately 60 yards northwest of the fan. The results for the remaining sample locations were below minimum detectable concentration and levels which would impact worker health or the environment. The results are included in Attachment 3, *Environmental Monitoring*.
    - Surface and subsurface water samples – Surface water samples were obtained on the dates and at the locations shown in Attachment 3.
    - Environmental air samples – Stationary low volume air samplers continuously sample air at the locations shown in Attachment 3.

5.0 Updates on activities performed pursuant to the Underground Derived Waste Storage Plan, including a description of any surface and underground derived waste produced, whether the derived waste is mixed or non-mixed, the contents, container type, container location, total container count, and approximate volume of derived waste per container, as requested per Paragraph 14(i) of AO1 and Paragraph 18(d) of AO2:

In accordance with Paragraph 17(b) of AO2, the draft *Underground Derived Waste Storage Plan* was submitted to the NMED by June 26, 2014 for review and comment. Furthermore, the NMED will review and provide comments on any revisions to the *Underground Derived Waste Storage Plan.* However, during this reporting period, no additional derived waste was generated. As recovery efforts progress, any derived waste produced will be reported in Attachment 4, *Surface and Underground Derived Waste Currently in Storage at the WIPP Facility*, which is currently reserved.

6.0 The current status of activities required by the RCRA Contingency Plan, Permit Attachment D, including identification of applicable sections of the Contingency Plan, the schedule for actions required under the Contingency Plan, and any deviations from any Contingency Plan requirements, as requested per Paragraph 18(b) of AO2. Non-applicable sections shall also be identified and explanations shall be provided as to why such sections do not apply:

A matrix outlining compliance with the individual sections of the RCRA Contingency Plan as they pertain to the April 11, 2014, implementation, was last submitted as Attachment 5, *Status of RCRA Contingency Plan Required Activities*, in the July 11, 2014, bi-weekly report. This matrix has been updated to reflect the current status of recovery-related activities pertinent to implantation of the RCRA Contingency Plan. See Attachment 5 for the revised matrix.

7.0 The monthly report shall include the submission of a list containing all additional requirements placed upon the WIPP by any state or federal agency relating to corrective actions or recovery and as a result of the incidents referenced in Paragraphs 8 and 9 of the May 12, 2014, Administrative Order, including requirements by other segments of DOE, as requested by Paragraph 18(f) of AO2:

During this reporting period, no additional requirements were placed upon the Permittees by any other state or federal agency relating to corrective actions or recovery and as a result of the incidents referenced in Paragraphs 8 and 9 of AO2, including requirements by other segments of the DOE. As additional Judgments of Need (JONs) are identified as a result of the completion of subsequent phases of the Accident Investigation Board (AIB) radiological release event investigation, they will be provided in Attachment 6, *Corrective Actions Required for Recovery*, which is currently reserved.

8.0 The Permittees shall provide documentation of the "as found" condition of Panel 7, including relevant photographs of the waste, as requested per Paragraph 18(i) of AO2:

Attachment 7, *As-Found Condition of Panel 7*, was provided to the NMED on June 13, 2014. During this reporting period, Project REACH components were deployed to the underground. Assembly of the Project REACH components is underway, and completion of the sub-assembly is expected in mid-December. Once assembled, the REACH 90-foot boom and trolley system will provide extensive video of Panel 7, Room 7, for the radiological incident investigation. There have been no photographs taken in Panel 7 since those that were initially submitted to the NMED on June 13, 2014. Therefore, this attachment is currently reserved. The first photographs via the Project REACH boom are anticipated to be obtained during the beginning of January 2015.

9.0 The Permittees shall provide documentation of the "as found" condition of Panel 6 partial closure system, including relevant photographs, as requested per Paragraph 18(j) of AO2:

Geotechnical surveys were performed in the area of the Panel 6 entrance. Radiological personnel have begun performing surveys at the entrance of Panel 6 to determine if the area can be rolled back to an Radiological Buffer Area (RBA) in preparation of Panel 6 initial closure activities, and bolting activities will be initiated in this area in the coming weeks. These efforts will commence when the bolter and sufficient support equipment have been cleaned or decontaminated and PMs have been performed to meet safety requirements. There have been no photographs taken in Panel 6.

10.0 The Permittees shall provide a status of recovery-related activities relative to the underground per Paragraph 18(e)(ii) of AO2 and a summary of recovery-related work performed in Panel 7, including relevant photographs, as requested per Paragraph 18(k) of AO2:

Consistent with the WIPP Recovery Plan, the focus of underground entries has been on radiological characterization and rollback, geotechnical evaluation, habitability surveys, clean up, electrical and mechanical evaluation of systems, and equipment and repairs as needed to support bolting and installation of the initial closures in Panel 6. More than 60 percent of the underground has been radiologically characterized and rolled back to a

RBA or Controlled Area, requiring no personal protective equipment for entry. Ongoing radiological rollback activities were started near the shaft areas, have progressed towards the south end of the underground via the main drifts (i.e., E-140 and W-30), and will continue towards the drifts (S-2750 and S-3080) that access Panel 6 to support Panel 6 initial closure activities. The S-1000 lunchroom, break-room and maintenance shops are now accessible, allowing for improved personnel habitability and availability of tools for underground equipment preventative maintenance. Maintenance crews are cleaning and inspecting electrical panels in the RBAs to ensure no soot from the fire is present. Electrical distribution panels were cleaned and power restored for lights and some receptacles in the north maintenance shop. Power is now available at Underground Services Offices and at the Connex at the Salt Shaft Station. Attachment 8, *Panel 7 Recovery-Related Work*, provides a map of the current status of the WIPP underground rollback areas during this reporting period.

The Salt and Air Intake Shafts/Hoists have been available to support access to the underground and have undergone weekly inspections. Preventative maintenance and preoperational checks continue in support of placing the waste hoist back into full service. The Waste Hoist has been returned to service for equipment conveyance and emergency egress which allows for up to 75 personnel to enter the underground, thereby increasing the pace of safety-related activities such as bolting and initial panel closure. The semi-annual vendor non destruction examination (NDE) inspection on the conveyance ropes for all three hoists was performed on November 22 and 23, 2014; no issues were observed. The Waste Shaft sump at the bottom of the shaft is the lowest point of the mine and, therefore, collects water from areas of the mine such as the Exhaust Shaft. Accumulated water is being removed to uncover the Waste Hoist counter weights that are attached to the guide ropes. Once the guide rope weights are uncovered and inspected, the hoist will be available for normal transport of personnel into the underground.

Priorities continue to include resumption of bolting and the initial closure of Panel 6. The forklift, bolter, lube truck, and diesel-fueled scissor lift, which are used for bolting activities and moving equipment associated with bolting activities, were returned to service. Two new electric scissor lifts have been downloaded to the underground. Bolting in un-contaminated areas resumed on November 15, 2014, with cleaning and maintenance activities underway to prepare equipment for bolting in contaminated areas. Bolting activities are prioritized based on geotechnical inspections and surveys. Roof bolting has commenced at the S-700 drift, has been initiated in the W-30 drift, and has transitioned to E-140 toward Panel 6 to ensure safe access for the beginning of initial panel closure. The number of pieces of diesel equipment that can be operated for roof bolting is limited by the available ventilation in the work area and the minimum ventilation flow rate assigned to each piece of equipment based on Mine, Safety, and Health Administration air quality requirements. Due to these limitations, ventilation adjustments will have to be made as a prerequisite in each location where bolting equipment will operate to ensure equipment airflow requirements are met.

Fabrication of the Interim Ventilation System (IVS), consisting of two skid mounted fan and filter units, began during this reporting period.

Preventative maintenance was performed on the 860B fan during this reporting period. The 860A fan, which is part of the mine ventilation and filtration system, was taken offline and replaced with the 860B fan on November 5, 2014.

During this reporting period, certain underground eyewash stations and permanently-located fire extinguishers, as well as the underground ambulance, were inspected, refurbished and replaced as needed and returned to service. Annual fire extinguisher inspections in accessible areas were completed. Radiological rollback has allowed access to some mine phones, radio, and public address system locations within a limited area. As a result, operability tests have been performed for these devices. As radiological rollback continues towards Panel 6, mine phones in the Panel 6 area will be checked and repaired, and batteries will be replaced, if necessary. Self-contained self-rescuer caches will be restocked, if needed, in the drifts to Panel 6. Habitability activities have started near the shaft areas and are progressing towards the south end of the underground via drifts E-140, W-30, and W-170 and will continue towards drifts S-2750 and S-3080, which provide access to Panel 6 to support Panel 6 initial closure activities.

Ongoing visual checks are being performed to evaluate the extent of soot accumulation on electrical equipment and, if necessary, to clean the equipment. The underground electrical cleaning during this reporting period was approximately 40 percent complete. Cleaning of some underground switch stations is ongoing.

Bulkheads for the initial closure of Panel 6 are fabricated and are located in the underground. No additional staging of materials is currently underway.

As the Permittees continue to conduct recovery-related activities, additional descriptions will be provided in subsequent reports.

Attachment 1
Surface and Underground Inspections

System/Equipment Name	Responsible Organization	Inspection Frequency	Procedure Number and Inspection Criteria	Inspection Status (Current/ Not Current)	Date of Last Inspection	Proposed Start Date (if Not Current or Equipment Not in Use)[1]	Comments
Air Intake Shaft Hoist	Underground Operations	Preoperational	WP 04-HO1004 Inspecting for Deterioration, Safety Equipment, Communication Systems, and Mechanical Operability in accordance with Mine Safety and Health Administration (MSHA) requirements	Current	11/30/14	N/A	Inspection performed daily before Hoist is declared in service.
Exhaust Shaft	Underground Operations	Quarterly	PM041099 Inspecting for Deterioration and Leaks/Spills	Not Current	12/31/13 (Due 3/31/14)	TBD	Shaft is not accessible due to the fire and radiological events, and inspections cannot be performed.
Salt Handling Shaft Hoist	Underground Operations	Preoperational	WP 04-HO1002 Inspecting for Deterioration, Safety Equipment, Communication Systems, and Mechanical Operability in accordance with MSHA requirements	Current	11/30/14	N/A	Inspection performed daily before Hoist is declared in service.
Self-Rescuers	Underground Operations	Quarterly	WP 04-AU1026 Inspecting for Deterioration and Functionality in accordance with MSHA requirements	Current for W65 Self-Rescuer Respirators Not Current for SCSRs	10/01/14	N/A	Respirators quarterly inspections are current. The Self Contained Self Rescuers (SCSRs) in the underground are not accessible at this time, therefore inspections cannot be performed.

System/Equipment Name	Responsible Organization	Inspection Frequency	Procedure Number and Inspection Criteria	Inspection Status (Current/ Not Current)	Date of Last Inspection	Proposed Start Date (if Not Current or Equipment Not in Use)[1]	Comments
Underground Openings—Roof Bolts and Travelways	Underground Operations	Weekly	WP 04-AU1007 Inspecting for Deterioration	Not Current	1/29/14	3/31/16	Not all areas of the underground are accessible, therefore inspections cannot be performed. Note that partial underground openings inspections are being performed by re-entry teams, but not the full weekly underground openings inspection.
Waste Hoist	Underground Operations	Preoperational	WP 04-HO1003 Inspecting for Deterioration, Safety Equipment, Communication Systems, and Mechanical Operability, Leaks/Spills, in accordance with MSHA requirements	Current	11/30/14	December	Hoist is operational for conveyance of equipment and emergency egress.
Explosion-Isolation Walls	Underground Operations	Quarterly	Integrity and Deterioration of Accessible Areas	Not Current	2/3/14: (Panel 1 and Panel 2) 11/4/13: (Panel 5)	3/31/16	Structures are not accessible due to the fire and radiological events, and inspections cannot be performed.
Bulkhead in Filled Panels	Underground Operations	Monthly	Integrity and Deterioration of Accessible Areas	Not Current	N/A	3/31/16	Area is not accessible due to the fire and radiological events, and inspections cannot be performed.
MSHA Air Quality Monitor	Maintenance/ Underground Operations	Daily	WP 12-IH1828 Inspecting for Air Quality Monitoring Equipment Functional Check	Current	11/30/14	N/A	Inspection performed prior to underground entry.

System/Equipment Name	Responsible Organization	Inspection Frequency	Procedure Number and Inspection Criteria	Inspection Status (Current/ Not Current)	Date of Last Inspection	Proposed Start Date (if Not Current or Equipment Not in Use)[1]	Comments
Ambulances (Surface) and related emergency supplies and equipment	Emergency Services	Weekly	12-FP0030 Inspecting for Mechanical Operability, Deterioration, and Required Equipment	Current	11/30/14	N/A	
Ambulances (Underground) and related emergency supplies and equipment	Emergency Services	Weekly	12-FP0030 Inspecting for Mechanical Operability, Deterioration, and Required Equipment	Not Current	11/29/14	3/31/16	Not all equipment is accessible due to the fire and radiological events, therefore inspections cannot be performed. As pieces of equipment are returned to service as part of the underground recovery, the Permit required inspections will be scheduled and performed and the inspection dates will be noted in this table.
Fire Detection and Alarm System (Underground)	Emergency Services	Semiannually	12-FP0027 Inspecting for Deterioration, Operability of indicator lights and, underground fuel station dry chemical suppression system. Inspection is per NFPA 17	Not Current	2/8/14	3/31/16	Not all equipment is accessible due to the fire and radiological events, therefore inspections cannot be performed. As pieces of equipment are returned to service as part of the underground recovery, the Permit required inspections will be scheduled and performed and the inspection dates will be noted in this table.

System/Equipment Name	Responsible Organization	Inspection Frequency	Procedure Number and Inspection Criteria	Inspection Status (Current/ Not Current)	Date of Last Inspection	Proposed Start Date (if Not Current or Equipment Not in Use)[1]	Comments
Fire Extinguishers (Surface)	Emergency Services	Monthly	12-FP0036 Inspecting for Deterioration, Leaks/Spills, Expiration, seals, fullness, and pressure	Current	11/30/14	N/A	
Fire Extinguishers (Underground)	Emergency Services	Monthly	12-FP0036 Inspecting for Deterioration, Leaks/Spills, Expiration, seals, fullness, and pressure	Not Current	11/30/14	3/31/16	Fire extinguishers are being returned to service. However, not all fire extinguishers are accessible due to the fire and radiological events, therefore inspections cannot be performed. As extinguishers are returned to service as part of the underground recovery, the Permit required inspections will be scheduled and performed and the inspection dates will be noted in this table. Currently all fire extinguishers in the U/G have been inspected in accessible areas, except those located in Panel 6.
Fire Hoses	Emergency Services	Annually (minimum)	12-FP0031 Inspecting for Deterioration and Leaks/Spills	Current	3/26/14	N/A	
Fire Hydrants	Emergency Services	Semiannual/ annually	12-FP0034 Inspecting for Deterioration and Leaks/Spills	Current	7/15/14: (Annual) 8/28/14: (Semiannual)	N/A	

System/Equipment Name	Responsible Organization	Inspection Frequency	Procedure Number and Inspection Criteria	Inspection Status (Current/ Not Current)	Date of Last Inspection	Proposed Start Date (if Not Current or Equipment Not in Use)[1]	Comments
Fire Pumps	Emergency Services	Weekly/annually	WP 12-FP0026 Inspecting for Deterioration, Leaks/Spills, valves, and panel lights	Current	11/24/14	N/A	
Fire Sprinkler Systems	Emergency Services	Monthly/ quarterly	WP 12-FP0025 Inspecting for Deterioration, Leaks/Spills, static pressures, and removable strainers	Current	11/24/14, 11/25/14, 11/26/14	N/A	A series of building fire sprinkler systems are inspected on a weekly basis so that a complete system inspection is accomplished on a monthly basis.
Fire and Emergency Response Trucks (Seagrave Fire Apparatus, Emergency One Apparatus)	Emergency Services	Weekly	12-FP0033 Inspecting for Mechanical Operability, Deterioration, Leaks/Spills, and Required Equipment	Current	11/28/14	N/A	
Fire and Emergency Response Trucks (Underground Rescue Truck)	Emergency Services	Weekly	12-FP0030 and 12-FP0033 Inspecting for Mechanical Operability, Deterioration, Leaks/Spills, and Required Equipment	Not Current	2/8/14	3/31/16	As the underground rescue truck is returned to service as part of the recovery, the Permit required inspections will be scheduled and performed and the inspection dates will be noted in this table.
Hazardous Material Response Equipment	Emergency Services	Weekly	12-FP0033 Inspecting for Mechanical Operability, Deterioration, and Required Equipment	Current	11/25/14	N/A	

System/Equipment Name	Responsible Organization	Inspection Frequency	Procedure Number and Inspection Criteria	Inspection Status (Current/ Not Current)	Date of Last Inspection	Proposed Start Date (if Not Current or Equipment Not in Use)[1]	Comments
Miners First Aid Station	Emergency Services	Quarterly	12-FP0035 Inspecting for Required Equipment	Not Current	2/8/14	3/31/16	As miners first aid stations are recovered and put back into normal service the inspections will be scheduled and performed and dates noted in this table.
Personal Protective Equipment (not otherwise contained in emergency vehicles or issued to individuals): —Self-Contained Breathing Apparatus	Emergency Services	Weekly	12-FP0029 Inspecting for Deterioration and Pressure	Current	11/29/14	N/A	
Rescue Truck (Surface)	Emergency Services	Weekly	12-FP0030 and 12-FP0033 Inspecting for Mechanical Operability, Deterioration, Leaks/Spills, and Required Equipment	Current	11/27/14	N/A	
Vehicle Siren (Surface Vehicles)	Emergency Services	Weekly	Functional Test included with inspection of the Ambulances, Fire Trucks, and Rescue Trucks	Current	11/29/14	N/A	
Vehicle Siren (Underground Vehicles)	Emergency Services	Weekly	Functional Test included with inspection of the Ambulances, Fire Trucks, and Rescue Trucks	Not Current	2/8/14	3/31/16	See entries above for ambulances, fire trucks and rescue trucks.
Adjustable Center of Gravity Lift Fixture	Waste Handling	Preoperational	WP 05-WH1410 Inspecting for Mechanical Operability and Deterioration	Current	10/14/14 (41-T-037) 10/23/14 (41-T-038) 11/30/14 (41-T-032)	N/A	There are four ACGLFs, but the pre-operational inspection was only performed on the one fixture listed. The other ACGLFs will be inspected prior to use.

System/Equipment Name	Responsible Organization	Inspection Frequency	Procedure Number and Inspection Criteria	Inspection Status (Current/ Not Current)	Date of Last Inspection	Proposed Start Date (if Not Current or Equipment Not in Use)[1]	Comments
Contact-Handled (CH) TRU Underground Transporter	Waste Handling	Preoperational	WP 05-WH1603 Inspecting for Mechanical Operability, Deterioration, and area around transporter clear of obstacles	Current	2/5/14	When waste disposal operations resume	Equipment not in use due to the fire and radiological events.
Conveyance Loading Car	Waste Handling	Preoperational	WP 05-1406 Inspecting for Mechanical Operability, Deterioration, path clear of obstacles and guards in the proper place	Current	11/30/14 (41-H-018)	When waste disposal operations resume	Equipment not in use due to the fire and radiological events. The preoperational inspection was completed for training purposes only. Inspection not intended for daily operations.
Facility Transfer Vehicle	Waste Handling	Preoperational	WP 05-WH1204 Inspecting for Mechanical Operability, Deterioration, path clear of obstacles, and guards in the proper place	Current	11/26/14 (41-H-020A) 11/10/14 (41-H-020B)	N/A	There are two transfer vehicles, but the pre-operational inspection was only performed on the one fixture listed. The other fixtures will be inspected prior to use.
Forklifts Used for Waste Handling (Electric and Diesel forklifts, Push-Pull Attachment) on Surface	Waste Handling	Preoperational	WP 05-WH1201, WP 05-WH1207, WP 05-WH1401, WP 05-WH1402, WP 05-WH1403, and WP 05-WH1412 Inspecting for Mechanical Operability, Deterioration, and On board fire suppression system	Current	11/29/14 (41-H-009) 11/30/14 (41-H-013) 10/15/14 (41-H-051) 8/9/14 (41-T-051) 11/29/14 (41-H-012D) 11/30/14 (41-H-012E) 11/30/14 (74-H-010B)	N/A	

System/Equipment Name	Responsible Organization	Inspection Frequency	Procedure Number and Inspection Criteria	Inspection Status (Current/ Not Current)	Date of Last Inspection	Proposed Start Date (if Not Current or Equipment Not in Use)[1]	Comments
Forklifts Used for Waste Handling (Electric and Diesel forklifts, Push-Pull Attachment) in Underground	Waste Handling	Preoperational	WP 05-WH1201, WP 05-WH1207, WP 05-WH1401, WP 05-WH1402, WP 05-WH1403, and WP 05-WH1412 Inspecting for Mechanical Operability, Deterioration, and On board fire suppression system	Current	2/5/14	When waste disposal operations resume	Equipment not in use due to the fire and radiological events.
Surface TRU Mixed Waste Handling Area	Waste Handling	Preoperational or Weekly	WP 05-WH1101 Inspecting for Deterioration, Leaks/Spills, Required Aisle Space, Posted Warnings, Communication Systems, Container Condition, and Floor coating integrity	Current	11/26/14 (Weekly) 11/30/14 (Daily)	N/A	
TRU Mixed Waste Decontamination Equipment	Waste Handling	Annually	WP 05-WH1101 Inspecting for Required Equipment	Current	12/31/13	N/A	
Underground TRU Mixed Waste Disposal Area	Waste Handling	Preoperational	WP 05-WH1810 Inspecting for Deterioration, Leaks/Spills, mine pager phones, equipment, unobstructed access, signs, debris, and ventilation	Current	2/5/14	When waste disposal operations resume	Waste handling operations are suspended therefore preoperational inspections are not being performed.
TDOP Upender	Waste Handling	Preoperational	WP 05-WH1010 Inspecting for Mechanical Operability and Deterioration	Current	10/9/13	When waste disposal operations resume	Equipment not in use due to the fire and radiological events.
Waste Handling Cranes	Waste Handling	Preoperational	WP 05-WH1407 Inspecting for Mechanical Operability, Deterioration, and Leaks/Spills	Current	11/08/14 (41-T-151A) (41-T-151B) 11/30/14 (41-T-151D)	N/A	There are four cranes, but the pre-operational inspections were only performed on the cranes listed. The other crane will be inspected prior to use.

System/Equipment Name	Responsible Organization	Inspection Frequency	Procedure Number and Inspection Criteria	Inspection Status (Current/ Not Current)	Date of Last Inspection	Proposed Start Date (if Not Current or Equipment Not in Use)[1]	Comments
Push-Pull Attachment (Surface)	Waste Handling	Preoperational	WP 05-WH1401 Inspecting for Damage and Deterioration	Current	11/09/14 (41-T-160A) 11/30/14 (41-T-160B)	N/A	
Push-Pull Attachment (Underground)	Waste Handling	Preoperational	WP 05-WH1401 Inspecting for Damage and Deterioration	Current	2/5/14	When waste disposal operations resume	Equipment not in use due to the fire and radiological events.
Trailer Jockey	Waste Handling	Preoperational	WP 05-WH1405 Inspecting for Mechanical Operability and Deterioration	Current	9/9/14 (41-H-151B) 11/30/14 (41-H-151A) 11/30/14 (41-H-046)	N/A	There are three Trailer Jockeys, but the pre-operational inspection was only performed on the one listed. The other Trailer Jockeys will be inspected prior to use.
Bolting Robot	Waste Handling	Preoperational	WP 05-WH1203 Mechanical Operability	Not Current	6/29/12	When waste disposal operations resume	Equipment is currently out of service.
Yard Transfer Vehicle	Waste Handling	Preoperational	WP 05-WH1205 Mechanical Operability, clear of obstacles and Guards in proper place	Current	7/29/14 (41-H-021A) 11/29/14 (41-H-021B)	N/A	There are two yard transfer vehicles (YTVs), but the pre- operational inspection was only performed on the one YTV listed. The other YTV will be inspected prior to use.
Payload Transfer Station	Waste Handling	Preoperational	WP 05-WH1208 Mechanical Operability, Deterioration, and Guards in proper place	Current	11/26/14 (41-Z-041)	N/A	

System/Equipment Name	Responsible Organization	Inspection Frequency	Procedure Number and Inspection Criteria	Inspection Status (Current/ Not Current)	Date of Last Inspection	Proposed Start Date (if Not Current or Equipment Not in Use)[1]	Comments
Monorail Hoist	Waste Handling	Preoperational	WP 05-WH1202 Mechanical Operability, and leaks/spills	Current	11/30/14 (41-H-027)	N/A	
Bolting Station	Waste Handling	Preoperational	WP 05-WH1203 Mechanical Operability, Deterioration, and Guards in proper place	Current	11/30/14 (41-T-053A) (41-T-054A)	N/A	
Backup Power Supply Diesel Generators	Facility Operations	Monthly	WP 04-ED1301 Inspecting for Mechanical Operability and Leaks/Spills by starting and operating both generators. Results of this inspection are logged in accordance with WP 04-AD3008.	Current	11/28/14 (#1) 11/28/14 (#2)	N/A	
Central Monitoring System (CMS)	Facility Operations	Continuous	Automatic Self-Checking	Current	11/30/14	N/A	
Mine Pager Phones (between surface and underground)	Facility Operations	Monthly	WP 04-PC3017 Testing of PA and Underground Alarms and Mine Page Phones at essential locations	Not Current	11/26/14	N/A	Mine phone tests are performed in the accessible areas each day an entry is made. U/G rollback is ongoing, so not all locations are accessible at this time.
Mine Pager Phones (underground)	Facility Operations	Monthly	WP 04-PC3017 Testing of PA and Underground Alarms and Mine Page Phones at essential locations	Not Current.	11/26/14	N/A	Mine phone tests are performed in the accessible areas each day an entry is made. U/G radiological characterization and rollback is ongoing, so not all locations are accessible at this time.

System/Equipment Name	Responsible Organization	Inspection Frequency	Procedure Number and Inspection Criteria	Inspection Status (Current/ Not Current)	Date of Last Inspection	Proposed Start Date (if Not Current or Equipment Not in Use)[1]	Comments
Public Address (and Intercom System) on Surface	Facility Operations	Monthly	WP 04-PC3017 Testing of PA and Underground Alarms and Mine Page Phones at essential locations Systems operated in test mode	Current	11/26/14	N/A	
Public Address (and Intercom System) in Underground	Facility Operations	Monthly	WP 04-PC3017 Testing of PA and Underground Alarms and Mine Page Phones at essential locations Systems operated in test mode	Not Current	11/26/14	N/A	Tests are being performed in the accessible areas each day an entry is made. U/G radiological characterization and rollback is ongoing, so not all locations are accessible at this time.
Radio Equipment	Facility Operations	Daily	Radios are operated daily and are repaired upon failure	Current	11/30/14	N/A	
Uninterruptible Power Supply (Central UPS)	Facility Operations	Daily	WP 04-ED1542 Inspecting for Mechanical Operability and Deterioration with no malfunction alarms. Results of this inspection are logged in accordance with WP 04- AD3008.	Current	11/30/14	N/A	
Water Tank Level	Facility Operations	Daily	SDD-WD00 Inspecting for Deterioration, and water levels. Results of this inspection are logged in accordance with WP 04-AD3008.	Current	11/30/14	N/A	
Facility Inspections (Water Diversion Berms)	Facility Engineering	Annually	WP 10-WC3008 Inspecting for Damage, Impediments to water flow, and Deterioration	Current	9/7/14	N/A	

System/Equipment Name	Responsible Organization	Inspection Frequency	Procedure Number and Inspection Criteria	Inspection Status (Current/ Not Current)	Date of Last Inspection	Proposed Start Date (if Not Current or Equipment Not in Use)[1]	Comments
Eye Wash and Shower Equipment (Surface)	Equipment Custodian	Weekly	WP 12-IS1832 Inspecting for Deterioration	Current	11/24/14, 11/25/14, 11/26/14	N/A	
Eye Wash and Shower Equipment (Underground)	Equipment Custodian	Weekly	WP 12-IS1832 Inspecting for Deterioration	Not Current	11/25/14	3/31/16	Eye wash stations are being brought back into service. As equipment is returned to service as part of the recovery, the Permit required inspections will be scheduled and performed and the inspection dates will be noted in this table. Four eyewash stations are currently in service
Perimeter Fence, Gates, Signs	Security	Daily	PF0-010 Inspecting for Deterioration and Posted Warnings	Current	11/30/14	N/A	
Underground—Geomechanical Instrumentation System (GIS)	Geotechnical Engineering	Monthly	WP 07-EU1301 Inspecting for Deterioration	Current	11/25/14	N/A	Complete at accessible areas.
Ventilation Exhaust	Maintenance Operations	Quarterly	IC041098 Check for Deterioration and Calibration of Mine Ventilation Rate Monitoring Equipment	Not Current	41F30703 Fan A (11/9/13) 41F30704 Fan B (5/20/13) 41F30702 Fan C (12/18/13)	3/31/16	The 700 horse power fans are not in use because underground ventilation system is operating in filtration mode.

System/Equipment Name	Responsible Organization	Inspection Frequency	Procedure Number and Inspection Criteria	Inspection Status (Current/ Not Current)	Date of Last Inspection	Proposed Start Date (if Not Current or Equipment Not in Use)[1]	Comments

[1] Inspection proposed start date of first quarter of calendar year 2016, is an estimate from the WIPP Recovery Plan. Inspections may be initiated prior to 3/31/16 as work zones are released in the underground. Therefore, 3/31/16 is a "placeholder," and proposed start dates may be revised as recovery work progresses.

Attachment 2
TRU Mixed Waste Currently in Storage at the WIPP Facility

Site of Origin	Shipment	Receipt Date/Time	ICV Closure Date/Time	Venting Deadline	Venting Date	WHB Deadline	Assembly	Unemplaced Containers	Waste Volume[1] (ft^3)
SRS	SR140003	1/24/2014 12:40	1/16/2014 8:45	3/16/2014 8:45	2/1/2014 8:15	05/06/15	SR139200	6-55G Drums	44.4
SRS	SR140003	1/24/2014 12:40	1/16/2014 8:45	3/16/2014 8:45	2/1/2014 8:15	05/06/15	SR139201	7-55G Drums	51.8
SRS	SR140003	1/24/2014 12:40	1/16/2014 8:40	3/16/2014 8:40	2/1/2014 8:32	05/06/15	SR139206	4-55G Drums	29.6
SRS	SR140003	1/24/2014 12:40	1/16/2014 8:40	3/16/2014 8:40	2/1/2014 8:34	05/06/15	SR139207	7-55G Drums	51.8
LANL	LA140018	2/1/2014 1:30	1/29/2014 14:25	3/29/2014 14:25	2/1/2014 12:40	05/06/15	LA139903	1 SWB	66.3
LANL	LA140019	2/1/2014 1:50	1/30/2014 15:20	3/30/2014 15:20	2/1/2014 14:25	05/06/15	LA139927	1 SWB	66.3
LANL	LA140019	2/1/2014 1:50	1/30/2014 15:20	3/30/2014 15:20	2/1/2014 14:26	05/06/15	LA139928	1 SWB	66.3
INL	IN140037	2/1/2014 21:11	1/30/2014 14:00	3/30/2014 14:00	2/2/2014 10:17	05/06/15	IN139806	1 TDOP	160
INL	IN140037	2/1/2014 21:11	1/30/2014 14:03	3/30/2014 14:03	2/2/2014 10:24	05/06/15	IN139814	1 TDOP	160
SRS	SR314011	1/28/2014 14:10	1/22/2014 8:30	3/22/2014 8:30	2/3/2014 12:14	05/06/15	SR139781	1 SLB2	261
INL	IN140036	2/1/2014 22:40	1/25/2014 13:35	3/25/2014 13:35	2/3/2014 13:15	05/06/15	IN139540	1 SWB	66.3
INL	IN140036	2/1/2014 22:40	1/25/2014 13:35	3/25/2014 13:35	2/3/2014 13:15	05/06/15	IN139541	1 SWB	66.3
INL	IN140041	2/3/2014 7:13	1/31/2014 13:30	3/31/2014 13:30	2/3/2014 14:37	05/06/15	IN140062	1 SWB	66.3
INL	IN140040	2/3/2014 0:17	1/31/2014 13:21	3/31/2014 13:21	2/4/2014 9:04	05/06/15	IN140133	1 TDOP	160
INL	IN140041	2/3/2014 7:13	1/31/2014 13:40	3/31/2014 13:40	2/4/2014 9:31	05/06/15	IN140129	1 TDOP	160
INL	IN140041	2/3/2014 7:13	1/31/2014 13:35	3/31/2014 13:35	2/4/2014 9:37	05/06/15	IN139266	1 TDOP	160
INL	IN140040	2/3/2014 0:17	1/31/2014 13:13	3/31/2014 13:13	2/4/2014 12:22	05/06/15	IN139593	1 SWB	66.3
INL	IN140040	2/3/2014 0:17	1/31/2014 13:16	3/31/2014 13:16	2/4/2014 12:55	05/06/15	IN140144	1 TDOP	160
SRS	SR140004	2/1/2014 15:45	1/23/2014 10:40	3/23/2014 10:40	2/4/2014 13:51	05/06/15	SR139755	6-55G Drums	44.4
SRS	SR140004	2/1/2014 15:45	1/23/2014 10:40	3/23/2014 10:40	2/4/2014 13:52	05/06/15	SR139756	7-55G Drums	51.8
LANL	LA140020	2/3/2014 22:34	2/3/2014 10:00	4/3/2014 10:00	2/4/2014 16:38	05/06/15	LA139983	1 SWB	66.3
LANL	LA140020	2/3/2014 22:34	2/3/2014 10:05	4/3/2014 10:05	2/4/2014 16:44	05/06/15	LA139972	1 SWB	66.3
SRS	SR140004	2/1/2014 15:45	1/23/2014 10:30	3/23/2014 10:30	2/4/2014 17:50	05/06/15	SR139767	7-55G Drums	51.8
SRS	SR140004	2/1/2014 15:45	1/23/2014 10:35	3/23/2014 10:35	2/4/2014 17:51	05/06/15	SR139760	6-55G Drums	44.4
SRS	SR140004	2/1/2014 15:45	1/23/2014 10:30	3/23/2014 10:30	2/4/2014 17:51	05/06/15	SR139766	4-55G Drums	29.6
SRS	SR140004	2/1/2014 15:45	1/23/2014 10:35	3/23/2014 10:35	2/4/2014 17:52	05/06/15	SR139761	7-55G Drums	51.8
LANL	LA140020	2/3/2014 22:34	2/3/2014 10:15	4/3/2014 10:15	2/5/2014 8:34	05/06/15	LA139965	1 SWB	66.3
LANL	LA140020	2/3/2014 22:34	2/3/2014 10:15	4/3/2014 10:15	2/5/2014 8:36	05/06/15	LA139966	1 SWB	66.3
LANL	LA140021	2/4/2014 22:40	2/4/2014 9:35	4/4/2014 9:35	2/5/2014 9:12	05/06/15	LA139990	1 SWB	66.3
LANL	LA140021	2/4/2014 22:40	2/4/2014 9:35	4/4/2014 9:35	2/5/2014 9:13	05/06/15	LA139991	1 SWB	66.3
LANL	LA140021	2/4/2014 22:40	2/4/2014 9:25	4/4/2014 9:25	2/5/2014 9:32	05/06/15	LA140008	1 SWB	66.3
INL	IN140043	2/5/2014 0:30	2/1/2014 11:30	4/1/2014 11:30	2/11/2014 9:12	05/06/15	IN140096	1 SWB	66.3
INL	IN140043	2/5/2014 0:30	2/1/2014 11:30	4/1/2014 11:30	2/11/2014 9:13	05/06/15	IN140097	1 SWB	66.3

Site of Origin	Shipment	Receipt Date/Time	ICV Closure Date/Time	Venting Deadline	Venting Date	WHB Deadline	Assembly	Unemplaced Containers	Waste Volume[1] (ft^3)
LANL	LA140021	2/4/2014 22:40	2/4/2014 9:30	4/4/2014 9:30	2/11/2014 9:13	05/06/15	LA140002	1 SWB	66.3
INL	IN140044	2/6/2014 1:09	2/3/2014 13:55	4/3/2014 13:55	2/11/2014 10:00	05/06/15	IN139670	1 TDOP	160
INL	IN140044	2/6/2014 1:09	2/3/2014 13:52	4/3/2014 13:52	2/11/2014 10:43	05/06/15	IN139666	1 TDOP	160
INL	IN140045	2/6/2014 1:27	2/3/2014 13:44	4/3/2014 13:44	2/11/2014 11:00	05/06/15	IN140205	1 TDOP	160
INL	IN140045	2/6/2014 1:27	2/3/2014 13:40	4/3/2014 13:40	2/11/2014 11:02	05/06/15	IN139923	1 TDOP	160
SRS	SR314012	1/31/2014 16:10	1/27/2014 10:48	3/27/2014 10:48	3/26/2014 9:33	05/06/15	SR139785	1 SLB2	261
SRS	SR140005	2/5/2014 13:00	1/31/2014 12:34	3/31/2014 12:34	3/26/2014 13:19	05/06/15	SR139977	5-55G Drums	37
SRS	SR140005	2/5/2014 13:00	1/31/2014 12:34	3/31/2014 12:34	3/26/2014 13:20	05/06/15	SR139978	7-55G Drums	51.8
SRS	SR140005	2/5/2014 13:00	1/31/2014 12:29	3/31/2014 12:29	3/26/2014 17:04	05/06/15	SR139996	5-55G Drums	37
SRS	SR140005	2/5/2014 13:00	1/31/2014 12:29	3/31/2014 12:29	3/26/2014 17:05	05/06/15	SR139997	7-55G Drums	51.8
SRS	SR314013	2/1/2014 15:15	1/28/2014 10:40	3/28/2014 10:40	3/26/2014 18:30	05/06/15	SR139789	1 SLB2	261
SRS	SR140005	2/5/2014 13:00	1/31/2014 12:23	3/31/2014 12:23	3/26/2014 18:40	05/06/15	SR140015	5-55G Drums	37
SRS	SR140005	2/5/2014 13:00	1/31/2014 12:23	3/31/2014 12:23	3/26/2014 18:43	05/06/15	SR140016	7-55G Drums	51.8
INL	IN140044	2/6/2014 1:09	2/3/2014 13:49	4/3/2014 13:49	3/27/2014 10:31	05/06/15	IN136332	7-55G Drums	51.8
INL	IN140043	2/5/2014 0:30	2/1/2014 11:35	4/1/2014 11:35	3/27/2014 12:48	05/06/15	IN140078	1 SWB	66.3
INL	IN140043	2/5/2014 0:30	2/1/2014 11:35	4/1/2014 11:35	3/27/2014 12:50	05/06/15	IN140079	1 SWB	66.3
SRS	SR314014	2/4/2014 13:15	1/30/2014 10:30	3/30/2014 10:30	3/27/2014 14:04	05/06/15	SR139793	1 SLB2	261
INL	IN140043	2/5/2014 0:30	2/1/2014 11:40	4/1/2014 11:40	3/27/2014 14:51	05/06/15	IN140074	1 SWB	66.3
INL	IN140042	2/5/2014 0:34	2/1/2014 11:50	4/1/2014 11:50	3/27/2014 15:34	05/06/15	IN140090	1 SWB	66.3
INL	IN140042	2/5/2014 0:34	2/1/2014 11:50	4/1/2014 11:50	3/27/2014 15:37	05/06/15	IN140091	1 SWB	66.3
INL	IN140042	2/5/2014 0:34	2/1/2014 11:45	4/1/2014 11:45	3/27/2014 18:08	05/06/15	IN140070	1 SWB	66.3
INL	IN140042	2/5/2014 0:34	2/1/2014 11:55	4/1/2014 11:55	3/27/2014 18:30	05/06/15	IN140084	1 SWB	66.3
INL	IN140042	2/5/2014 0:34	2/1/2014 11:55	4/1/2014 11:55	3/27/2014 18:36	05/06/15	IN140085	1 SWB	66.3
INL	IN140045	2/6/2014 1:27	2/3/2014 13:48	4/3/2014 13:48	3/27/2014 19:24	05/06/15	IN140066	1 SWB	66.3
WIPP[2]	---	6/13/2014	---	---	---	05/06/15	WISD002[3]	1 SWB	66.3
WIPP[2]	---	6/13/2014	---	---	---	05/06/15	WISD003[3]	1 SWB	66.3
WIPP[2]	---	6/13/2014	---	---	---	05/06/15	WISD004[3]	1 SWB	66.3
WIPP[2]	---	6/13/2014	---	---	---	05/06/15	WISD005[3]	1 SWB	66.3
WIPP[2]	---	6/21/2014	---	---	---	05/06/15	WISD006[3]	1 SWB	66.3
WIPP[2]	---	6/21/2014	---	---	---	05/06/15	WISD007[3]	1 SWB	66.3
WIPP[2]	---	6/24/2014	---	---	---	05/06/15	WISD008[3]	1 SWB	66.3
WIPP[2]	---	6/24/2014	---	---	---	05/06/15	WISD009[3]	1 SWB	66.3
WIPP[2]	---	6/24/2014	---	---	---	05/06/15	WISD010[3]	1 SWB	66.3
WIPP[2]	---	6/24/2014	---	---	---	05/06/15	WISD011[3]	1 SWB	66.3
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Site of Origin	Shipment	Receipt Date/Time	ICV Closure Date/Time	Venting Deadline	Venting Date	WHB Deadline	Assembly	Unemplaced Containers	Waste Volume[1] (ft^3)

Notes:

[1]55G Drum=7.4 ft^3, SWB=66.3 ft^3, TDOP=160 ft^3, 85G Drum=11.4 ft^3, 100G Drum=13.4 ft^3, SLB2=261 ft^3 (Permit Part 3, Section 3.3.1)

[2]Waste generated at the WIPP facility as a result of decontamination activities and characterized as derived waste (Permit Part 2, Section 2.3.5)

[3]Derived-waste container number

INL – Idaho National Laboratory

LANL – Los Alamos National Laboratory

SRS – Savannah River Site

SWB – standard waste box

SLB – Standard large box

TDOP – ten-drum overpack

WHB – Waste Handling Building

Attachment 3
Environmental Monitoring

This attachment contains the following environmental monitoring data:

- VOC Monitoring
- Radiological Monitoring
  - Surface and Subsurface Water Sampling
  - Environmental Air Sampling

VOC Sampling Locations

Validated VOC Monitoring Data – Surface Sampling at the WIPP

analytical services by Carlsbad Environmental Monitoring & Research Center (CEMRC)

Lab	Sample Date	Analysis Date	Sample ID	Location	Compound	CAS	MRL (ppbv)*	Concentration (ppbv)
CEMRC	10/22/2014	10/24/2014	9116	WQSP-4	Methylene Chloride	75-09-2	0.4	U
CEMRC	10/22/2014	10/24/2014	9116	WQSP-4	Carbon Tetrachloride	56-23-5	0.4	U
CEMRC	10/22/2014	10/24/2014	9116	WQSP-4	1,1,1-Trichloroethane	71-55-6	0.4	U
CEMRC	10/22/2014	10/24/2014	9116	WQSP-4	Chlorobenzene	108-90-7	0.4	U
CEMRC	10/22/2014	10/24/2014	9116	WQSP-4	Toluene	108-88-3	0.4	0.26 J
CEMRC	10/22/2014	10/24/2014	9116	WQSP-4	Chloroform	67-66-3	0.4	U
CEMRC	10/22/2014	10/24/2014	9116	WQSP-4	1,1-Dichloroethylene	75-35-4	0.4	U
CEMRC	10/22/2014	10/24/2014	9116	WQSP-4	1,1,2,2-Tetrachloroethane	79-34-5	0.4	U
CEMRC	10/22/2014	10/24/2014	9116	WQSP-4	1,2-Dichloroethane	107-06-2	0.4	U
CEMRC	10/22/2014	10/24/2014	9116	WQSP-4	Trichloroethylene (1)	79-01-6	0.4	U
CEMRC	10/22/2014	10/24/2014	9116	WQSP-4	Acetone	67-64-1		1.18 NJ
CEMRC	10/22/2014	10/24/2014	9116	WQSP-4	Butane	106-97-8		4.64 NJ
CEMRC	10/22/2014	10/24/2014	9116	WQSP-4	Dichlorodifluoromethane	75-71-8		0.42 NJ
CEMRC	10/22/2014	10/24/2014	9116	WQSP-4	Isobutane	75-28-5		2.68 NJ
CEMRC	10/22/2014	10/24/2014	9116	WQSP-4	Pentane	109-66-0		1.74 NJ
CEMRC	10/22/2014	10/24/2014	9116	WQSP-4	Propane	74-98-6		3.86 NJ
CEMRC	10/22/2014	10/24/2014	9115	Building 489 North Air Intake	Methylene Chloride	75-09-2	0.4	U
CEMRC	10/22/2014	10/24/2014	9115	Building 489 North Air Intake	Carbon Tetrachloride	56-23-5	0.4	0.52
CEMRC	10/22/2014	10/24/2014	9115	Building 489 North Air Intake	1,1,1-Trichloroethane	71-55-6	0.4	U
CEMRC	10/22/2014	10/24/2014	9115	Building 489 North Air Intake	Chlorobenzene	108-90-7	0.4	U
CEMRC	10/22/2014	10/24/2014	9115	Building 489 North Air Intake	Toluene	108-88-3	0.4	0.26 J
CEMRC	10/22/2014	10/24/2014	9115	Building 489 North Air Intake	Chloroform	67-66-3	0.4	U

Qualifiers:

J = Estimated value; below laboratory's method reporting limit (MRL), but above method detection limit (MDL).
U = Compound not detected above the MDL.
NJ = Presumptive evidence of the presence of the compound at an estimated quantity; only used for tentatively identified compounds (TICs).

Notes:

(1) Starting with samples collected on or after May 12, 2014, trichloroethylene (TCE) is a target analyte in compliance with Administrative Order dated 5/12/2014. For samples collected before 5/12/2014, TCE is an additional requested analyte; not a Permit-prescribed target analyte but included in the laboratory quantitative analysis.

* A value will not appear in the MRL column for TICs.

Validated VOC Monitoring Data – Surface Sampling at the WIPP

analytical services by Carlsbad Environmental Monitoring & Research Center (CEMRC)

Lab	Sample Date	Analysis Date	Sample ID	Location	Compound	CAS	MRL (ppbv)*	Concentration (ppbv)
CEMRC	10/22/2014	10/24/2014	9115	Building 489 North Air Intake	1,1-Dichloroethylene	75-35-4	0.4	U
CEMRC	10/22/2014	10/24/2014	9115	Building 489 North Air Intake	1,1,2,2-Tetrachloroethane	79-34-5	0.4	U
CEMRC	10/22/2014	10/24/2014	9115	Building 489 North Air Intake	1,2-Dichloroethane	107-06-2	0.4	U
CEMRC	10/22/2014	10/24/2014	9115	Building 489 North Air Intake	Trichloroethylene (1)	79-01-6	0.4	0.18 J
CEMRC	10/22/2014	10/24/2014	9115	Building 489 North Air Intake	Acetone	67-64-1		0.82 NJ
CEMRC	10/22/2014	10/24/2014	9115	Building 489 North Air Intake	Butane	106-97-8		4.42 NJ
CEMRC	10/22/2014	10/24/2014	9115	Building 489 North Air Intake	Isobutane	75-28-5		2.58 NJ
CEMRC	10/22/2014	10/24/2014	9115	Building 489 North Air Intake	Pentane	109-66-0		1.66 NJ
CEMRC	10/22/2014	10/24/2014	9115	Building 489 North Air Intake	Propane	74-98-6		3.48 NJ
CEMRC	10/22/2014	10/24/2014	9113	Building 489 Air Intake	Methylene Chloride	75-09-2	0.4	U
CEMRC	10/22/2014	10/24/2014	9113	Building 489 Air Intake	Carbon Tetrachloride	56-23-5	0.4	0.2 J
CEMRC	10/22/2014	10/24/2014	9113	Building 489 Air Intake	1,1,1-Trichloroethane	71-55-6	0.4	U
CEMRC	10/22/2014	10/24/2014	9113	Building 489 Air Intake	Chlorobenzene	108-90-7	0.4	U
CEMRC	10/22/2014	10/24/2014	9113	Building 489 Air Intake	Toluene	108-88-3	0.4	0.3 J
CEMRC	10/22/2014	10/24/2014	9113	Building 489 Air Intake	Chloroform	67-66-3	0.4	U
CEMRC	10/22/2014	10/24/2014	9113	Building 489 Air Intake	1,1-Dichloroethylene	75-35-4	0.4	U
CEMRC	10/22/2014	10/24/2014	9113	Building 489 Air Intake	1,1,2,2-Tetrachloroethane	79-34-5	0.4	U
CEMRC	10/22/2014	10/24/2014	9113	Building 489 Air Intake	1,2-Dichloroethane	107-06-2	0.4	U
CEMRC	10/22/2014	10/24/2014	9113	Building 489 Air Intake	Trichloroethylene (1)	79-01-6	0.4	U
CEMRC	10/22/2014	10/24/2014	9113	Building 489 Air Intake	Acetone	67-64-1		0.76 NJ
CEMRC	10/22/2014	10/24/2014	9113	Building 489 Air Intake	Butane	106-97-8		4.48 NJ
CEMRC	10/22/2014	10/24/2014	9113	Building 489 Air Intake	Butane, 2-methyl-	78-78-4		1.94 NJ
CEMRC	10/22/2014	10/24/2014	9113	Building 489 Air Intake	Isobutane	75-28-5		2.54 NJ

Qualifiers:

J = Estimated value; below laboratory's method reporting limit (MRL), but above method detection limit (MDL).
U = Compound not detected above the MDL.
NJ = Presumptive evidence of the presence of the compound at an estimated quantity; only used for tentatively identified compounds (TICs).

Notes:

(1) Starting with samples collected on or after May 12, 2014, trichloroethylene (TCE) is a target analyte in compliance with Administrative Order dated 5/12/2014. For samples collected before 5/12/2014, TCE is an additional requested analyte; not a Permit-prescribed target analyte but included in the laboratory quantitative analysis.

* A value will not appear in the MRL column for TICs.

Validated VOC Monitoring Data – Surface Sampling at the WIPP

analytical services by Carlsbad Environmental Monitoring & Research Center (CEMRC)

Lab	Sample Date	Analysis Date	Sample ID	Location	Compound	CAS	MRL (ppbv)*	Concentration (ppbv)
CEMRC	10/22/2014	10/24/2014	9113	Building 489 Air Intake	Pentane	109-66-0		1.72 NJ
CEMRC	10/22/2014	10/24/2014	9113	Building 489 Air Intake	Pentane, 2-methyl-	107-83-5		0.46 NJ
CEMRC	10/22/2014	10/24/2014	9113	Building 489 Air Intake	Propane	74-98-6		3.72 NJ
CEMRC	10/23/2014	10/24/2014	9119	WQSP-4	Methylene Chloride	75-09-2	0.4	U
CEMRC	10/23/2014	10/24/2014	9119	WQSP-4	Carbon Tetrachloride	56-23-5	0.4	U
CEMRC	10/23/2014	10/24/2014	9119	WQSP-4	1,1,1-Trichloroethane	71-55-6	0.4	U
CEMRC	10/23/2014	10/24/2014	9119	WQSP-4	Chlorobenzene	108-90-7	0.4	U
CEMRC	10/23/2014	10/24/2014	9119	WQSP-4	Toluene	108-88-3	0.4	0.84
CEMRC	10/23/2014	10/24/2014	9119	WQSP-4	Chloroform	67-66-3	0.4	U
CEMRC	10/23/2014	10/24/2014	9119	WQSP-4	1,1-Dichloroethylene	75-35-4	0.4	U
CEMRC	10/23/2014	10/24/2014	9119	WQSP-4	1,1,2,2-Tetrachloroethane	79-34-5	0.4	U
CEMRC	10/23/2014	10/24/2014	9119	WQSP-4	1,2-Dichloroethane	107-06-2	0.4	U
CEMRC	10/23/2014	10/24/2014	9119	WQSP-4	Trichloroethylene (1)	79-01-6	0.4	U
CEMRC	10/23/2014	10/24/2014	9119	WQSP-4	Acetone	67-64-1		0.68 NJ
CEMRC	10/23/2014	10/24/2014	9119	WQSP-4	Benzene	71-43-2		0.44 NJ
CEMRC	10/23/2014	10/24/2014	9119	WQSP-4	Butane	106-97-8		7.12 NJ
CEMRC	10/23/2014	10/24/2014	9119	WQSP-4	Butane, 2-methyl-	78-78-4		3.44 NJ
CEMRC	10/23/2014	10/24/2014	9119	WQSP-4	Cyclohexane, methyl-	108-87-2		1.24 NJ
CEMRC	10/23/2014	10/24/2014	9119	WQSP-4	Cyclopentane, methyl-	96-37-7		0.9 NJ
CEMRC	10/23/2014	10/24/2014	9119	WQSP-4	Isobutane	75-28-5		3.76 NJ
CEMRC	10/23/2014	10/24/2014	9119	WQSP-4	Nonanal	124-19-6		0.54 NJ
CEMRC	10/23/2014	10/24/2014	9119	WQSP-4	Pentane	109-66-0		3.26 NJ
CEMRC	10/23/2014	10/24/2014	9119	WQSP-4	Pentane, 2-methyl-	107-83-5		1.08 NJ

Qualifiers:

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Notes:

(1) Starting with samples collected on or after May 12, 2014, trichloroethylene (TCE) is a target analyte in compliance with Administrative Order dated 5/12/2014. For samples collected before 5/12/2014, TCE is an additional requested analyte; not a Permit-prescribed target analyte but included in the laboratory quantitative analysis.

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* A value will not appear in the MRL column for TICs.

Validated VOC Monitoring Data – Surface Sampling at the WIPP

analytical services by Carlsbad Environmental Monitoring & Research Center (CEMRC)

Lab	Sample Date	Analysis Date	Sample ID	Location	Compound	CAS	MRL (ppbv)*	Concentration (ppbv)
CEMRC	10/23/2014	10/24/2014	9119	WQSP-4	Propane	74-98-6		5.6 NJ
CEMRC	10/23/2014	10/24/2014	9118	Building 489 North Air Intake	Methylene Chloride	75-09-2	0.4	U
CEMRC	10/23/2014	10/24/2014	9118	Building 489 North Air Intake	Carbon Tetrachloride	56-23-5	0.4	0.26 J
CEMRC	10/23/2014	10/24/2014	9118	Building 489 North Air Intake	1,1,1-Trichloroethane	71-55-6	0.4	U
CEMRC	10/23/2014	10/24/2014	9118	Building 489 North Air Intake	Chlorobenzene	108-90-7	0.4	U
CEMRC	10/23/2014	10/24/2014	9118	Building 489 North Air Intake	Toluene	108-88-3	0.4	0.8
CEMRC	10/23/2014	10/24/2014	9118	Building 489 North Air Intake	Chloroform	67-66-3	0.4	U
CEMRC	10/23/2014	10/24/2014	9118	Building 489 North Air Intake	1,1-Dichloroethylene	75-35-4	0.4	U
CEMRC	10/23/2014	10/24/2014	9118	Building 489 North Air Intake	1,1,2,2-Tetrachloroethane	79-34-5	0.4	U
CEMRC	10/23/2014	10/24/2014	9118	Building 489 North Air Intake	1,2-Dichloroethane	107-06-2	0.4	U
CEMRC	10/23/2014	10/24/2014	9118	Building 489 North Air Intake	Trichloroethylene (1)	79-01-6	0.4	U
CEMRC	10/23/2014	10/24/2014	9118	Building 489 North Air Intake	Acetone	67-64-1		0.58 NJ
CEMRC	10/23/2014	10/24/2014	9118	Building 489 North Air Intake	Butane	106-97-8		6.94 NJ
CEMRC	10/23/2014	10/24/2014	9118	Building 489 North Air Intake	Cyclohexane, methyl-	108-87-2		1.1 NJ
CEMRC	10/23/2014	10/24/2014	9118	Building 489 North Air Intake	Cyclopentane, methyl-	96-37-7		0.64 NJ
CEMRC	10/23/2014	10/24/2014	9118	Building 489 North Air Intake	Isobutane	75-28-5		3.66 NJ
CEMRC	10/23/2014	10/24/2014	9118	Building 489 North Air Intake	Pentane	109-66-0		3.08 NJ
CEMRC	10/23/2014	10/24/2014	9118	Building 489 North Air Intake	Pentane, 2-methyl-	107-83-5		1 NJ
CEMRC	10/23/2014	10/24/2014	9118	Building 489 North Air Intake	Propane	74-98-6		5.54 NJ
CEMRC	10/23/2014	10/24/2014	9117	Building 489 Air Intake	Methylene Chloride	75-09-2	0.4	U
CEMRC	10/23/2014	10/24/2014	9117	Building 489 Air Intake	Carbon Tetrachloride	56-23-5	0.4	U
CEMRC	10/23/2014	10/24/2014	9117	Building 489 Air Intake	1,1,1-Trichloroethane	71-55-6	0.4	U
CEMRC	10/23/2014	10/24/2014	9117	Building 489 Air Intake	Chlorobenzene	108-90-7	0.4	U

Qualifiers:

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NJ = Presumptive evidence of the presence of the compound at an estimated quantity; only used for tentatively identified compounds (TICs).

Notes:

(1) Starting with samples collected on or after May 12, 2014, trichloroethylene (TCE) is a target analyte in compliance with Administrative Order dated 5/12/2014. For samples collected before 5/12/2014, TCE is an additional requested analyte; not a Permit-prescribed target analyte but included in the laboratory quantitative analysis.

* A value will not appear in the MRL column for TICs.

Validated VOC Monitoring Data – Surface Sampling at the WIPP

analytical services by Carlsbad Environmental Monitoring & Research Center (CEMRC)

Lab	Sample Date	Analysis Date	Sample ID	Location	Compound	CAS	MRL (ppbv)*	Concentration (ppbv)
CEMRC	10/23/2014	10/24/2014	9117	Building 489 Air Intake	Toluene	108-88-3	0.4	0.74
CEMRC	10/23/2014	10/24/2014	9117	Building 489 Air Intake	Chloroform	67-66-3	0.4	U
CEMRC	10/23/2014	10/24/2014	9117	Building 489 Air Intake	1,1-Dichloroethylene	75-35-4	0.4	U
CEMRC	10/23/2014	10/24/2014	9117	Building 489 Air Intake	1,1,2,2-Tetrachloroethane	79-34-5	0.4	U
CEMRC	10/23/2014	10/24/2014	9117	Building 489 Air Intake	1,2-Dichloroethane	107-06-2	0.4	U
CEMRC	10/23/2014	10/24/2014	9117	Building 489 Air Intake	Trichloroethylene (1)	79-01-6	0.4	U
CEMRC	10/23/2014	10/24/2014	9117	Building 489 Air Intake	Acetone	67-64-1		0.66 NJ
CEMRC	10/23/2014	10/24/2014	9117	Building 489 Air Intake	Butane	106-97-8		7 NJ
CEMRC	10/23/2014	10/24/2014	9117	Building 489 Air Intake	Cyclohexane, methyl-	108-87-2		1.12 NJ
CEMRC	10/23/2014	10/24/2014	9117	Building 489 Air Intake	Cyclopentane, methyl-	96-37-7		0.6 NJ
CEMRC	10/23/2014	10/24/2014	9117	Building 489 Air Intake	Isobutane	75-28-5		3.64 NJ
CEMRC	10/23/2014	10/24/2014	9117	Building 489 Air Intake	Pentane	109-66-0		3.08 NJ
CEMRC	10/23/2014	10/24/2014	9117	Building 489 Air Intake	Pentane, 2-methyl-	107-83-5		1 NJ
CEMRC	10/23/2014	10/24/2014	9117	Building 489 Air Intake	Propane	74-98-6		5.58 NJ
CEMRC	10/29/2014	11/3/2014	9122	WQSP-4	Methylene Chloride	75-09-2	0.4	U
CEMRC	10/29/2014	11/3/2014	9122	WQSP-4	Carbon Tetrachloride	56-23-5	0.4	U
CEMRC	10/29/2014	11/3/2014	9122	WQSP-4	1,1,1-Trichloroethane	71-55-6	0.4	U
CEMRC	10/29/2014	11/3/2014	9122	WQSP-4	Chlorobenzene	108-90-7	0.4	U
CEMRC	10/29/2014	11/3/2014	9122	WQSP-4	Toluene	108-88-3	0.4	0.46
CEMRC	10/29/2014	11/3/2014	9122	WQSP-4	Chloroform	67-66-3	0.4	U
CEMRC	10/29/2014	11/3/2014	9122	WQSP-4	1,1-Dichloroethylene	75-35-4	0.4	U
CEMRC	10/29/2014	11/3/2014	9122	WQSP-4	1,1,2,2-Tetrachloroethane	79-34-5	0.4	U
CEMRC	10/29/2014	11/3/2014	9122	WQSP-4	1,2-Dichloroethane	107-06-2	0.4	U

Qualifiers:

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NJ = Presumptive evidence of the presence of the compound at an estimated quantity; only used for tentatively identified compounds (TICs).

Notes:

(1) Starting with samples collected on or after May 12, 2014, trichloroethylene (TCE) is a target analyte in compliance with Administrative Order dated 5/12/2014. For samples collected before 5/12/2014, TCE is an additional requested analyte; not a Permit-prescribed target analyte but included in the laboratory quantitative analysis.

* A value will not appear in the MRL column for TICs.

Validated VOC Monitoring Data – Surface Sampling at the WIPP

analytical services by Carlsbad Environmental Monitoring & Research Center (CEMRC)

Lab	Sample Date	Analysis Date	Sample ID	Location	Compound	CAS	MRL (ppbv)*	Concentration (ppbv)
CEMRC	10/29/2014	11/3/2014	9122	WQSP-4	Trichloroethylene (1)	79-01-6	0.4	U
CEMRC	10/29/2014	11/3/2014	9122	WQSP-4	Acetone	67-64-1		0.64 NJ
CEMRC	10/29/2014	11/3/2014	9122	WQSP-4	Butane	106-97-8		8.5 NJ
CEMRC	10/29/2014	11/3/2014	9122	WQSP-4	Cyclopentane, methyl-	96-37-7		0.58 NJ
CEMRC	10/29/2014	11/3/2014	9122	WQSP-4	Isobutane	75-28-5		4.4 NJ
CEMRC	10/29/2014	11/3/2014	9122	WQSP-4	Pentane	109-66-0		3.48 NJ
CEMRC	10/29/2014	11/3/2014	9122	WQSP-4	Pentane, 2-methyl-	107-83-5		0.92 NJ
CEMRC	10/29/2014	11/3/2014	9122	WQSP-4	Propane	74-98-6		6.72 NJ
CEMRC	10/29/2014	11/3/2014	9121	Building 489 North Air Intake	Methylene Chloride	75-09-2	0.4	U
CEMRC	10/29/2014	11/3/2014	9121	Building 489 North Air Intake	Carbon Tetrachloride	56-23-5	0.4	0.22 J
CEMRC	10/29/2014	11/3/2014	9121	Building 489 North Air Intake	1,1,1-Trichloroethane	71-55-6	0.4	U
CEMRC	10/29/2014	11/3/2014	9121	Building 489 North Air Intake	Chlorobenzene	108-90-7	0.4	U
CEMRC	10/29/2014	11/3/2014	9121	Building 489 North Air Intake	Toluene	108-88-3	0.4	0.44
CEMRC	10/29/2014	11/3/2014	9121	Building 489 North Air Intake	Chloroform	67-66-3	0.4	U
CEMRC	10/29/2014	11/3/2014	9121	Building 489 North Air Intake	1,1-Dichloroethylene	75-35-4	0.4	U
CEMRC	10/29/2014	11/3/2014	9121	Building 489 North Air Intake	1,1,2,2-Tetrachloroethane	79-34-5	0.4	U
CEMRC	10/29/2014	11/3/2014	9121	Building 489 North Air Intake	1,2-Dichloroethane	107-06-2	0.4	U
CEMRC	10/29/2014	11/3/2014	9121	Building 489 North Air Intake	Trichloroethylene (1)	79-01-6	0.4	U
CEMRC	10/29/2014	11/3/2014	9121	Building 489 North Air Intake	Acetone	67-64-1		0.4 NJ
CEMRC	10/29/2014	11/3/2014	9121	Building 489 North Air Intake	Butane	106-97-8		9.18 NJ
CEMRC	10/29/2014	11/3/2014	9121	Building 489 North Air Intake	Butane, 2-methyl-	78-78-4		3.9 NJ
CEMRC	10/29/2014	11/3/2014	9121	Building 489 North Air Intake	Cyclohexane, methyl-	108-87-2		0.56 NJ
CEMRC	10/29/2014	11/3/2014	9121	Building 489 North Air Intake	Cyclopentane, methyl-	96-37-7		0.6 NJ

Qualifiers:

J = Estimated value; below laboratory's method reporting limit (MRL), but above method detection limit (MDL).
U = Compound not detected above the MDL.
NJ = Presumptive evidence of the presence of the compound at an estimated quantity; only used for tentatively identified compounds (TICs).

Notes:

(1) Starting with samples collected on or after May 12, 2014, trichloroethylene (TCE) is a target analyte in compliance with Administrative Order dated 5/12/2014. For samples collected before 5/12/2014, TCE is an additional requested analyte; not a Permit-prescribed target analyte but included in the laboratory quantitative analysis.

* A value will not appear in the MRL column for TICs.

Validated VOC Monitoring Data – Surface Sampling at the WIPP

analytical services by Carlsbad Environmental Monitoring & Research Center (CEMRC)

Lab	Sample Date	Analysis Date	Sample ID	Location	Compound	CAS	MRL (ppbv)*	Concentration (ppbv)
CEMRC	10/29/2014	11/3/2014	9121	Building 489 North Air Intake	Isobutane	75-28-5		4.8 NJ
CEMRC	10/29/2014	11/3/2014	9121	Building 489 North Air Intake	Pentane	109-66-0		3.62 NJ
CEMRC	10/29/2014	11/3/2014	9121	Building 489 North Air Intake	Pentane, 2-methyl-	107-83-5		0.94 NJ
CEMRC	10/29/2014	11/3/2014	9121	Building 489 North Air Intake	Propane	74-98-6		7.58 NJ
CEMRC	10/29/2014	11/3/2014	9120	Building 489 Air Intake	Methylene Chloride	75-09-2	0.4	U
CEMRC	10/29/2014	11/3/2014	9120	Building 489 Air Intake	Carbon Tetrachloride	56-23-5	0.4	0.42
CEMRC	10/29/2014	11/3/2014	9120	Building 489 Air Intake	1,1,1-Trichloroethane	71-55-6	0.4	U
CEMRC	10/29/2014	11/3/2014	9120	Building 489 Air Intake	Chlorobenzene	108-90-7	0.4	U
CEMRC	10/29/2014	11/3/2014	9120	Building 489 Air Intake	Toluene	108-88-3	0.4	0.46
CEMRC	10/29/2014	11/3/2014	9120	Building 489 Air Intake	Chloroform	67-66-3	0.4	U
CEMRC	10/29/2014	11/3/2014	9120	Building 489 Air Intake	1,1-Dichloroethylene	75-35-4	0.4	U
CEMRC	10/29/2014	11/3/2014	9120	Building 489 Air Intake	1,1,2,2-Tetrachloroethane	79-34-5	0.4	U
CEMRC	10/29/2014	11/3/2014	9120	Building 489 Air Intake	1,2-Dichloroethane	107-06-2	0.4	U
CEMRC	10/29/2014	11/3/2014	9120	Building 489 Air Intake	Trichloroethylene (1)	79-01-6	0.4	0.12 J
CEMRC	10/29/2014	11/3/2014	9120	Building 489 Air Intake	Butane	106-97-8		9.04 NJ
CEMRC	10/29/2014	11/3/2014	9120	Building 489 Air Intake	Butane, 2-methyl-	78-78-4		3.84 NJ
CEMRC	10/29/2014	11/3/2014	9120	Building 489 Air Intake	Cyclohexane, methyl-	108-87-2		0.58 NJ
CEMRC	10/29/2014	11/3/2014	9120	Building 489 Air Intake	Cyclopentane, methyl-	96-37-7		0.76 NJ
CEMRC	10/29/2014	11/3/2014	9120	Building 489 Air Intake	Isobutane	75-28-5		4.8 NJ
CEMRC	10/29/2014	11/3/2014	9120	Building 489 Air Intake	Pentane	109-66-0		3.58 NJ
CEMRC	10/29/2014	11/3/2014	9120	Building 489 Air Intake	Pentane, 2-methyl-	107-83-5		0.96 NJ
CEMRC	10/29/2014	11/3/2014	9120	Building 489 Air Intake	Propane	74-98-6		7.48 NJ

Qualifiers:

J = Estimated value; below laboratory's method reporting limit (MRL), but above method detection limit (MDL).
U = Compound not detected above the MDL.
NJ = Presumptive evidence of the presence of the compound at an estimated quantity; only used for tentatively identified compounds (TICs).

Notes:

(1) Starting with samples collected on or after May 12, 2014, trichloroethylene (TCE) is a target analyte in compliance with Administrative Order dated 5/12/2014. For samples collected before 5/12/2014, TCE is an additional requested analyte; not a Permit-prescribed target analyte but included in the laboratory quantitative analysis.

* A value will not appear in the MRL column for TICs.

Validated VOC Monitoring Data – Surface Sampling at the WIPP

analytical services by Carlsbad Environmental Monitoring & Research Center (CEMRC)

Lab	Sample Date	Analysis Date	Sample ID	Location	Compound	CAS	MRL (ppbv)*	Concentration (ppbv)
CEMRC	10/30/2014	11/3/2014	9125	WQSP-4	Methylene Chloride	75-09-2	0.4	U
CEMRC	10/30/2014	11/3/2014	9125	WQSP-4	Carbon Tetrachloride	56-23-5	0.4	U
CEMRC	10/30/2014	11/3/2014	9125	WQSP-4	1,1,1-Trichloroethane	71-55-6	0.4	U
CEMRC	10/30/2014	11/3/2014	9125	WQSP-4	Chlorobenzene	108-90-7	0.4	U
CEMRC	10/30/2014	11/3/2014	9125	WQSP-4	Toluene	108-88-3	0.4	0.56
CEMRC	10/30/2014	11/3/2014	9125	WQSP-4	Chloroform	67-66-3	0.4	U
CEMRC	10/30/2014	11/3/2014	9125	WQSP-4	1,1-Dichloroethylene	75-35-4	0.4	U
CEMRC	10/30/2014	11/3/2014	9125	WQSP-4	1,1,2,2-Tetrachloroethane	79-34-5	0.4	U
CEMRC	10/30/2014	11/3/2014	9125	WQSP-4	1,2-Dichloroethane	107-06-2	0.4	U
CEMRC	10/30/2014	11/3/2014	9125	WQSP-4	Trichloroethylene (1)	79-01-6	0.4	U
CEMRC	10/30/2014	11/3/2014	9125	WQSP-4	Acetone	67-64-1		0.76 NJ
CEMRC	10/30/2014	11/3/2014	9125	WQSP-4	Butane	106-97-8		10.44 NJ
CEMRC	10/30/2014	11/3/2014	9125	WQSP-4	Butane, 2-methyl-	78-78-4		4.36 NJ
CEMRC	10/30/2014	11/3/2014	9125	WQSP-4	Cyclohexane, methyl-	108-87-2		0.86 NJ
CEMRC	10/30/2014	11/3/2014	9125	WQSP-4	Cyclopentane, methyl-	96-37-7		0.9 NJ
CEMRC	10/30/2014	11/3/2014	9125	WQSP-4	Isobutane	75-28-5		5.44 NJ
CEMRC	10/30/2014	11/3/2014	9125	WQSP-4	Nonanal	124-19-6		0.76 NJ
CEMRC	10/30/2014	11/3/2014	9125	WQSP-4	Pentane	109-66-0		4.1 NJ
CEMRC	10/30/2014	11/3/2014	9125	WQSP-4	Pentane, 2-methyl-	107-83-5		1.2 NJ
CEMRC	10/30/2014	11/3/2014	9125	WQSP-4	Propane	74-98-6		8.78 NJ
CEMRC	10/30/2014	11/3/2014	9124	Building 489 North Air Intake	Methylene Chloride	75-09-2	0.4	U
CEMRC	10/30/2014	11/3/2014	9124	Building 489 North Air Intake	Carbon Tetrachloride	56-23-5	0.4	0.36 J
CEMRC	10/30/2014	11/3/2014	9124	Building 489 North Air Intake	1,1,1-Trichloroethane	71-55-6	0.4	U

Qualifiers:

J = Estimated value; below laboratory's method reporting limit (MRL), but above method detection limit (MDL).
U = Compound not detected above the MDL.
NJ = Presumptive evidence of the presence of the compound at an estimated quantity; only used for tentatively identified compounds (TICs).

Notes:

(1) Starting with samples collected on or after May 12, 2014, trichloroethylene (TCE) is a target analyte in compliance with Administrative Order dated 5/12/2014. For samples collected before 5/12/2014, TCE is an additional requested analyte; not a Permit-prescribed target analyte but included in the laboratory quantitative analysis.

* A value will not appear in the MRL column for TICs.

Validated VOC Monitoring Data – Surface Sampling at the WIPP

analytical services by Carlsbad Environmental Monitoring & Research Center (CEMRC)

Lab	Sample Date	Analysis Date	Sample ID	Location	Compound	CAS	MRL (ppbv)*	Concentration (ppbv)
CEMRC	10/30/2014	11/3/2014	9124	Building 489 North Air Intake	Chlorobenzene	108-90-7	0.4	U
CEMRC	10/30/2014	11/3/2014	9124	Building 489 North Air Intake	Toluene	108-88-3	0.4	0.54
CEMRC	10/30/2014	11/3/2014	9124	Building 489 North Air Intake	Chloroform	67-66-3	0.4	U
CEMRC	10/30/2014	11/3/2014	9124	Building 489 North Air Intake	1,1-Dichloroethylene	75-35-4	0.4	U
CEMRC	10/30/2014	11/3/2014	9124	Building 489 North Air Intake	1,1,2,2-Tetrachloroethane	79-34-5	0.4	U
CEMRC	10/30/2014	11/3/2014	9124	Building 489 North Air Intake	1,2-Dichloroethane	107-06-2	0.4	U
CEMRC	10/30/2014	11/3/2014	9124	Building 489 North Air Intake	Trichloroethylene (1)	79-01-6	0.4	U
CEMRC	10/30/2014	11/3/2014	9124	Building 489 North Air Intake	Acetone	67-64-1		0.7 NJ
CEMRC	10/30/2014	11/3/2014	9124	Building 489 North Air Intake	Butane	106-97-8		10.38 NJ
CEMRC	10/30/2014	11/3/2014	9124	Building 489 North Air Intake	Butane, 2-methyl-	78-78-4		4.4 NJ
CEMRC	10/30/2014	11/3/2014	9124	Building 489 North Air Intake	Cyclohexane, methyl-	108-87-2		0.82 NJ
CEMRC	10/30/2014	11/3/2014	9124	Building 489 North Air Intake	Cyclopentane, methyl-	96-37-7		0.9 NJ
CEMRC	10/30/2014	11/3/2014	9124	Building 489 North Air Intake	Isobutane	75-28-5		5.54 NJ
CEMRC	10/30/2014	11/3/2014	9124	Building 489 North Air Intake	Pentane	109-66-0		4.08 NJ
CEMRC	10/30/2014	11/3/2014	9124	Building 489 North Air Intake	Pentane, 2-methyl-	107-83-5		1.14 NJ
CEMRC	10/30/2014	11/3/2014	9124	Building 489 North Air Intake	Propane	74-98-6		8.86 NJ
CEMRC	10/30/2014	11/3/2014	9123	Building 489 Air Intake	Methylene Chloride	75-09-2	0.4	U
CEMRC	10/30/2014	11/3/2014	9123	Building 489 Air Intake	Carbon Tetrachloride	56-23-5	0.4	0.28 J
CEMRC	10/30/2014	11/3/2014	9123	Building 489 Air Intake	1,1,1-Trichloroethane	71-55-6	0.4	U
CEMRC	10/30/2014	11/3/2014	9123	Building 489 Air Intake	Chlorobenzene	108-90-7	0.4	U
CEMRC	10/30/2014	11/3/2014	9123	Building 489 Air Intake	Toluene	108-88-3	0.4	0.64
CEMRC	10/30/2014	11/3/2014	9123	Building 489 Air Intake	Chloroform	67-66-3	0.4	U
CEMRC	10/30/2014	11/3/2014	9123	Building 489 Air Intake	1,1-Dichloroethylene	75-35-4	0.4	U

Qualifiers:

J = Estimated value; below laboratory's method reporting limit (MRL), but above method detection limit (MDL).
U = Compound not detected above the MDL.
NJ = Presumptive evidence of the presence of the compound at an estimated quantity; only used for tentatively identified compounds (TICs).

Notes:

(1) Starting with samples collected on or after May 12, 2014, trichloroethylene (TCE) is a target analyte in compliance with Administrative Order dated 5/12/2014. For samples collected before 5/12/2014, TCE is an additional requested analyte; not a Permit-prescribed target analyte but included in the laboratory quantitative analysis.

* A value will not appear in the MRL column for TICs.

Validated VOC Monitoring Data – Surface Sampling at the WIPP

analytical services by Carlsbad Environmental Monitoring & Research Center (CEMRC)

Lab	Sample Date	Analysis Date	Sample ID	Location	Compound	CAS	MRL (ppbv)*	Concentration (ppbv)
CEMRC	10/30/2014	11/3/2014	9123	Building 489 Air Intake	1,1,2,2-Tetrachloroethane	79-34-5	0.4	U
CEMRC	10/30/2014	11/3/2014	9123	Building 489 Air Intake	1,2-Dichloroethane	107-06-2	0.4	U
CEMRC	10/30/2014	11/3/2014	9123	Building 489 Air Intake	Trichloroethylene (1)	79-01-6	0.4	U
CEMRC	10/30/2014	11/3/2014	9123	Building 489 Air Intake	Acetone	67-64-1		0.84 NJ
CEMRC	10/30/2014	11/3/2014	9123	Building 489 Air Intake	Butane	106-97-8		10.92 NJ
CEMRC	10/30/2014	11/3/2014	9123	Building 489 Air Intake	Butane, 2-methyl-	78-78-4		4.5 NJ
CEMRC	10/30/2014	11/3/2014	9123	Building 489 Air Intake	Cyclohexane, methyl-	108-87-2		0.84 NJ
CEMRC	10/30/2014	11/3/2014	9123	Building 489 Air Intake	Isobutane	75-28-5		5.76 NJ
CEMRC	10/30/2014	11/3/2014	9123	Building 489 Air Intake	Pentane	109-66-0		4.34 NJ
CEMRC	10/30/2014	11/3/2014	9123	Building 489 Air Intake	Pentane, 2-methyl-	107-83-5		1.18 NJ
CEMRC	10/30/2014	11/3/2014	9123	Building 489 Air Intake	Propane	74-98-6		9.2 NJ

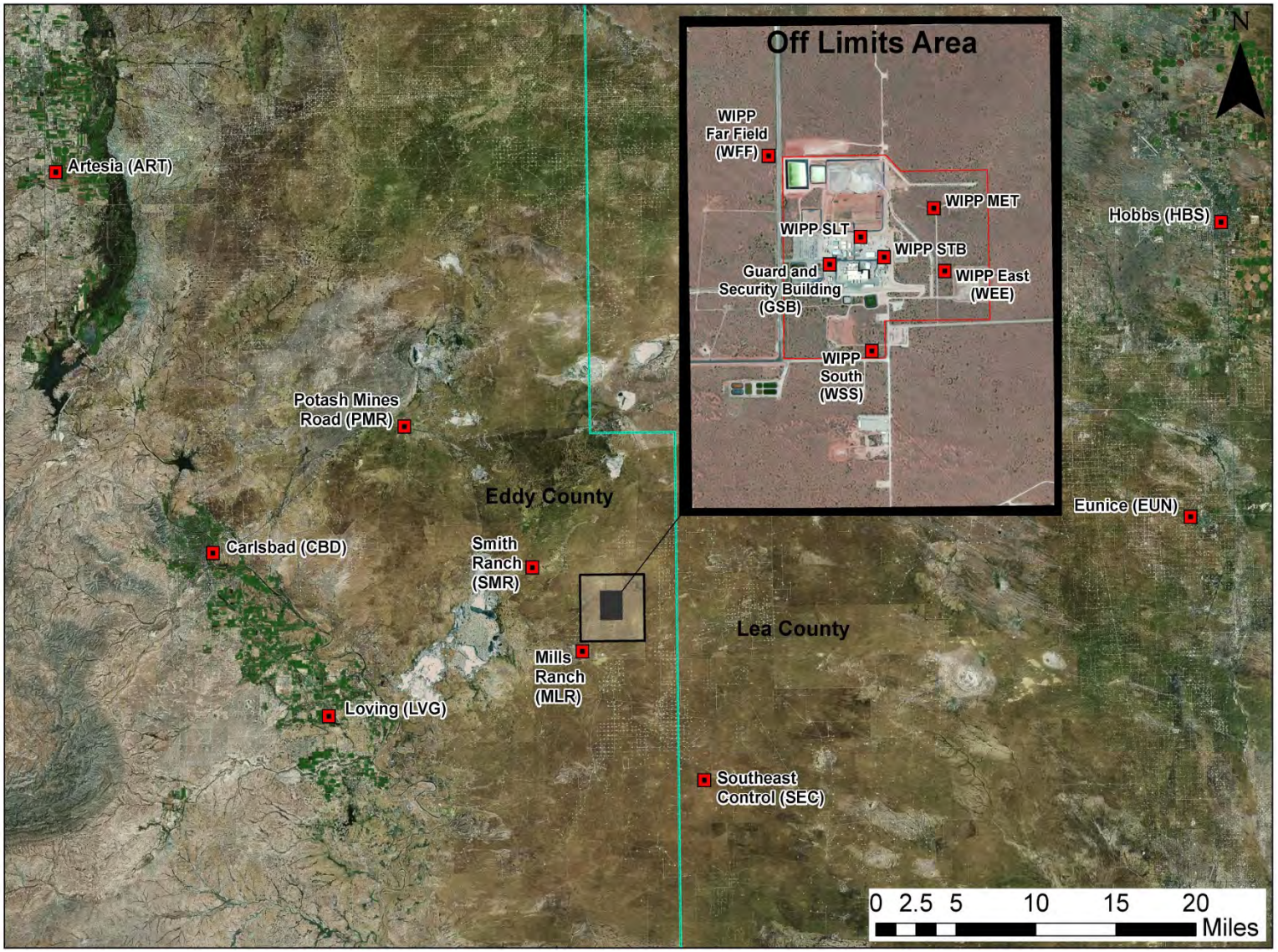
Qualifiers:

J = Estimated value; below laboratory's method reporting limit (MRL), but above method detection limit (MDL).
U = Compound not detected above the MDL.
NJ = Presumptive evidence of the presence of the compound at an estimated quantity; only used for tentatively identified compounds (TICs).

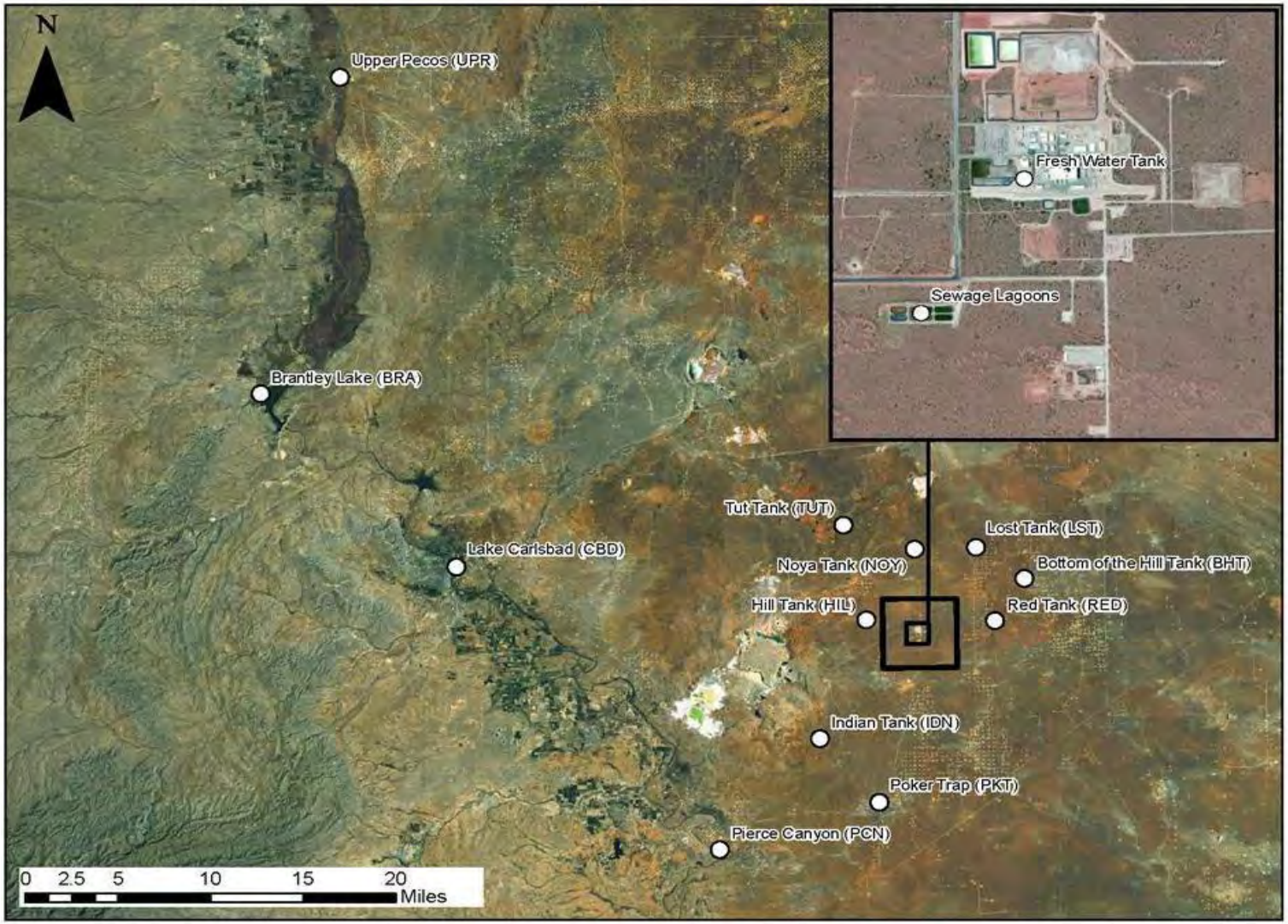
Notes:

(1) Starting with samples collected on or after May 12, 2014, trichloroethylene (TCE) is a target analyte in compliance with Administrative Order dated 5/12/2014. For samples collected before 5/12/2014, TCE is an additional requested analyte; not a Permit-prescribed target analyte but included in the laboratory quantitative analysis.

* A value will not appear in the MRL column for TICs.

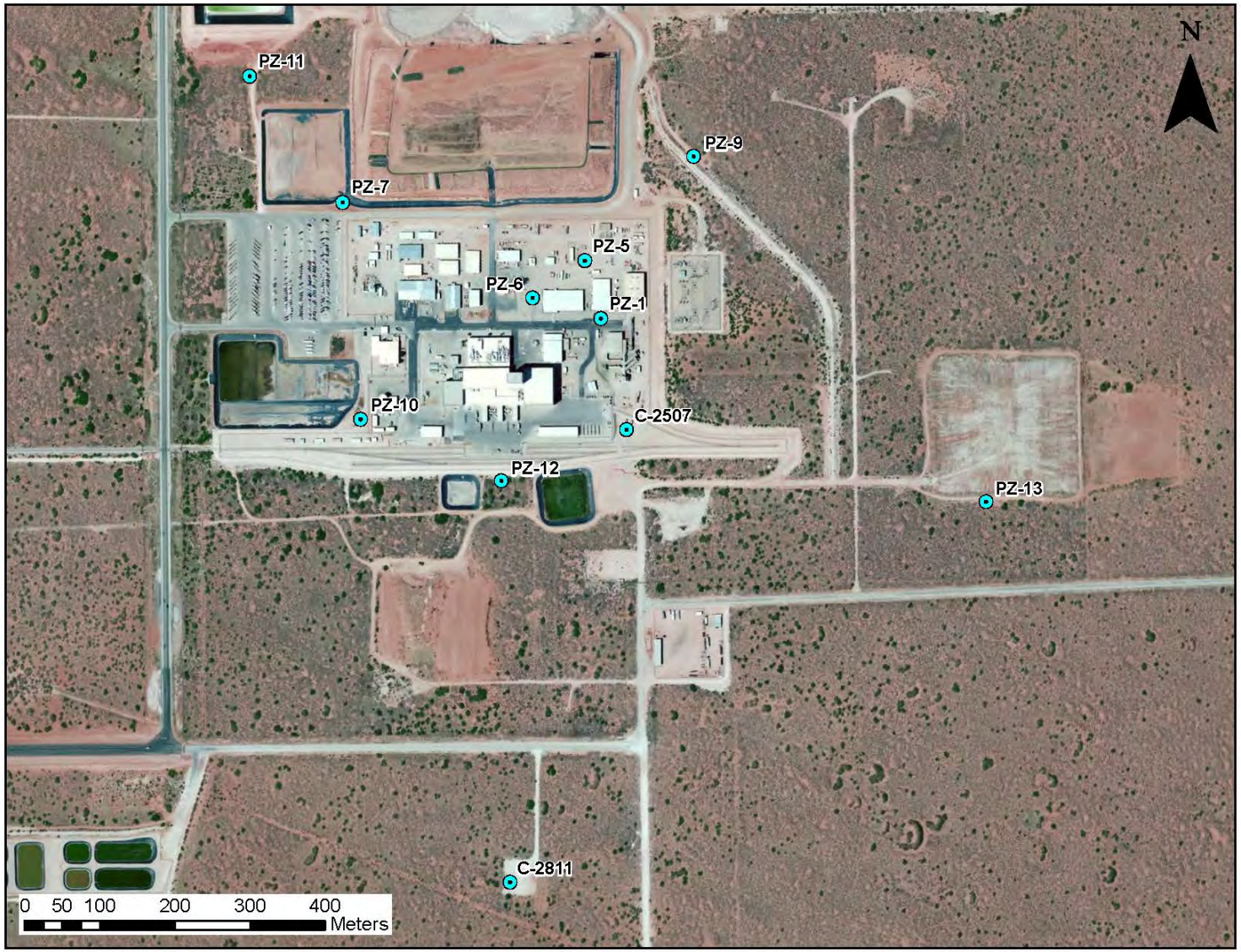


Environmental Air Sampling Locations



Surface Water Sampling Locations

Surface Water Sampling Locations (continued)
Samples of Opportunity, September 13, 2014



Shallow Subsurface Well Sampling Locations

Environmental Monitoring & Hydrology Airborne

Location	Sample ID Number	Sample Date	WIPP Labs Radiochemistry		
			Am-241 (dpm/sample)	Pu-238 (dpm/sample)	Pu-239/240 (dpm/sample)
WIPP Far Field (WFF)	EE-WFF-20141022-1.1	10/22/2014	Below MDC	Below MDC	Below MDC
WIPP East (WEE)	EE-WEE-20141022-1.2	10/22/2014	Below MDC	Below MDC	Below MDC
WIPP East (WEE) co-located	EE-WEE-20141022-2.2	10/22/2014	Below MDC	Below MDC	Below MDC
WIPP South (WSS)	EE-WSS-20141022-1.1	10/22/2014	Below MDC	Below MDC	Below MDC
Mills Ranch (MLR)	EE-MLR-20141022-1.1	10/22/2014	Below MDC	Below MDC	Below MDC
Carlsbad (CBD)	EE-CBD-20141022-1.2	10/22/2014	Below MDC	Below MDC	Below MDC
Carlsbad (CBD) co-located	EE-CBD-20141022-2.2	10/22/2014	Below MDC	Below MDC	Below MDC
Smith Ranch (SMR)	EE-SMR-20141022-1.1	10/22/2014	Below MDC	Below MDC	Below MDC
Southeast Control (SEC)	EE-SEC-20141022-1.1	10/22/2014	Below MDC	Below MDC	Below MDC
Meteorology Tower Building (MET)†	EE-MET-20141022-1.1	10/22/2014	Below MDC	Below MDC	Below MDC
Salt Hoist (SLT)†	EE-SLT-20141022-1.1	10/22/2014	**8.24E-02**	Below MDC	Below MDC
Southeast of Training Building (STB)†	EE-STB-20141022-1.1	10/22/2014	Below MDC	Below MDC	Below MDC
Guard and Security Building (GSB)‡	EE-GSB-20141022-1.1	10/22/2014	Below MDC	Below MDC	Below MDC
Artesia (ART)§	EE-ART-20141022-1.1	10/22/2014	Below MDC	Below MDC	Below MDC
Eunice (EUN)§	EE-EUN-20141022-1.1	10/22/2014	Below MDC	Below MDC	Below MDC
Hobbs (HBS)§	EE-HBS-20141022-1.1	10/22/2014	Below MDC	Below MDC	Below MDC
Loving (LVG)§	EE-LVG-20141022-1.1	10/22/2014	Below MDC	Below MDC	Below MDC
Potash Mines Road (PMR)‡‡	EE-PMR-20141022-1.1	10/22/2014	Below MDC	Below MDC	Below MDC

† This sampling location was initiated on March 4, 2014.

‡ This sampling location was initiated on March 25, 2014.

§ This sampling location was initiated on April 10, 2014.

‡‡ This sampling location was initiated on July 31, 2014. July (includes only one filter) and August monthly filter composites were analyzed. Filters collected after August will be archived for sample analysis, if needed.

Note: Shaded cells in the table represent samples identified as a detectable concentration. Minimum detectable concentration (MDC) corresponds to the lowest concentration measurement that can be detected by the laboratory instrumentation.

MDC ranges are:

MDC Am-241 (dpm/sample): 1.89E-02 to 5.05E-01

MDC Pu-238 (dpm/sample): 1.89E-02 to 1.57E+01

MDC Pu-239/240 (dpm/sample): 1.70E-02 to 5.94E-01

Environmental Monitoring & Hydrology Surface Water Sampling

Location	Sample ID Number	Sample Date	WIPP Labs Radiochemistry		
			Am-241 (dpm/L)	Pu-238 (dpm/L)	Pu-239/240 (dpm/L)
Noya Tank	WS-NOY-20140814-1.1	8/14/2014	Below MDC	Below MDC	Below MDC
Red Tank	WS-RED-20140814-1.1	8/14/2014	Below MDC	Below MDC	Below MDC
Indian Tank	WS-IDN-20140818-1.1	8/18/2014	Below MDC	Below MDC	Below MDC
Sample of Opportunity†	WS-SOO-20140913-1.7	9/13/2014	Below MDC	Below MDC	Below MDC
Sample of Opportunity†	WS-SOO-20140913-2.7	9/13/2014	Below MDC	Below MDC	Below MDC
Sample of Opportunity†	WS-SOO-20140913-3.7	9/13/2014	Below MDC	Below MDC	Below MDC
Sample of Opportunity (Dup)†	WS-SOO-20140913-4.7	9/13/2014	Below MDC	Below MDC	Below MDC
Sample of Opportunity†	WS-SOO-20140913-5.7	9/13/2014	Below MDC	Below MDC	Below MDC
Sample of Opportunity†	WS-SOO-20140913-6.7	9/13/2014	Below MDC	Below MDC	Below MDC
Blank	WS-SOO-20140913-7.7	9/13/2014	Below MDC	Below MDC	Below MDC

† These samples were collected during an opportunistic rain event. The samples were taken from the WIPP site building roof top and roadway drainage.

MDC ranges are:

MDC Am-241 (dpm/L): 4.34E-02 to 8.34E-02

MDC Pu-238 (dpm/L): 2.84E-02 to 6.69E-02

MDC Pu-239/240 (dpm/L): 3.01E-02 to 6.60E-02

Site Environmental Compliance Groundwater/SSW Purge Water Characterization Sampling

Sample Description	Sample ID Number	Sample Date	WIPP Labs Radiochemistry		
			Am-241 (dpm/L)	Pu-238 (dpm/L)	Pu-239/240 (dpm/L)
†Shallow Subsurface Water (SSW) Purge	WST-14-035	5/15/2014	Below MDC	Below MDC	Below MDC
Field Blank	WST-14-036	5/15/2014	Below MDC	Below MDC	Below MDC

†Sample is a composite of PZ-1,5,6,7,9,10,11,12,13; C-2507, C-2811 wells

Samples collected per procedure WP 02-EC1001.

MDC ranges are:

MDC Am-241 (dpm/L): 4.80E-02 to 7.83E-02

MDC Pu-238 (dpm/L): 3.14E-02 to 6.15E-02

MDC Pu-239/240 (dpm/L): 3.25E-02 to 4.62E-02

Attachment 4
Surface and Underground Derived Waste Currently in Storage at the WIPP Facility
(reserved)

Attachment 5
Status of RCRA Contingency Plan Required Activities

RCRA Contingency Plan Section	RCRA Contingency Plan Text	Applicability to the February 14, 2014, Event	Current Status/Schedule/Deviations
D-1 General Information	Wastes generated as a result of maintenance or response actions will be categorized into one of three groups and disposed of accordingly. These are: 1) nonhazardous wastes to be disposed of in an approved landfill, 2) hazardous nonradioactive wastes to be disposed of at an off-site RCRA permitted facility, and 3) TRU mixed waste to be disposed of in the underground HWDUs.	The required activities described in this section are applicable to the current implementation of the Contingency Plan.	Category 3 waste has been generated from the change out of the underground ventilation filtration system filters. It was characterized using the derived waste process in the Permit. It is currently stored in the Waste Handling Building. Categories 1 and 2 are not regulated by this Permit.
D-1 General Information	Liquid wastes that may be generated as a result of the fire fighting water or decontamination solutions will be managed as follows: Non-Mixed - Hazardous waste liquids contaminated only with hazardous constituents will be placed into containers and managed in accordance with 20.4.1.300 NMAC (incorporating 40 CFR §262.34) requirements. The waste will be shipped to an approved off-site treatment, storage, or disposal facility. Mixed - Liquids contaminated with TRU mixed waste (inside the WHB Unit) will be solidified as they are placed into containers with cement, Aquaset, or absorbent material in them. The solidified materials will be disposed of in the underground WIPP repository as derived waste.	The required activities described in this section are applicable to the current implementation of the RCRA Contingency Plan.	No fire fighting water has been used in response to this event. No liquid waste has been generated to date as a result of decontamination activities. Water removed from the waste shaft sump is being managed as a liquid waste stream in accordance with procedures. Non-mixed hazardous waste is not regulated by this Permit.
D-4b Identification of Hazardous Materials	The identification of hazardous wastes, hazardous waste constituents, or hazardous materials involved in a fire, an explosion, or a release to the environment is a necessary part of the assessment of an incident, as described in 20.4.1.500 NMAC (incorporating 40 CFR §264.56(b)). RCRA hazardous waste and hazardous substances and materials listed in 40 CFR §302.4 and §302.6 or New Mexico Emergency Management Act, §74-4B-3 and §74-4B-5 and, involved in any release at the WIPP facility will be identified. The identification of likely hazardous materials at any location is enhanced because hazardous materials and hazardous waste are only stored or managed in specified locations throughout the WIPP facility. An attempt will be made to identify products involved by occupancy/location, container shape, markings/color, placards/labels, United Nations/North America/Product Identification Number, on-site technical experts, or field sampling. Further, the ES&H department maintains an	The required activities described in this section are applicable to the current implementation of the RCRA Contingency Plan.	The Permit-required information was available via the WIPP Waste Information System. Entries into Panel 7, Room 7, have indicated that the radiological release originated from at least one damaged waste container from Los Alamos National Laboratory waste stream LA-MIN02-V.001. EPA hazardous waste numbers associated with this waste stream at the time of disposal were D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002,

RCRA Contingency Plan Section	RCRA Contingency Plan Text	Applicability to the February 14, 2014, Event	Current Status/Schedule/Deviations
	updated inventory of hazardous materials/substances that are brought on site, and a master MSDS listing in the Safety and Emergency Services Facility, Building 452. Sources of information available to identify the hazardous wastes, substances, or materials involved in a fire, an explosion, or a release at the WIPP facility include operator/supervisor knowledge of their work areas, materials used, and work activities underway; the WIPP Waste Information System (WWIS), which identifies the location within the facility of emplaced TRU mixed waste, including emplaced derived waste; and waste manifests and other waste characterization information in the operating record. The WWIS also includes information on wastes that are in the waste handling process. Also available are MSDSs for hazardous material in the various user areas throughout the facility, waste acceptance records, and materials inventories for buildings and operating groups at the WIPP facility. Information or data from the derived waste accumulation areas, the hazardous waste staging area, satellite staging areas, and nonregulated waste accumulation areas are included. TRU mixed waste received by the WIPP facility during the Disposal Phase will be characterized for hazardous constituents prior to receipt, and acceptable knowledge will be used to characterize derived waste prior to emplacement. Information required for identifying TRU mixed hazardous constituents in case of an incident is readily available through the WWIS and the waste acceptance records. Waste accepted at WIPP is already known to be compatible with all materials used to respond to an emergency. All non-TRU mixed waste materials received on site, other than those listed in Table D-1, are in such small quantities that no reaction could develop which would trigger an Incident Level II or III response. The RCRA Emergency Coordinator will have access to the WWIS through Operations, or through the Facility Shift Manager's Office. The RCRA Emergency Coordinator has access to the inventory lists and MSDSs in the Safety and Emergency Services Facility at all times.		and F005.
D-4c Assessment of the Nature and	Once the required notifications have been made, the RCRA Emergency Coordinator will ensure that the identity, exact source, amount, and areal extent of any released materials are	The February 14, 2014, event has been managed as a radiological event. The initial response to this	Hazards posed by the February 14, 2014, event are radiological in nature. The processes for dealing

RCRA Contingency Plan Section	RCRA Contingency Plan Text	Applicability to the February 14, 2014, Event	Current Status/Schedule/Deviations
Extent of the Emergency	determined, as required under 20.4.1.500 NMAC (incorporating 40 CFR §264.56(b)). The RCRA Emergency Coordinator will determine whether the occurrence constitutes an emergency based on knowledge of the area and access to the waste identification/characterization information described in Section D-4b. An emergency will require response by only trained emergency response personnel. The RCRA Emergency Coordinator will be responsible for responding to immediate and potential hazards, using the services of trained personnel to determine: 1) the identity of hazardous wastes, hazardous waste constituents, and other hazardous materials involved in a release, as described in Section D-4b; 2) whether or not a release involved a reportable quantity of a hazardous substance; 3) the areal extent of a release; 4) the exact source of a release; and 5) the potential hazards to human health or to the environment. After the materials involved in an emergency are identified, the specific information on the associated hazards, appropriate personal protective equipment (PPE), decontamination, etc., will be obtained from MSDSs and from appropriate chemical reference materials at the same location. These information sources may be accessed by the RCRA Emergency Coordinator or through several WIPP facility organizations. The emergency assessment requires determination of hazards involving evaluation of several criteria, including: • Exposure: magnitude of actual or potential exposure to employees, the general public, and the environment; duration of human and environmental exposure; pathways of exposure • Toxicity: types of adverse health or environmental effects associated with exposures; the relationship between the magnitude of exposure and adverse effects • Reactivity: hazardous materials or hazardous wastes, which are not TRU mixed wastes, involved in an incident will be assessed for reactivity through accessing the MSDSs for the affected material and the recommended method(s) for managing such waste • Uncertainties: considerations for undeterminable or future exposures; uncertain or unknown health effects, including future health effects	event was to protect against the primary hazard, which was identified as the radiological component of the waste. Therefore, the activities conducted relative to assessing the nature and extent of the emergency pertained to the radiological release.	with the event involve measures to protect workers from radioactivity. As the nature and extent of the radioactive contamination continue to be evaluated by workers, these measures will be appropriate and sufficient to protect against any hazardous constituents that might be present.

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D-4d Control, Containment, and Correction of the Emergency	The WIPP facility is required to control an emergency and to minimize the potential for the occurrence, recurrence, or spread of releases due to the emergency situation, as described in 20.4.1.500 NMAC (incorporating 40 CFR §264.56 (e)). The WIPP Emergency Response procedures utilize the incident mitigation guidelines in NFPA 471, Responding to Hazardous Materials Incidents, with initial response priority being on control, and those actions necessary to ensure confinement and containment (the first line of defense) in the early, critical stages of a spill or leak. The RCRA Emergency Coordinator is responsible for stopping processes and operations when necessary, and removing or isolating containers. TRU mixed waste will remain within the WHB Unit, the Parking Area Unit, and the underground HWDU.	The required activities described in this section are applicable to the current implementation of the RCRA Contingency Plan.	The NMED has approved the use of HEPA filtration as a method to prevent contamination. Access to the underground is limited to recovery activities. The Permittees have prepared Nitrate Salt Bearing Waste Container Isolation Plan to expeditiously close Panel 6 and Room 7 of Panel 7, which minimizes the potential of occurrence, recurrence, or spread of releases.
D-4d(1) All Emergencies	The WIPP Emergency Response procedures include, but are not limited to, the following actions appropriate for control: 1. Isolate the area from unauthorized person by fences, barricades, warning signs, or other security and site control precautions. Isolation and evacuation distances vary, depending upon the chemical/product, fire, and weather situations. 2. Identify the chemical/product according to Section D-4b. 3. Drainage controls. 4. Stabilization of physical controls (such as dikes or impoundment[s]). 5. Capping of contaminated soils to reduce migration. 6. Using chemicals and other materials to retard the spread of the release or to mitigate its effects. 7. Excavation, consolidation, removal, or disposal of contaminated soils. 8. Removal of drums, barrels, or tanks where it will reduce exposure risk during situations such as fires. If the facility stops operations in response to a fire, explosion, or release, the RCRA Emergency Coordinator shall ensure continued monitoring for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever appropriate. If operations continue, personnel normally assigned to these tasks will continue.	The required activities described in this section are applicable to the current implementation of the RCRA Contingency Plan.	Procedures and/or work control documents are in place per the WIPP Emergency Plan. The following actions are being taken to deal with the radiological release: 1. Access to the underground is being controlled, and entries into contaminated areas require appropriate PPE. 2. Chemicals have been identified as addressed in Section D-4b. 3. Drainage controls are not applicable since the breached container(s) is in the underground. 4. Stabilization of physical controls is not applicable to this event. 5. Capping of contaminated soils to reduce migration is not applicable to this event since soils are not involved. However, covering of contaminated salt is being evaluated as part of recovery operations in order to reduce

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	Both natural and synthetic methods will be employed to limit the releases of hazardous materials so that effective recovery and treatment can be accomplished with minimum additional risk to human health or the environment. A combination of the above methods to achieve protection of human health and the environment, with emphasis on two basic methods for mitigation of hazardous materials incidents - Physical and Chemical (Tables D-4, D-5) mitigation, will be used.		migration of contamination in the underground. 6. The use of fixatives to control radioactivity is currently being evaluated and will be part of recovery operations. 7. Excavation, consolidation, removal, or disposal of contaminated salt is being evaluated as part of recovery efforts. 8. There are currently no plans to remove waste containers from the underground. The NMED has issued an administrative order which requires the Permittees to develop a plan for closing the areas of most risk. A revision to the plan was submitted by the DOE to the NMED on September 30, 2014. Radiological monitoring is ongoing at surface Stations A and B. When accessible, equipment used to ensure protection are inspected in accordance with Permit Attachment E, Table E-1. HEPA filtration is currently being used to limit radiological releases. The most effective methods for mitigation will be part of recovery operations.
D-4d(1) All Emergencies	The established procedures are based upon the incident level and a graded approach for nonradioactive or CH TRU waste emergencies and initiated to: 1. Minimize contamination or contact (through PPE, etc.) 2. Limit migration of contaminants	The required activities described in this section are applicable to the current implementation of the RCRA Contingency Plan.	Procedures are in place to address these requirements. Radiological work permits specify the appropriate PPE and other measures to be taken to minimize personnel exposure. HEPA filtration limits radiological

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	3. Properly dispose of contaminated materials		releases. To date, CH TRU waste has been generated as the result of changing the filters in the underground filtration system. This waste was characterized using the derived waste process in the Permit and is stored in the WHB.
D-4d(6) Control of Spills or Leaking or Punctured Containers of CH and RH TRU Mixed Waste	In the event of spills or leaking or punctured containers of CH and RH TRU mixed waste, the WIPP responds to three distinct phases: 1) the event, 2) the re-entry, and 3) the recovery. During the event, the following immediate actions are completed: 1) stop work, 2) warn others (notify CMR), 3) isolate the area, 4) minimize exposure, and 5) close off unfiltered ventilation. These actions can take place simultaneously, as long as they are completed before proceeding to the re-entry phase. <u>CH TRU Mixed Waste</u> Prior to the re-entry following an event involving containers that are managed as CH TRU mixed waste, a Radiological Work Permit (RWP) is written for personnel to enter with protective clothing to assess the conditions, take surveys and samples, and mitigate problems that could compound the hazards in the area (cover up spilled material with plastic material sheeting and or any approved fixatives such as paint, place equipment in a safe configuration, etc.). During the re-entry phase, smears and air sample filters are taken and counted. This information is used by cognizant managers, RC personnel, and As Low As Reasonably Achievable (ALARA) Committee representatives to determine an appropriate course of action to recover the area. A plan to decontaminate and recover affected areas and equipment will be approved with a separate RWP written to establish the radiological controls required for the recovery. During the recovery phase, the plan will be executed to utilize the necessary resources to conduct decontamination and/or overpacking operations as needed. The completion of this phase will occur prior to returning the affected area and/or equipment to normal activities. The recovery phase will include activities to minimize the spread of contamination to other areas. These activities will involve placing the waste material in another	The required activities described in this section (as they apply to CH TRU mixed waste in the underground disposal facility) are applicable to the current implementation of the RCRA Contingency Plan because the radiation event did involve at least one punctured/breached container of CH TRU mixed waste. However, prior to the release, this container had been disposed in the underground HWDU.	The required immediate actions were conducted prior to re-entry into the underground immediately following the event. Radiological Work Permits (RWPs) have been developed and implemented to address recovery activities in the underground, including assessing the extent of radiological contamination, the conditions of the underground, and required PPE. Work Control Documents are written such that work can be carried out under the RWPs. For the recovery phase, a WIPP Recovery Plan has been issued to address recovery operations as appropriate for disposed waste.

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	container; vacuuming the waste material; overpacking or plugging/patching the spilled, leaking, or punctured waste container; and/or decontaminating the affected area(s). If an affected surface cannot be decontaminated to releasable levels, it may be covered with a fixative coating and established as a Fixed Contamination Area to prevent spread of contamination, or it may be removed using heavy machinery and tools, packaged in approved waste containers, and emplaced in the underground. Every reasonable effort to minimize the amount of derived waste, while providing for the health and safety of personnel, will be made.		
D-4d(6) Control of Spills or Leaking or Punctured Containers of CH and RH TRU Mixed Waste	At the underground emplacement room, salt contaminated by a spill of CH TRU mixed waste would be either covered or cleaned up, depending on location, extent, and spilled material, due to potential radioactive contamination spread via the salt dust. The contaminated salt would be covered to isolate it from the workers, and the stacking of waste containers would resume or would be removed and packaged as site-derived waste using applicable site procedures for decontaminating surfaces.	The required activities described in this section are applicable to the current implementation of the RCRA Contingency Plan.	Required actions will be part of recovery operations. The Underground Derived Waste Storage Plan, submitted to the NMED on June 25, 2014, addresses the management of waste generated by this action.
D-4d(6) Control of Spills or Leaking or Punctured Containers of CH and RH TRU Mixed Waste	Certain structures and/or equipment may be disassembled to facilitate decontamination or may be placed directly into a derived waste container. Items used in the spill cleanup and decontamination operations (e.g., swipes, tools, PPE, etc.) may also be placed into a derived waste container. When decontamination is deemed by the recovery team to be complete, RC personnel will conduct one final, intensive radcon survey of the area and components in the area to release it for uncontrolled use. The free release criteria for items, equipment, and areas is < 20 dpm/100 cm^2 for alpha radioactivity and < 200 dpm/100 cm^2 for beta-gamma radioactivity. Personnel will then perform hazardous material sampling after decontamination efforts are complete to verify the removal of hazardous waste substances. After cleanup is complete, facility personnel will complete an inspection and include the details of the spill and cleanup in the log.	The applicability of the activities described in this section, as they pertain to the current implementation of the RCRA Contingency Plan, will be addressed in during recovery activities.	Required actions will be part of recovery operations.
D-4d(10) Emergency Termination Procedures	For the transition from emergency phase to cleanup phase, the following items will be complete: • Emergency scene will be stable	The applicability of the activities described in this section, as they pertain to the current implementation of the RCRA Contingency Plan, will	Activities required to transition from the emergency phase to cleanup phase will be part of recovery operations.

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	• Release of hazardous substance will be stopped • Reaction of hazardous substance will be controlled • The released hazardous substance will be contained within a localized and manageable area • The area of contamination will be adequately secure from unauthorized entry At every incident involving hazardous materials, there is a possibility that response personnel and their equipment will become contaminated. Emergency response personnel have procedures to minimize contamination or contact, and to properly dispose of contaminated materials. For nonemergencies and Incident Level I emergencies, the following methods of decontamination are available for personnel, environment, and/or equipment according to emergency response procedures: • Absorption • Adsorption • Chemical degradation • Dilution • Disposal • Isolation • Neutralization • Solidification Any necessary verification of air, soil, or water samples will be directed by the RCRA Emergency Coordinator. Immediately after an emergency, the RCRA Emergency Coordinator will provide for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility in accordance with standard operating procedures. For Level II and III incidents after the emergency itself is controlled and contained, the RCRA Emergency Coordinator will be responsible for the development and implementation of an incident-specific decontamination plan. PPE will be decontaminated or disposed according to procedure	be addressed during recovery activities.	If required, a sampling plan will be prepared for submittal to the NMED.

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	before it is returned to its storage location. As part of the facility's defense-in-depth approach, equipment will be assumed to be contaminated after each hazardous material response and a thorough check for radioactive contamination will be conducted. If contamination is found, a technically sound decontamination process will be followed. Many types of equipment are difficult to decontaminate and may have to be discarded as hazardous or derived waste. Whenever possible, pieces of equipment will be disposable or made of nonporous material. If radioactive contamination is detected on equipment or on structures, it will be assumed that hazardous constituents may also be present. Radiological surveys to determine whether a potential release of hazardous constituents has occurred (Permit Attachment G3) will be used along with other techniques as a detection method to determine when decontamination is required. Radiological cleanup standards will be used to determine the effectiveness of decontamination efforts. To provide verification of the effectiveness of the removal of hazardous waste constituents, once a contaminated surface is demonstrated to be radiologically clean, the "swipe" can be sent for analysis for hazardous constituents. The use of these confirmation analyses is as follows: For waste containers, the analyses become documentation of the condition of the container at the time of emplacement. These containers will be placed in the underground without further action, once the radiological contamination is removed, unless there is visible evidence of hazardous waste spills or hazardous waste on the container and this contamination is considered likely to be released prior to emplacement in the underground. In no case shall these containers contain a total liquid content equal to, or which exceeds, one volume percent of the container. For area contamination, once the area is cleaned up and is shown to be radiologically clean, it will be sampled for the presence of hazardous waste residues. If the area is large, a sampling plan will be developed. The sampling plan will be approved by the NMED before it is implemented. If the area is small, swipes will be used. If the results of the analysis show that residual contamination remains, a decision will be made whether further cleaning will be beneficial or whether final clean up will be		

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	deferred until closure. Appropriate notations will be entered into the operating record to assure proper consideration of formerly contaminated areas at the time of closure. Furthermore, measures such as covering, barricading, and/or placarding will be used as needed to mark areas that remain contaminated. For all Contingency Plan emergency responses, the RCRA Emergency Coordinator will ensure, in keeping with standard operating procedures, that, in the affected area(s) of the facility: • No waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed • All emergency equipment listed in the Contingency Plan is cleaned and fit for its intended use, or replaced before operations are resumed		
D-4e Prevention of Recurrence or Spread of Fires, Explosions, or Releases	During an emergency, the RCRA Emergency Coordinator will ensure that reasonable measures are taken so that fires, explosions, and releases do not occur, recur, or spread to TRU mixed waste or other hazardous materials at the facility, as required under 20.4.1.500 NMAC (incorporating 40 CFR §§264.56(e) and (f)). These measures include: • Stopping processes and operations. • Collecting and containing released wastes and materials. • Removing or isolating containers of waste or hazardous substances posing a threat. • Ensuring that wastes managed during an emergency are handled, stored, or treated with due consideration for compatibility with other wastes and materials on site and with containers utilized (Section D-4h). • Restricting personnel not needed for response activities from the scene of the incident. • Evacuating the area. • Curtailing nonessential activities in the area. • Conducting preliminary inspections of adjacent facilities and equipment to assess damage. • Overpacking and/or removing damaged containers/drums from affected areas. Damaged equipment and facilities will	The required activities described in this section are applicable to the current implementation of the RCRA Contingency Plan.	Since the WIPP facility has transitioned into the cleanup phase, the emergency has passed, and these required activities are no longer applicable to this implementation of the RCRA Contingency Plan.

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	be repaired as appropriate. • Constructing, monitoring, and reinforcing temporary dikes as needed. • Maintaining fire equipment on standby at the incident site in cases where ignitable liquids have been or may be released and ensuring that all ignition sources are kept out of the area. Ignitable liquids will be segregated, contained, confined, diluted, or otherwise controlled to preclude inadvertent explosion or detonation. No operation that has been shut down in response to the incident will be restarted until authorized by the RCRA Emergency Coordinator. Sections D-4g, Incompatible Waste, and D-4h, Post-Emergency Facility and Equipment Maintenance and Reporting, address specific issues related to decreasing the possibility of a recurrence or spread of a release, a fire, or an explosion. After resolution of the incident, a Root Cause Analysis will be conducted to review all Level II and Level III incidents for determination of cause, and the corrective action plan to prevent recurrence.		
D-4f Management and Containment of Released Material and Waste	Once initial release or spill containment has been completed, the RCRA Emergency Coordinator will ensure that recovered hazardous materials and waste are properly stored and/or disposed, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.56(g)). For spills of liquid, the perimeter of the spill will be diked with an absorbent material that is compatible with the material(s) released. Free-standing liquid will be transferred to a marked compatible container. The remaining liquid will be absorbed with an absorbent material and swept or scooped into a marked compatible container. Spill residue will be removed. Spills of dry material will be swept or shoveled into a labeled compatible recovery container. Material recovered from the spill will be transferred to clean containers or tanks or to containers or tanks that have held a compatible material. All containers will meet DOT specifications for shipping the wastes, and materials will be recovered. Nonradioactive hazardous waste resulting from the cleanup of a fire, an explosion, or a release involving a nonradioactive hazardous waste or hazardous substance at the WIPP facility will be contained and managed as a hazardous waste until such time	The applicability of the activities described in this section, as they pertain to the current implementation of the RCRA Contingency Plan, will be addressed during recovery activities.	Required actions to manage and contain released waste material will be part of recovery operations.

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	as the waste is disposed of, or determined to be nonhazardous, as defined in 20.4.1.200 NMAC (incorporating 40 CFR §261) Subparts C and D. In most cases, hazardous materials inventories for the various buildings and areas at the facility will allow a determination of the hazardous materials present in any cleanup of a release or of the residues from an emergency condition (The quantities of such spills are so small, it is not likely to trigger an Incident Level II or III). When necessary samples of the waste will be collected and analyzed to determine the presence of any hazardous characteristics and/or hazardous waste constituents; this information is needed to evaluate disposal options. EPA-approved sampling and analytical methods will be utilized. Hazardous wastes will be transferred to the Hazardous Waste Staging Area. The staging area is used to store hazardous waste awaiting transfer to an off-site treatment or disposal facility in accordance with applicable regulations (e.g., 20.4.1 NMAC and DOT regulations). The Hazardous Waste Staging Area for nonradioactive hazardous waste is Buildings 474A and 474B, as shown in Figure D-1. Nonradioactive hazardous wastes will be shipped off-site for disposal at a RCRA permitted disposal facility. Under normal operations, administrative controls will be implemented to ensure that hazardous materials and incompatible materials will not be introduced to the radioactive materials area during TRU mixed waste handling operations. Examples of administrative controls include restricting the waste received in the TRU mixed waste management area(s) to TRU mixed waste properly manifested from the generator sites and ensuring that materials used in these area(s) are restricted to only those that have previously been determined to be compatible with the TRU mixed waste. The RCRA Emergency Coordinator will have access to building design information and information on specific equipment used within an area upon which to base a determination of the compatibility of materials with the area. If necessary, the RCRA Emergency Coordinator will use EPA-600/2-80-076, “A Method for Determining the Compatibility of Hazardous Waste,” (EPA, 1980) for making compatibility determinations. Waste resulting from the cleanup of a fire, explosion, or release in the miscellaneous unit, the CH TRU mixed waste handling areas, or the RH Complex will be considered derived from the received TRU mixed waste and may		

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	be treated and managed as CH TRU mixed waste depending on the surface dose rate. In the event of a prolonged cessation of TRU mixed waste handling operations, TRU mixed waste can be placed in areas of the WHB Unit that are available for such contingencies. These areas and the TRU mixed waste containers in them would be located so that adequate aisle space would be maintained for unobstructed movement of personnel and equipment in an emergency. Permit Attachments A1 and A2 describe the HWMUs in detail, including the facility description, support structures and equipment, security, waste handling areas, ventilation, and fire protection. The contaminated area will be decontaminated. If a release is to a permeable surface, such as soil, asphalt, concrete, or other surface, the surface material will be removed and placed in containers meeting applicable DOT requirements. Contaminated soil, asphalt, concrete, or other surface material, as well as materials used in the cleanup (e.g., rags and absorbent material) will be contained and disposed of in the same manner as dictated for the contaminant. Clean soil, new asphalt, or new concrete will be emplaced at the spill location. If a spill occurs on an impermeable surface, the surface will be decontaminated with water and/or a detergent. In the event that the spilled material is water reactive, a compatible nonhazardous cleaning solution will be used. Contaminated wash water or cleaning solution will be transferred to an appropriate container, marked, and managed as described above for nonradioactive or radioactive liquid wastes. In the event of a hazardous material or hazardous waste release, the RCRA Emergency Coordinator will ensure that no wastes will be received or disposed of in the affected areas until cleanup operations have been completed. This is to ensure that incompatible waste will not be present in the vicinity of the release. Because of the restrictions which the WIPP facility places on generators, and because of control of WIPP operations, TRU mixed wastes and derived wastes will not contain any incompatible wastes. However, the areas established for the temporary holding of nonradioactive waste routinely generated at the WIPP facility is divided into bays to accommodate the		

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	management of wastes that may be incompatible. If waste is generated as the result of a spill or release of hazardous materials or nonradioactive hazardous waste, the waste generated as a result of abatement and cleanup will be evaluated to determine its compatibility with other wastes being managed in the temporary holding areas. The evaluation will be by identifying the material or waste that was spilled or released and determining its characteristics (e.g., ignitable, reactive, corrosive, or toxic). The waste generated by the abatement and cleanup activities will be stored in that part of the temporary holding area that has been established to manage wastes with which it is compatible. For small nonemergency liquid spills (e.g., a detergent solution leaking out of the pump handle during decontamination, a spill of hydraulic fluid while servicing a vehicle), spill control procedures will be used to contain and absorb free-standing liquid. The contaminated absorbent will be swept or shoveled into a compatible container and managed as described above. No notifications will be required, but site procedures require documentation of the incident.		
D-4g Incompatible Waste	Implementation of the TSDF-WAC for the WIPP ensures that incompatible TRU mixed waste will not be shipped to the WIPP facility. Nonradioactive waste at the WIPP facility will be carefully segregated during handling and holding and will be transported within and off the facility. The RCRA Emergency Coordinator will not allow hazardous or TRU mixed waste operations to resume in a building or area in which incompatible materials have been released prior to completion of necessary post-emergency cleanup operations to remove potentially incompatible materials. In making the determination of compatibility, the RCRA Emergency Coordinator will have available the resources and information described in Section D-4b, Identification of Hazardous Materials. In addition, ES&H department personnel will be available for consultation. Finally, the RCRA Emergency Coordinator may use EPA-600/2-80-076, (EPA, 1980).	The required activities described in this section are applicable to the current implementation of the RCRA Contingency Plan.	These requirements are addressed using site standard operating procedures.
D-4h Post-Emergency Facility and Equipment Maintenance	The RCRA Emergency Coordinator will ensure that emergency equipment that is located or used in the affected area(s) of the facility and listed in the Contingency Plan is cleaned and ready for its intended use before operations are resumed, as specified in 20.4.1.500 NMAC (incorporating 40 CFR §264.56(h)(2)). Any	The applicability of the activities described in this section, as they pertain to the current implementation of the RCRA Contingency Plan, will be addressed during recovery	Required actions will be integrated with the WIPP facility recovery process.

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Reporting	equipment that cannot be decontaminated will be discarded as waste (e.g., hazardous, mixed, solid), as appropriate. The WIPP facility is committed to replacing any needed equipment or supplies that cannot be reused following an emergency. After the equipment has been cleaned, repaired, or replaced, a post-emergency facility and equipment inspection will be performed, and the results will be documented. Cleaning and decontaminating equipment will be accomplished by physically removing gross or solid residue; rinsing with water or another suitable liquid, if required; and/or washing with detergent and water. Decontamination and cleaning will be conducted in a confined area, such as a wash pad or building equipped with a floor drain and sump isolated from the environment. Care will be taken to prevent wind dispersion of particles and spray. Liquid or particulate resulting from cleaning and decontamination of equipment will be placed in clean, compatible containers. Waste produced in an emergency cleanup in the TRU mixed waste handling areas is derived waste and will be emplaced in the underground derived waste emplacement area. Waste resulting from decontamination operations elsewhere in the WIPP facility will be analyzed for hazardous waste constituents and/or hazardous waste characteristics to ensure proper management. When the WIPP facility has completed post-emergency cleanup of waste and hazardous residues from areas where waste management operations are ready to resume and the RCRA Emergency Coordinator has ensured that emergency equipment used in managing the emergency has been cleaned or replaced and is fit for service, the notifications will be made by the Permittees to the following: the EPA Region VI Administrator; the Secretary of the NMED; and any relevant local authorities. This post-emergency notification complies with 20.4.1.500 NMAC (incorporating 40 CFR §264.56(i)), and is the responsibility of the RCRA Emergency Coordinator.	activities.	
D-8 Required Reports	The RCRA Emergency Coordinator, on behalf of the Permittees, will note in the operating record the time, date, and details of any incident that requires implementing this Contingency Plan. This notation will be in the facility log maintained by the CMRO. In compliance with 20.4.1.500 NMAC (incorporating 40 CFR §264.56(j)), within 15 days after the incident, the Permittees will	The required activities described in this section are applicable to the current implementation of the RCRA Contingency Plan.	This report was prepared and submitted to the NMED on April 28, 2014. Supplements to this report were submitted to the NMED on July 7, 2014, and on

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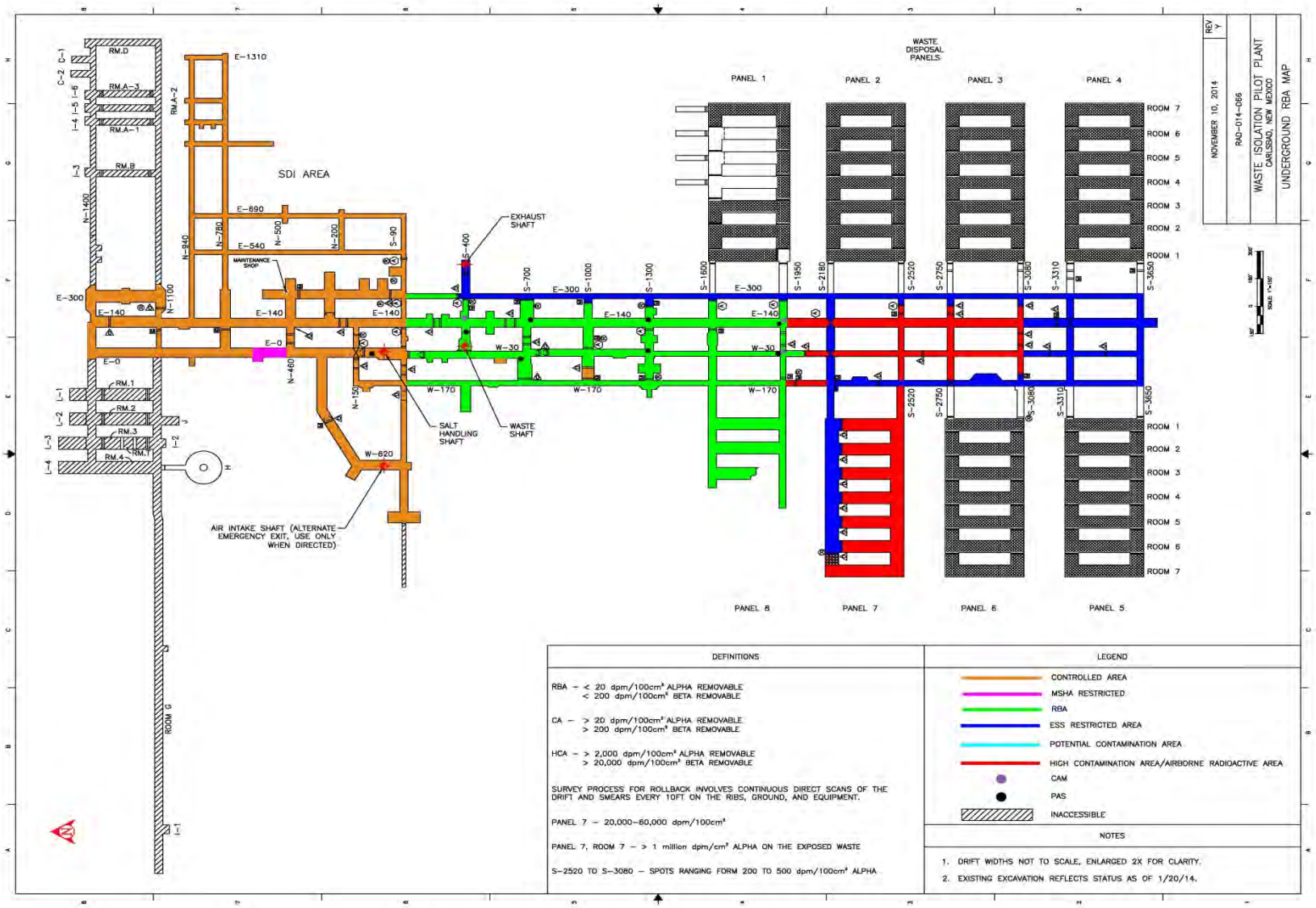
	ensure that a written report on the incident will be submitted to the EPA Region VI Administrator and to the Secretary of the NMED. The report will include: • The name, address, and telephone number of the Owner/Operator • The name, address, and telephone number of the facility • The date, time, and type of incident (e.g., fire, explosion or release) • The name and quantity of material(s) involved • The extent of injuries, if any • An assessment of actual or potential hazards to human health or the environment, where this is applicable • The estimated quantity and disposition of recovered material that resulted from the incident In addition to the above report, the Permittees will ensure that the ES&H Manager, or designee, submits reports to the appropriate agencies as listed in Tables D-8 and D-9.		August 18, 2014.
D-8 Required Reports	In accordance with 20.4.1.500 NMAC (incorporating 40 CFR §264.56(i)), the Permittees will notify the Secretary of the NMED and EPA Region VI Administrator that the WIPP facility is in compliance with requirements for the cleanup of areas affected by the emergency and that emergency equipment used in the emergency response has been cleaned, repaired, or replaced and is fit for its intended use prior to the resumption of waste management operations in affected areas. The means the WIPP facility will use to meet these requirements are described in Sections D-4e, D-4f, D-4g, and D-4h.	The required activities described in this section are applicable to the current implementation of the RCRA Contingency Plan.	Required actions will be integrated with the WIPP facility recovery process.
D-8 Required Reports	The WIPP requires the EST/FPT to initiate the “WIPP Hazardous Materials Incident Report” if the Contingency Plan is implemented. A form is attached as Figure D-12. The form is initiated by the EST/FPT. The RCRA Emergency Coordinator, CMRO, and Environmental Compliance representatives complete their respective sections.	The required activities described in this section are applicable to the current implementation of the RCRA Contingency Plan.	The WIPP Hazardous Materials Incident Report was initiated as required on April 11, 2014.
D-9 Location of the Contingency	The owner/operator of the WIPP facility will ensure that copies of this Contingency Plan are available to all emergency personnel and organizations described in Section D-2. When the	The required activities described in this section are applicable to the current implementation of the RCRA	Copies of the RCRA Contingency Plan are available as described.

RCRA Contingency Plan Section	RCRA Contingency Plan Text	Applicability to the February 14, 2014, Event	Current Status/Schedule/Deviations
Plan and Plan Revisions	Contingency Plan is revised, updated copies are manually distributed (electronically or via site mail) or hand delivered to applicable WIPP Facility emergency personnel and alternate Emergency Operations Center and Joint Information Center. In addition, the owner/operator will make copies available to the following outside agencies: • Intrepid Potash NM LLC and Mosaic Potash Carlsbad Inc. • Carlsbad Fire Department, Carlsbad • Carlsbad Medical Center, Carlsbad • Lea Regional Medical Center, Hobbs • Otis Fire Department, Otis • Hobbs Fire Department, Hobbs • Joel Fire Department, Carlsbad • BLM, Carlsbad • New Mexico State Police The owner/operator of the WIPP facility will ensure that this plan is reviewed annually and amended whenever: • Applicable regulations are revised • The RCRA Part B permit for the WIPP facility is revised in any way that would affect the Contingency Plan • This plan fails in an emergency • The WIPP facility design, construction, operation, maintenance, or other circumstances change in a way that materially increases the potential for fires, explosions, or releases of hazardous waste or hazardous constituents or change the response necessary in an emergency • The list of RCRA Emergency Coordinators change • The list of WIPP facility emergency equipment changes.	Contingency Plan.	

Attachment 6
Corrective Actions Required for Recovery (reserved)

Attachment 7
As-Found Condition of Panel 7 (reserved)

Attachment 8
Panel 7 Recovery-Related Work



Status of the WIPP Underground Rollback Areas for this Reporting Period
November 10, 2014