Department of Energy
Carlsbad Field Office
P. O. Box 3090
Carlsbad, New Mexico 88221

JAN 29 2016

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NMED
Hazardous Waste Bureau

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

Ms. Kathryn Roberts, Director
Resource Protection 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 December 31, 2015, as required by NMED Administrative Orders dated February 27, 2014, and May 12, 2014, as amended by NMED Directives dated August 29, 2014, December 9, 2014, and July 15, 2015

Dear Mr. Kieling and Ms. Roberts:

The purpose of this letter is to transmit the monthly report for the reporting period ending December 31, 2015, as required by the February 27, 2014, and May 12, 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 and the July 15, 2015, directive from Ms. Kathryn Roberts to Messrs. Bryson and Breidenbach. The paper copy of the 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 according to 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,

Todd Shrader, Manager
Carlsbad Field Office

Philip J. Breidenbach, Project Manager
Nuclear Waste Partnership LLC

Enclosure

cc: (w/enclosure)
R. Maestas, NMED *ED
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Monthly Status Report for the New Mexico Environment Department Administrative Orders

Reporting Period December 1, 2015, through December 31, 2015

Introduction

This report serves to fulfill the monitoring and reporting requirements set forth by Administrative Orders, AO1, AO2, and AO3, as amended by the NMED directives dated August 29, 2014, December 9, 2014, and July 15, 2015. In accordance with Paragraph 18(a) of AO2, subsequent reports will identify new information since the previous reporting period. The following sections combine the information required by the three orders and provide references to the respective paragraphs from AO1, AO2, and AO3.

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:

Attachment 1, *Surface and Underground Inspections*, shows the current status of each Permit-required inspection, including accessibility of underground equipment for personnel performing the inspections.

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:

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) including 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) are not currently being performed due to radioactive contamination.

Surface VOC monitoring is conducted in lieu of underground monitoring. Surface monitoring is 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 non-waste workers are satisfied. Samples are being collected twice each week at one location on-site and one location off-site. The two monitoring locations, which are 24-hour VOC samples, are collected on the surface near the Training Building and at an off-site location (WQSP-4) approximately a mile southeast of the Training Building. In accordance with Paragraph 19 of AO2, the Permittees are currently monitoring for trichloroethylene as a target analyte.

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. Disposal room monitoring will commence when underground waste emplacement operations resume.

Geomechanical Monitoring

The purpose of geomechanical monitoring is to confirm the structural integrity of the underground repository. Geomechanical monitoring data are transmitted electronically via remote instruments located in Room 6 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. More than 5,400 bolts have been installed in the underground since bolting activities resumed in November 2014, and catchup bolting is approximately 85 percent complete.

Hydrogen and Methane Monitoring

Hydrogen and methane monitoring activities (required by Permit Part 4, Section 4.6.5 and associated requirements in Attachment N1) are not currently being performed due to radioactive contamination. Previous monitoring data from the Semi-Annual VOC, Hydrogen and Methane Data Summary Reports indicate that this does not pose a threat to underground waste workers.

Mine Ventilation Rate Monitoring

Mine ventilation rate monitoring activities (required by Permit Part 4, Section 4.6.4 and associated requirements of Permit 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. Pursuant to the Nitrate Salt Bearing Waste Container Isolation Plan, Revision 2, Section 3, high-efficiency particulate air (HEPA) filtration of underground exhaust air is continuing. 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). The calculated running annual average ventilation flow rate as of December 31, 2015, was 59,871 SCFM. Surface VOC monitoring is being used to ensure 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 Waste Handling Building (WHB). Since the submittal of the last monthly report, there has been no additional waste placed in storage in the WHB, and there were no changes to the storage deadlines during this reporting period. Therefore, Attachment 2, *TRU Mixed Waste Currently in Storage at the WIPP Facility*, is currently reserved. Attachment 2 was last updated June 30, 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 this 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. The results are included in Attachment 3, *Environmental Monitoring*.
    - Surface water samples – Surface water samples were obtained on the dates shown in Attachment 3.
    - Biota/Fauna samples – Fauna samples were obtained on the dates 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:

Since the submittal of the last monthly report, no derived waste was generated; therefore, Attachment 4, *Surface and Underground Derived Waste Currently in Storage at the WIPP Facility,* is currently reserved. Attachment 4 was last updated June 30, 2015.

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:

There has been no change in the status of the RCRA Contingency Plan implementation since the submittal of the last monthly report. Attachment 5, *Status of RCRA Contingency Plan Required Activities*, was last updated September 30, 2015.

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 U.S. Department of Energy (DOE). Attachment 6, *Corrective Actions Required for Recovery*, is currently reserved and was last updated October 31, 2015.

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:

This action item is complete; therefore, status updates are no longer required.

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:

This action item is complete; therefore, status updates are no longer required.

10.0 The Permittees shall provide a status of recovery-related activities relative to the underground per Paragraph 18l(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:

During this reporting period, progress continued on contamination mitigation in Panel 7, Rooms 1-5, and the S-2520 drift. An updated radiological rollback map is shown in Attachment 7*, Panel 7 & Other Recovery-Related Work.*

During this reporting period, progress has continued on the Interim Ventilation System (IVS). Attachment 8, *Interim Ventilation System & Supplemental Ventilation System Equipment and Work Activities*, shows photographs of the IVS work progress.

11.0 The Permittees shall submit a WIPP Nitrate Salt Bearing Waste Container Isolation Plan per Paragraph 22(a) of AO3. The plan shall contain a detailed proposal for the expedited closure of Panel 6 per Paragraph 22(a)(i) of AO3 and the expedited closure of Panel 7, Room 7 per Paragraph 22(a)(iii) of AO3:

On May 20, 2015, isolation of nitrate salt bearing waste containers was completed with the closure of Panel 7, Room 7. WIPP personnel also completed the initial closure of Panel 6 in May 2015. Any written updates to information in the Plan will be provided with the existing monthly report in accordance with an NMED letter dated July 15, 2015. Attachment 9, *WIPP Nitrate Salt Bearing Waste Container Isolation Plan Information Required by Administrative Order 3*, is currently reserved, and was last updated on November 30, 2015.

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	12/31/15	N/A	
Exhaust Shaft	Underground Operations	Quarterly	PM041099 Inspecting for Deterioration and Leaks/Spills	Not Current	9/14/15	1/31/16	The 2015 fourth quarter exhaust shaft inspection was not performed because upgrades to the video system required for the inspection had not been completed. It is expected to be completed in January 2016.
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	12/31/15	N/A	
Self-Rescuers	Underground Operations	Quarterly	WP 04-AU1026 Inspecting for Deterioration and Functionality in accordance with MSHA requirements	Current	12/31/15	N/A	
Underground Openings—Roof Bolts and Travelways	Underground Operations	Weekly	WP 04-AU1007 Inspecting for Deterioration	Current	12/31/15	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
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	12/31/15	N/A	
Explosion-Isolation Walls	Underground Operations	Quarterly	Integrity and Deterioration of Accessible Areas	Current	12/11/15	N/A	
Bulkhead in Filled Panels	Underground Operations	Monthly	Integrity and Deterioration of Accessible Areas	Not Current	12/15/15	3/31/2016	Inspections in Panel 6 and Panel 7 are current. Access limitations have prevented inspections in Panels 3 & 4. Inspections for Panel 3 and Panel 4 were last performed in March 2015.
MSHA Air Quality Monitor	Maintenance/ Underground Operations	Daily	WP 12-IH1828 Inspecting for Air Quality Monitoring Equipment Functional Check	Current	12/31/15	N/A	
Ambulances (Surface) and related emergency supplies and equipment	Emergency Services	Weekly	12-FP0030 Inspecting for Mechanical Operability, Deterioration, and Required Equipment	Not Current	12/20/15	N/A	Due to inclement weather and WIPP facility closure, the inspection for the week of 12/27/2015 was not performed. The next inspection performed on January 3, 2016 indicated that the equipment was satisfactory.

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 (Underground) and related emergency supplies and equipment	Emergency Services	Weekly	12-FP0030 Inspecting for Mechanical Operability, Deterioration, and Required Equipment	Not Current For in-service ambulance #2	12/19/15	2/29/16	Due to inclement weather the inspection for the week of 12/26/2015 was not performed. The next inspection performed on January 2, 2016 indicated that the equipment was satisfactory. The underground ambulance #2 is in service. Underground ambulance #3 is awaiting procedural changes prior to starting inspections. It is expected to go into service in February 2016.
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	Current	7/1/15	N/A	Two inspections were performed in calendar year 2015 (January and July). The semiannual inspection frequency has been satisfied.
Fire Extinguishers (Surface)	Emergency Services	Monthly	12-FP0036 Inspecting for Deterioration, Leaks/Spills, Expiration, seals, fullness, and pressure	Current	12/31/15	N/A	
Fire Extinguishers (Underground)	Emergency Services	Monthly	12-FP0036 Inspecting for Deterioration, Leaks/Spills, Expiration, seals, fullness, and pressure	Current	12/31/15	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 Hoses	Emergency Services	Annually (minimum)	12-FP0031 Inspecting for Deterioration and Leaks/Spills	Current	2/28/15	N/A	
Fire Hydrants	Emergency Services	Semiannual/ annually	12-FP0034 Inspecting for Deterioration and Leaks/Spills	Current	9/25/15: (Semiannual) 8/1/15 – 8/6/15: (Annual)	N/A	
Fire Pumps	Emergency Services	Weekly/ annually	WP 12-FP0026 Inspecting for Deterioration, Leaks/Spills, valves, and panel lights	Current	12/28/15	N/A	
Fire Sprinkler Systems	Emergency Services	Monthly/ quarterly	WP 12-FP0025 Inspecting for Deterioration, Leaks/Spills, static pressures, and removable strainers	Current	12/28/15, 12/29/15, 12/31/15	N/A	
Fire and Emergency Response Trucks (Surface Fire Trucks)	Emergency Services	Weekly	12-FP0033 Inspecting for Mechanical Operability, Deterioration, Leaks/Spills, and Required Equipment	Not Current	12/18/15, 12/19/15	N/A	Due to inclement weather the inspection for the week of 12/26/2015 was not performed. The next inspections performed on January 1 and January 2, 2016 indicated that the equipment was satisfactory.

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 and Emergency Response Trucks (Underground Fire Suppression Vehicles)	Emergency Services	Weekly	12-FP0033 Inspecting for Mechanical Operability, Deterioration, Leaks/Spills, and Required Equipment	Not Current for two vehicles on site.	12/20/15	2/29/16	Due to inclement weather and WIPP facility closure, the inspection for the week of 12/27/2015 was not performed. The next inspection performed on January 3, 2016 indicated that the equipment was satisfactory. Weekly inspections have been performed on the two vehicles in the underground, which are currently in-service.
Automatic on-board fire suppression systems	Emergency Services	Semiannual	WP 12-FP0060 Inspecting for Mechanical Operability, Deterioration	Current	9/30/15	N/A	There are 13 vehicles (mining operations equipment and waste handling equipment) identified to be changed over from the manual system to an automatic on-board fire suppression system.
Hazardous Material Response Equipment	Emergency Services	Weekly	12-FP0033 Inspecting for Mechanical Operability, Deterioration, and Required Equipment	Current	12/29/15	N/A	
Miners First Aid Station	Emergency Services	Quarterly	12-FP0035 Inspecting for Required Equipment	Current	12/31/15	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
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	Not Current	12/20/15	N/A	Due to inclement weather and WIPP facility closure, the inspection for the week of 12/27/2015 was not performed. The next inspection performed on January 3, 2016 indicated that the equipment was satisfactory. Self-Contained Breathing Apparatuses are currently located on the emergency vehicles and weekly inspections are being performed as related emergency supplies and equipment are updated.
Rescue Truck (Surface)	Emergency Services	Weekly	12-FP0030 and 12-FP0033 Inspecting for Mechanical Operability, Deterioration, Leaks/Spills, and Required Equipment	Current	12/31/15	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
Rescue Trucks (Underground)	Emergency Services	Weekly	12-FP0030 and 12-FP0033 Inspecting for Mechanical Operability, Deterioration, Leaks/Spills, and Required Equipment	Not Current for truck on site.	2/8/14	2/29/16	There are two underground rescue trucks on the equipment list, but one is still awaiting arrival to the site. The arrival of the second rescue truck is pending. Because the on-site rescue truck is currently not operating, underground emergency response compensatory measures have been implemented including fire and medical.
Vehicle Siren (Surface Vehicles)	Emergency Services	Weekly	Functional Test included with inspection of the Ambulances, Fire Trucks, and Rescue Trucks	Current	12/31/15	N/A	
Vehicle Siren (Underground Vehicles)	Emergency Services	Weekly	Functional Test included with inspection of the Ambulances, Fire Trucks, and Rescue Trucks	Not Current	12/20/15	N/A	Due to inclement weather and WIPP facility closure, the inspection for the week of 12/27/2015 was not performed. The next inspection performed on January 3, 2016 indicated that the equipment was satisfactory.

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
Adjustable Center of Gravity Lift Fixture	Waste Handling	Preoperational	WP 05-WH1410 Inspecting for Mechanical Operability and Deterioration	Current	12/20/15 (41-T-037) 10/23/14 (41-T-038) 12/14/15 (41-T-032) 4/13/15 (41-T-036)	N/A	
Contact-Handled (CH) TRU Underground Transporter	Waste Handling	Preoperational	WP 05-WH1603 Inspecting for Leaks/Spills, Mechanical Operability, Deterioration, and area around transporter clear of obstacles	Current	7/23/15 (52-H-008A)	N/A	One of three transporters is now in service. This is a pre-operational check needed only prior to use. This transporter is in the uncontaminated area of the mine.
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	12/08/15 (41-H-018)	N/A	This is a pre-operational inspection and is not needed for daily operations. Pre-operational inspection performed for training.
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	7/14/15 (41-H-020A) 7/10/15 (41-H-020B)	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) 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 Leaks/Spills, Mechanical Operability, Deterioration, and On board fire suppression system	Current	12/16/15 (41-H-009) 12/12/15 (41-H-013) 9/24/15 (41-H-051) 12/23/15 (41-H-012D) 12/16/15 (41-H-012E) 5/23/15 (74-H-010B)	N/A	
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 Leaks/Spills, Mechanical Operability, Deterioration, and On board fire suppression system	Current	5/20/15 (52-H-126)	N/A	One 6-ton forklift in the underground is now in service in Panel 7. The inspection was completed as shown as pre-operational. Other forklifts are not in use due to the fire and radiological event.
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	12/30/15 (Weekly) 12/31/15 (Daily)	N/A	
TRU Mixed Waste Decontamination Equipment	Waste Handling	Annually	WP 05-WH1101 Inspecting for Required Equipment	Current	12/30/15	N/A	Annual 2015 Inspection. This is an annual inspection and not needed for daily operation.

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 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	No change. This is a pre-operational inspection and is not needed for daily operations.
Waste Handling Cranes	Waste Handling	Preoperational	WP 05-WH1407 Inspecting for Mechanical Operability, Deterioration, and Leaks/Spills	Current	1/6/15 (41-T-151A) 7/7/15 (41-T-151B) 7/23/15 (41-T-151C) 12/20/15 (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.
Push-Pull Attachment (Surface)	Waste Handling	Preoperational	WP 05-WH1401 Inspecting for Damage and Deterioration	Current	7/08/15 (41-T-160A) 9/1/15 (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. The preoperational inspection was completed for training purposes and in support of preventive maintenance only. Inspection not intended for daily operations.

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
Trailer Jockey	Waste Handling	Preoperational	WP 05-WH1405 Inspecting for Leaks/Spills, Mechanical Operability and Deterioration	Current	12/26/15 (41-H-151A) 11/19/15 (41-H-151B) 11/22/15 (41-H-046)	N/A	There are three trailer jockeys. Inspections are only performed if the equipment is used on the shift.
Bolting Robot	Waste Handling	Preoperational	WP 05-WH1203 Mechanical Operability	Current	6/29/12	When waste disposal operations resume	Equipment not in use due to the fire and radiological events. The preoperational inspection was completed for training purposes and in support of preventive maintenance only. Inspection not intended for daily operations.
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) 7/21/15 (41-H-021B)	N/A	
Payload Transfer Station	Waste Handling	Preoperational	WP 05-WH1208 Mechanical Operability, Deterioration, and Guards in proper place	Current	12/16/14 (41-Z-041)	N/A	
Monorail Hoist	Waste Handling	Preoperational	WP 05-WH1202 Mechanical Operability, and Leaks/Spills	Current	10/29/15 (41-H-027)	N/A	
Bolting Station	Waste Handling	Preoperational	WP 05-WH1203 Mechanical Operability, Deterioration, and Guards in proper place	Current	3/23/15 (41-T-053A) (41-T-054A)	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
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	12/25/15 (#1) 12/25/15 (#2)	N/A	
Central Monitoring System (CMS)	Facility Operations	Continuous	Automatic Self-Checking	Current	12/31/15	N/A	
Mine Pager Phones (between surface and underground)	Facility Operations	Monthly (see comment)	WP 04-PC3017 Testing of PA and Underground Alarms and Mine Page Phones at essential locations	Current	12/31/15	N/A	Mine pager phones in non-essential locations are not routinely inspected. Many are used in day-to-day operations. They are used until they fail, at which time they are repaired. Mine pager phones are used routinely by Underground Operations.
Mine Pager Phones (underground)	Facility Operations	Monthly (see comment)	WP 04-PC3017 Testing of PA and Underground Alarms and Mine Page Phones at essential locations	Current	12/31/15	N/A	Mine pager phones in non-essential locations are not routinely inspected. Many are used in day-to-day operations. They are used until they fail, at which time they are repaired. Mine pager phones are used routinely by Underground Operations.

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	12/31/15	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	Current	12/31/15	N/A	
Radio Equipment	Facility Operations	Daily	Radios are operated daily and are repaired upon failure	Current	12/31/15	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	12/31/15	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	12/31/15	N/A	
Facility Inspections (Water Diversion Berms)	Facility Engineering	Annually	WP 10-WC3008 Inspecting for Damage, Impediments to water flow, and Deterioration	Current	9/7/15	N/A	
Eye Wash and Shower Equipment (Surface)	Equipment Custodian	Weekly	WP 12-IS1832 Inspecting for Deterioration	Current	12/21/15-12/31/15	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 (Underground)	Equipment Custodian	Weekly	WP 12-IS1832 Inspecting for Deterioration	Current	12/21/15- 12/31/15	N/A	
Perimeter Fence, Gates, Signs	Security	Daily	PF0-008 Inspecting for Deterioration and Posted Warnings	Current	12/31/15	N/A	
Underground—Geomechanical Instrumentation System (GIS)	Geotechnical Engineering	Monthly	WP 07-EU1301 Inspecting for Deterioration	Current	12/22/15	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)	No date set because the 700 fans are not used while in filtration mode.	The 700 horsepower fans are not in use because underground ventilation system is operating in filtration mode.

[1] Routine inspections are proposed to begin with resumption of normal operations.

Attachment 2

TRU Mixed Waste Currently in Storage at the WIPP Facility (reserved)

[Last updated June 30, 2015]

Attachment 3
Environmental Monitoring

Attachment 3 contains the following environmental monitoring information:

- VOC Monitoring Map
  - Validated VOC sample data
- Radiological Monitoring Maps & Data
  - Validated surface water sample data
  - Validated biota/fauna sample data

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	UNITS	MRL*	Concentration
CEMRC	10/8/2015	10/13/2015	9358	WQSP-4	1,1,1-Trichloroethane	71-55-6	PPBV	0.4	U
CEMRC	10/8/2015	10/13/2015	9358	WQSP-4	1,1,2,2-Tetrachloroethane	79-34-5	PPBV	0.4	U
CEMRC	10/8/2015	10/13/2015	9358	WQSP-4	1,1-Dichloroethylene	75-35-4	PPBV	0.4	U
CEMRC	10/8/2015	10/13/2015	9358	WQSP-4	1,2-Dichloroethane	107-06-2	PPBV	0.4	U
CEMRC	10/8/2015	10/13/2015	9358	WQSP-4	Carbon Tetrachloride	56-23-5	PPBV	0.4	U
CEMRC	10/8/2015	10/13/2015	9358	WQSP-4	Chlorobenzene	108-90-7	PPBV	0.4	U
CEMRC	10/8/2015	10/13/2015	9358	WQSP-4	Chloroform	67-66-3	PPBV	0.4	U
CEMRC	10/8/2015	10/13/2015	9358	WQSP-4	Methylene Chloride	75-09-2	PPBV	0.4	U
CEMRC	10/8/2015	10/13/2015	9358	WQSP-4	Toluene	108-88-3	PPBV	0.4	0.12 J
CEMRC	10/8/2015	10/13/2015	9358	WQSP-4	Trichloroethylene (1)	79-01-6	PPBV	0.4	U
CEMRC	10/8/2015	10/13/2015	9358	WQSP-4	Acetone	67-64-1	PPBV		0.8 NJ
CEMRC	10/8/2015	10/13/2015	9358	WQSP-4	Butane	106-97-8	PPBV		3.82 NJ
CEMRC	10/8/2015	10/13/2015	9358	WQSP-4	Isobutane	75-28-5	PPBV		2.2 NJ
CEMRC	10/8/2015	10/13/2015	9358	WQSP-4	Pentane	109-66-0	PPBV		1.68 NJ
CEMRC	10/8/2015	10/13/2015	9358	WQSP-4	Propane	74-98-6	PPBV		4.28 NJ
CEMRC	10/8/2015	10/13/2015	9358	WQSP-4	1,1,1-Trichloroethane	71-55-6	PPTV	200	U
CEMRC	10/8/2015	10/13/2015	9358	WQSP-4	1,1,2,2-Tetrachloroethane	79-34-5	PPTV	200	U
CEMRC	10/8/2015	10/13/2015	9358	WQSP-4	1,1-Dichloroethylene	75-35-4	PPTV	200	U
CEMRC	10/8/2015	10/13/2015	9358	WQSP-4	1,2-Dichloroethane	107-06-2	PPTV	200	18.9 J
CEMRC	10/8/2015	10/13/2015	9358	WQSP-4	Carbon Tetrachloride	56-23-5	PPTV	200	91.66 J
CEMRC	10/8/2015	10/13/2015	9358	WQSP-4	Chlorobenzene	108-90-7	PPTV	200	U
CEMRC	10/8/2015	10/13/2015	9358	WQSP-4	Chloroform	67-66-3	PPTV	200	13.64 J

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.
PPTV = parts per trillion by volume
PPBV = parts per billion by volume

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	UNITS	MRL*	Concentration
CEMRC	10/8/2015	10/13/2015	9358	WQSP-4	Methylene Chloride	75-09-2	PPTV	200	55.3 J
CEMRC	10/8/2015	10/13/2015	9358	WQSP-4	Toluene	108-88-3	PPTV	200	128.14 J
CEMRC	10/8/2015	10/13/2015	9358	WQSP-4	Trichloroethylene (1)	79-01-6	PPTV	200	U
CEMRC	10/8/2015	10/13/2015	9359	Building 489 Air Intake	1,1,1-Trichloroethane	71-55-6	PPBV	0.4	U
CEMRC	10/8/2015	10/13/2015	9359	Building 489 Air Intake	1,1,2,2-Tetrachloroethane	79-34-5	PPBV	0.4	U
CEMRC	10/8/2015	10/13/2015	9359	Building 489 Air Intake	1,1-Dichloroethylene	75-35-4	PPBV	0.4	U
CEMRC	10/8/2015	10/13/2015	9359	Building 489 Air Intake	1,2-Dichloroethane	107-06-2	PPBV	0.4	U
CEMRC	10/8/2015	10/13/2015	9359	Building 489 Air Intake	Carbon Tetrachloride	56-23-5	PPBV	0.4	0.16 J
CEMRC	10/8/2015	10/13/2015	9359	Building 489 Air Intake	Chlorobenzene	108-90-7	PPBV	0.4	U
CEMRC	10/8/2015	10/13/2015	9359	Building 489 Air Intake	Chloroform	67-66-3	PPBV	0.4	U
CEMRC	10/8/2015	10/13/2015	9359	Building 489 Air Intake	Methylene Chloride	75-09-2	PPBV	0.4	U
CEMRC	10/8/2015	10/13/2015	9359	Building 489 Air Intake	Toluene	108-88-3	PPBV	0.4	0.18 J
CEMRC	10/8/2015	10/13/2015	9359	Building 489 Air Intake	Trichloroethylene (1)	79-01-6	PPBV	0.4	U
CEMRC	10/8/2015	10/13/2015	9359	Building 489 Air Intake	Acetone	67-64-1	PPBV		0.54 NJ
CEMRC	10/8/2015	10/13/2015	9359	Building 489 Air Intake	Butane	106-97-8	PPBV		4.06 NJ
CEMRC	10/8/2015	10/13/2015	9359	Building 489 Air Intake	Isobutane	75-28-5	PPBV		2.5 NJ
CEMRC	10/8/2015	10/13/2015	9359	Building 489 Air Intake	Pentane	109-66-0	PPBV		1.84 NJ
CEMRC	10/8/2015	10/13/2015	9359	Building 489 Air Intake	Propane	74-98-6	PPBV		4.44 NJ
CEMRC	10/8/2015	10/13/2015	9359	Building 489 Air Intake	1,1,1-Trichloroethane	71-55-6	PPTV	200	29.9 J
CEMRC	10/8/2015	10/13/2015	9359	Building 489 Air Intake	1,1,2,2-Tetrachloroethane	79-34-5	PPTV	200	U
CEMRC	10/8/2015	10/13/2015	9359	Building 489 Air Intake	1,1-Dichloroethylene	75-35-4	PPTV	200	U
CEMRC	10/8/2015	10/13/2015	9359	Building 489 Air Intake	1,2-Dichloroethane	107-06-2	PPTV	200	19.06 J

Qualifiers:

J = Estimated value; below laboratory's method reporting limit (MRL), but above method detection limit (MDL).
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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.

PPTV = parts per trillion by volume

PPBV = parts per billion by volume

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	UNITS	MRL*	Concentration
CEMRC	10/8/2015	10/13/2015	9359	Building 489 Air Intake	Carbon Tetrachloride	56-23-5	PPTV	200	166.34 J
CEMRC	10/8/2015	10/13/2015	9359	Building 489 Air Intake	Chlorobenzene	108-90-7	PPTV	200	U
CEMRC	10/8/2015	10/13/2015	9359	Building 489 Air Intake	Chloroform	67-66-3	PPTV	200	19.78 J
CEMRC	10/8/2015	10/13/2015	9359	Building 489 Air Intake	Methylene Chloride	75-09-2	PPTV	200	58 J
CEMRC	10/8/2015	10/13/2015	9359	Building 489 Air Intake	Toluene	108-88-3	PPTV	200	169.3 J
CEMRC	10/8/2015	10/13/2015	9359	Building 489 Air Intake	Trichloroethylene (1)	79-01-6	PPTV	200	38.62 J
CEMRC	10/14/2015	11/2/2015	9360	WQSP-4	1,1,1-Trichloroethane	71-55-6	PPBV	0.4	U
CEMRC	10/14/2015	11/2/2015	9360	WQSP-4	1,1,2,2-Tetrachloroethane	79-34-5	PPBV	0.4	U
CEMRC	10/14/2015	11/2/2015	9360	WQSP-4	1,1-Dichloroethylene	75-35-4	PPBV	0.4	U
CEMRC	10/14/2015	11/2/2015	9360	WQSP-4	1,2-Dichloroethane	107-06-2	PPBV	0.4	U
CEMRC	10/14/2015	11/2/2015	9360	WQSP-4	Carbon Tetrachloride	56-23-5	PPBV	0.4	U
CEMRC	10/14/2015	11/2/2015	9360	WQSP-4	Chlorobenzene	108-90-7	PPBV	0.4	U
CEMRC	10/14/2015	11/2/2015	9360	WQSP-4	Chloroform	67-66-3	PPBV	0.4	U
CEMRC	10/14/2015	11/2/2015	9360	WQSP-4	Methylene Chloride	75-09-2	PPBV	0.4	U
CEMRC	10/14/2015	11/2/2015	9360	WQSP-4	Toluene	108-88-3	PPBV	0.4	0.34 J
CEMRC	10/14/2015	11/2/2015	9360	WQSP-4	Trichloroethylene (1)	79-01-6	PPBV	0.4	U
CEMRC	10/14/2015	11/2/2015	9360	WQSP-4	Acetone	67-64-1	PPBV		0.98 NJ
CEMRC	10/14/2015	11/2/2015	9360	WQSP-4	Butane	106-97-8	PPBV		7.22 NJ
CEMRC	10/14/2015	11/2/2015	9360	WQSP-4	Cyclohexane, methyl-	108-87-2	PPBV		0.48 NJ
CEMRC	10/14/2015	11/2/2015	9360	WQSP-4	Cyclopentane, methyl-	96-37-7	PPBV		0.54 NJ
CEMRC	10/14/2015	11/2/2015	9360	WQSP-4	Isobutane	75-28-5	PPBV		5.18 NJ
CEMRC	10/14/2015	11/2/2015	9360	WQSP-4	Pentane	109-66-0	PPBV		3.26 NJ

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.

PPTV = parts per trillion by volume

PPBV = parts per billion by volume

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	UNITS	MRL*	Concentration
CEMRC	10/14/2015	11/2/2015	9360	WQSP-4	Pentane, 2-methyl-	107-83-5	PPBV		0.78 NJ
CEMRC	10/14/2015	11/2/2015	9360	WQSP-4	Propane	74-98-6	PPBV		5.44 NJ
CEMRC	10/14/2015	11/2/2015	9360	WQSP-4	1,1,1-Trichloroethane	71-55-6	PPTV	200	U
CEMRC	10/14/2015	11/2/2015	9360	WQSP-4	1,1,2,2-Tetrachloroethane	79-34-5	PPTV	200	U
CEMRC	10/14/2015	11/2/2015	9360	WQSP-4	1,1-Dichloroethylene	75-35-4	PPTV	200	U
CEMRC	10/14/2015	11/2/2015	9360	WQSP-4	1,2-Dichloroethane	107-06-2	PPTV	200	25.2 J
CEMRC	10/14/2015	11/2/2015	9360	WQSP-4	Carbon Tetrachloride	56-23-5	PPTV	200	87.12 J
CEMRC	10/14/2015	11/2/2015	9360	WQSP-4	Chlorobenzene	108-90-7	PPTV	200	17 J
CEMRC	10/14/2015	11/2/2015	9360	WQSP-4	Chloroform	67-66-3	PPTV	200	23.64 J
CEMRC	10/14/2015	11/2/2015	9360	WQSP-4	Methylene Chloride	75-09-2	PPTV	200	62.2 J
CEMRC	10/14/2015	11/2/2015	9360	WQSP-4	Toluene	108-88-3	PPTV	200	348.18
CEMRC	10/14/2015	11/2/2015	9360	WQSP-4	Trichloroethylene (1)	79-01-6	PPTV	200	7.98 J
CEMRC	10/14/2015	11/2/2015	9361	Building 489 Air Intake	1,1,1-Trichloroethane	71-55-6	PPBV	0.4	U
CEMRC	10/14/2015	11/2/2015	9361	Building 489 Air Intake	1,1,2,2-Tetrachloroethane	79-34-5	PPBV	0.4	U
CEMRC	10/14/2015	11/2/2015	9361	Building 489 Air Intake	1,1-Dichloroethylene	75-35-4	PPBV	0.4	U
CEMRC	10/14/2015	11/2/2015	9361	Building 489 Air Intake	1,2-Dichloroethane	107-06-2	PPBV	0.4	U
CEMRC	10/14/2015	11/2/2015	9361	Building 489 Air Intake	Carbon Tetrachloride	56-23-5	PPBV	0.4	0.12 J
CEMRC	10/14/2015	11/2/2015	9361	Building 489 Air Intake	Chlorobenzene	108-90-7	PPBV	0.4	U
CEMRC	10/14/2015	11/2/2015	9361	Building 489 Air Intake	Chloroform	67-66-3	PPBV	0.4	U
CEMRC	10/14/2015	11/2/2015	9361	Building 489 Air Intake	Methylene Chloride	75-09-2	PPBV	0.4	U
CEMRC	10/14/2015	11/2/2015	9361	Building 489 Air Intake	Toluene	108-88-3	PPBV	0.4	0.42
CEMRC	10/14/2015	11/2/2015	9361	Building 489 Air Intake	Trichloroethylene (1)	79-01-6	PPBV	0.4	U

Qualifiers:

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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.

PPTV = parts per trillion by volume

PPBV = parts per billion by volume

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	UNITS	MRL*	Concentration
CEMRC	10/14/2015	11/2/2015	9361	Building 489 Air Intake	Butane	106-97-8	PPBV		8.96 NJ
CEMRC	10/14/2015	11/2/2015	9361	Building 489 Air Intake	Butane, 2-methyl-	78-78-4	PPBV		3.94 NJ
CEMRC	10/14/2015	11/2/2015	9361	Building 489 Air Intake	Cyclohexane, methyl-	108-87-2	PPBV		0.68 NJ
CEMRC	10/14/2015	11/2/2015	9361	Building 489 Air Intake	Cyclopentane, methyl-	96-37-7	PPBV		0.78 NJ
CEMRC	10/14/2015	11/2/2015	9361	Building 489 Air Intake	Isobutane	75-28-5	PPBV		4.88 NJ
CEMRC	10/14/2015	11/2/2015	9361	Building 489 Air Intake	Pentane	109-66-0	PPBV		4.12 NJ
CEMRC	10/14/2015	11/2/2015	9361	Building 489 Air Intake	Propane	74-98-6	PPBV		7.06 NJ
CEMRC	10/14/2015	11/2/2015	9361	Building 489 Air Intake	1,1,1-Trichloroethane	71-55-6	PPTV	200	13.28 J
CEMRC	10/14/2015	11/2/2015	9361	Building 489 Air Intake	1,1,2,2-Tetrachloroethane	79-34-5	PPTV	200	U
CEMRC	10/14/2015	11/2/2015	9361	Building 489 Air Intake	1,1-Dichloroethylene	75-35-4	PPTV	200	U
CEMRC	10/14/2015	11/2/2015	9361	Building 489 Air Intake	1,2-Dichloroethane	107-06-2	PPTV	200	30.32 J
CEMRC	10/14/2015	11/2/2015	9361	Building 489 Air Intake	Carbon Tetrachloride	56-23-5	PPTV	200	134.04 J
CEMRC	10/14/2015	11/2/2015	9361	Building 489 Air Intake	Chlorobenzene	108-90-7	PPTV	200	U
CEMRC	10/14/2015	11/2/2015	9361	Building 489 Air Intake	Chloroform	67-66-3	PPTV	200	25.86 J
CEMRC	10/14/2015	11/2/2015	9361	Building 489 Air Intake	Methylene Chloride	75-09-2	PPTV	200	58.72 J
CEMRC	10/14/2015	11/2/2015	9361	Building 489 Air Intake	Toluene	108-88-3	PPTV	200	398.08
CEMRC	10/14/2015	11/2/2015	9361	Building 489 Air Intake	Trichloroethylene (1)	79-01-6	PPTV	200	20.58 J
CEMRC	10/15/2015	11/2/2015	9362	WQSP-4	1,1,1-Trichloroethane	71-55-6	PPBV	0.4	U
CEMRC	10/15/2015	11/2/2015	9362	WQSP-4	1,1,2,2-Tetrachloroethane	79-34-5	PPBV	0.4	U
CEMRC	10/15/2015	11/2/2015	9362	WQSP-4	1,1-Dichloroethylene	75-35-4	PPBV	0.4	U
CEMRC	10/15/2015	11/2/2015	9362	WQSP-4	1,2-Dichloroethane	107-06-2	PPBV	0.4	U
CEMRC	10/15/2015	11/2/2015	9362	WQSP-4	Carbon Tetrachloride	56-23-5	PPBV	0.4	0.1 J

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.

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

PPTV = parts per trillion by volume

PPBV = parts per billion by volume

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	UNITS	MRL*	Concentration
CEMRC	10/15/2015	11/2/2015	9362	WQSP-4	Chlorobenzene	108-90-7	PPBV	0.4	U
CEMRC	10/15/2015	11/2/2015	9362	WQSP-4	Chloroform	67-66-3	PPBV	0.4	U
CEMRC	10/15/2015	11/2/2015	9362	WQSP-4	Methylene Chloride	75-09-2	PPBV	0.4	U
CEMRC	10/15/2015	11/2/2015	9362	WQSP-4	Toluene	108-88-3	PPBV	0.4	0.44
CEMRC	10/15/2015	11/2/2015	9362	WQSP-4	Trichloroethylene (1)	79-01-6	PPBV	0.4	U
CEMRC	10/15/2015	11/2/2015	9362	WQSP-4	Acetone	67-64-1	PPBV		0.7 NJ
CEMRC	10/15/2015	11/2/2015	9362	WQSP-4	Butane	106-97-8	PPBV		8.56 NJ
CEMRC	10/15/2015	11/2/2015	9362	WQSP-4	Cyclopentane, methyl-	96-37-7	PPBV		0.54 NJ
CEMRC	10/15/2015	11/2/2015	9362	WQSP-4	Isobutane	75-28-5	PPBV		4.74 NJ
CEMRC	10/15/2015	11/2/2015	9362	WQSP-4	Pentane	109-66-0	PPBV		4.02 NJ
CEMRC	10/15/2015	11/2/2015	9362	WQSP-4	Propane	74-98-6	PPBV		6.62 NJ
CEMRC	10/15/2015	11/2/2015	9362	WQSP-4	1,1,1-Trichloroethane	71-55-6	PPTV	200	U
CEMRC	10/15/2015	11/2/2015	9362	WQSP-4	1,1,2,2-Tetrachloroethane	79-34-5	PPTV	200	U
CEMRC	10/15/2015	11/2/2015	9362	WQSP-4	1,1-Dichloroethylene	75-35-4	PPTV	200	U
CEMRC	10/15/2015	11/2/2015	9362	WQSP-4	1,2-Dichloroethane	107-06-2	PPTV	200	26.72 J
CEMRC	10/15/2015	11/2/2015	9362	WQSP-4	Carbon Tetrachloride	56-23-5	PPTV	200	102.3 J
CEMRC	10/15/2015	11/2/2015	9362	WQSP-4	Chlorobenzene	108-90-7	PPTV	200	U
CEMRC	10/15/2015	11/2/2015	9362	WQSP-4	Chloroform	67-66-3	PPTV	200	55.44 J
CEMRC	10/15/2015	11/2/2015	9362	WQSP-4	Methylene Chloride	75-09-2	PPTV	200	54.48 J
CEMRC	10/15/2015	11/2/2015	9362	WQSP-4	Toluene	108-88-3	PPTV	200	465.46
CEMRC	10/15/2015	11/2/2015	9362	WQSP-4	Trichloroethylene (1)	79-01-6	PPTV	200	U
CEMRC	10/15/2015	11/2/2015	9363	Building 489 Air Intake	1,1,1-Trichloroethane	71-55-6	PPBV	0.6	U

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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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	UNITS	MRL*	Concentration
CEMRC	10/15/2015	11/2/2015	9363	Building 489 Air Intake	1,1,2,2-Tetrachloroethane	79-34-5	PPBV	0.6	U
CEMRC	10/15/2015	11/2/2015	9363	Building 489 Air Intake	1,1-Dichloroethylene	75-35-4	PPBV	0.6	U
CEMRC	10/15/2015	11/2/2015	9363	Building 489 Air Intake	1,2-Dichloroethane	107-06-2	PPBV	0.6	U
CEMRC	10/15/2015	11/2/2015	9363	Building 489 Air Intake	Carbon Tetrachloride	56-23-5	PPBV	0.6	0.15 J
CEMRC	10/15/2015	11/2/2015	9363	Building 489 Air Intake	Chlorobenzene	108-90-7	PPBV	0.6	U
CEMRC	10/15/2015	11/2/2015	9363	Building 489 Air Intake	Chloroform	67-66-3	PPBV	0.6	U
CEMRC	10/15/2015	11/2/2015	9363	Building 489 Air Intake	Methylene Chloride	75-09-2	PPBV	0.6	U
CEMRC	10/15/2015	11/2/2015	9363	Building 489 Air Intake	Toluene	108-88-3	PPBV	0.6	0.51 J
CEMRC	10/15/2015	11/2/2015	9363	Building 489 Air Intake	Trichloroethylene (1)	79-01-6	PPBV	0.6	U
CEMRC	10/15/2015	11/2/2015	9363	Building 489 Air Intake	Butane	106-97-8	PPBV		11.4 NJ
CEMRC	10/15/2015	11/2/2015	9363	Building 489 Air Intake	Butane, 2-methyl-	78-78-4	PPBV		4.77 NJ
CEMRC	10/15/2015	11/2/2015	9363	Building 489 Air Intake	Cyclopentane, methyl-	96-37-7	PPBV		0.78 NJ
CEMRC	10/15/2015	11/2/2015	9363	Building 489 Air Intake	Isobutane	75-28-5	PPBV		6.06 NJ
CEMRC	10/15/2015	11/2/2015	9363	Building 489 Air Intake	Pentane	109-66-0	PPBV		5.07 NJ
CEMRC	10/15/2015	11/2/2015	9363	Building 489 Air Intake	Propane	74-98-6	PPBV		9.84 NJ
CEMRC	10/15/2015	11/2/2015	9363	Building 489 Air Intake	1,1,1-Trichloroethane	71-55-6	PPTV	300	19.2 J
CEMRC	10/15/2015	11/2/2015	9363	Building 489 Air Intake	1,1,2,2-Tetrachloroethane	79-34-5	PPTV	300	U
CEMRC	10/15/2015	11/2/2015	9363	Building 489 Air Intake	1,1-Dichloroethylene	75-35-4	PPTV	300	U
CEMRC	10/15/2015	11/2/2015	9363	Building 489 Air Intake	1,2-Dichloroethane	107-06-2	PPTV	300	33.27 J
CEMRC	10/15/2015	11/2/2015	9363	Building 489 Air Intake	Carbon Tetrachloride	56-23-5	PPTV	300	164.61 J
CEMRC	10/15/2015	11/2/2015	9363	Building 489 Air Intake	Chlorobenzene	108-90-7	PPTV	300	U
CEMRC	10/15/2015	11/2/2015	9363	Building 489 Air Intake	Chloroform	67-66-3	PPTV	300	27.24 J
CEMRC	10/15/2015	11/2/2015	9363	Building 489 Air Intake	Methylene Chloride	75-09-2	PPTV	300	63.36 J

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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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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	UNITS	MRL*	Concentration
CEMRC	10/15/2015	11/2/2015	9363	Building 489 Air Intake	Toluene	108-88-3	PPTV	300	501.75
CEMRC	10/15/2015	11/2/2015	9363	Building 489 Air Intake	Trichloroethylene (1)	79-01-6	PPTV	300	33.6 J
CEMRC	10/21/2015	11/2/2015	9365	WQSP-4-FD	1,1,1-Trichloroethane	71-55-6	PPBV	0.6	U
CEMRC	10/21/2015	11/2/2015	9365	WQSP-4-FD	1,1,2,2-Tetrachloroethane	79-34-5	PPBV	0.6	U
CEMRC	10/21/2015	11/2/2015	9365	WQSP-4-FD	1,1-Dichloroethylene	75-35-4	PPBV	0.6	U
CEMRC	10/21/2015	11/2/2015	9365	WQSP-4-FD	1,2-Dichloroethane	107-06-2	PPBV	0.6	U
CEMRC	10/21/2015	11/2/2015	9365	WQSP-4-FD	Carbon Tetrachloride	56-23-5	PPBV	0.6	U
CEMRC	10/21/2015	11/2/2015	9365	WQSP-4-FD	Chlorobenzene	108-90-7	PPBV	0.6	U
CEMRC	10/21/2015	11/2/2015	9365	WQSP-4-FD	Chloroform	67-66-3	PPBV	0.6	U
CEMRC	10/21/2015	11/2/2015	9365	WQSP-4-FD	Methylene Chloride	75-09-2	PPBV	0.6	U
CEMRC	10/21/2015	11/2/2015	9365	WQSP-4-FD	Toluene	108-88-3	PPBV	0.6	0.15 J
CEMRC	10/21/2015	11/2/2015	9365	WQSP-4-FD	Trichloroethylene (1)	79-01-6	PPBV	0.6	U
CEMRC	10/21/2015	11/2/2015	9365	WQSP-4-FD	Butane	106-97-8	PPBV		4.44 NJ
CEMRC	10/21/2015	11/2/2015	9365	WQSP-4-FD	Butane, 2-methyl-	78-78-4	PPBV		1.98 NJ
CEMRC	10/21/2015	11/2/2015	9365	WQSP-4-FD	Isobutane	75-28-5	PPBV		2.4 NJ
CEMRC	10/21/2015	11/2/2015	9365	WQSP-4-FD	Pentane	109-66-0	PPBV		1.47 NJ
CEMRC	10/21/2015	11/2/2015	9365	WQSP-4-FD	Propane	74-98-6	PPBV		4.59 NJ
CEMRC	10/21/2015	11/2/2015	9365	WQSP-4-FD	1,1,1-Trichloroethane	71-55-6	PPTV	300	U
CEMRC	10/21/2015	11/2/2015	9365	WQSP-4-FD	1,1,2,2-Tetrachloroethane	79-34-5	PPTV	300	U
CEMRC	10/21/2015	11/2/2015	9365	WQSP-4-FD	1,1-Dichloroethylene	75-35-4	PPTV	300	U
CEMRC	10/21/2015	11/2/2015	9365	WQSP-4-FD	1,2-Dichloroethane	107-06-2	PPTV	300	U
CEMRC	10/21/2015	11/2/2015	9365	WQSP-4-FD	Carbon Tetrachloride	56-23-5	PPTV	300	96.42 J

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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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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	UNITS	MRL*	Concentration
CEMRC	10/21/2015	11/2/2015	9365	WQSP-4-FD	Chlorobenzene	108-90-7	PPTV	300	U
CEMRC	10/21/2015	11/2/2015	9365	WQSP-4-FD	Chloroform	67-66-3	PPTV	300	17.34 J
CEMRC	10/21/2015	11/2/2015	9365	WQSP-4-FD	Methylene Chloride	75-09-2	PPTV	300	67.95 J
CEMRC	10/21/2015	11/2/2015	9365	WQSP-4-FD	Toluene	108-88-3	PPTV	300	150.96 J
CEMRC	10/21/2015	11/2/2015	9365	WQSP-4-FD	Trichloroethylene (1)	79-01-6	PPTV	300	U
CEMRC	10/21/2015	11/2/2015	9364	WQSP-4	1,1,1-Trichloroethane	71-55-6	PPBV	0.4	U
CEMRC	10/21/2015	11/2/2015	9364	WQSP-4	1,1,2,2-Tetrachloroethane	79-34-5	PPBV	0.4	U
CEMRC	10/21/2015	11/2/2015	9364	WQSP-4	1,1-Dichloroethylene	75-35-4	PPBV	0.4	U
CEMRC	10/21/2015	11/2/2015	9364	WQSP-4	1,2-Dichloroethane	107-06-2	PPBV	0.4	U
CEMRC	10/21/2015	11/2/2015	9364	WQSP-4	Carbon Tetrachloride	56-23-5	PPBV	0.4	0.1 J
CEMRC	10/21/2015	11/2/2015	9364	WQSP-4	Chlorobenzene	108-90-7	PPBV	0.4	U
CEMRC	10/21/2015	11/2/2015	9364	WQSP-4	Chloroform	67-66-3	PPBV	0.4	U
CEMRC	10/21/2015	11/2/2015	9364	WQSP-4	Methylene Chloride	75-09-2	PPBV	0.4	U
CEMRC	10/21/2015	11/2/2015	9364	WQSP-4	Toluene	108-88-3	PPBV	0.4	0.18 J
CEMRC	10/21/2015	11/2/2015	9364	WQSP-4	Trichloroethylene (1)	79-01-6	PPBV	0.4	U
CEMRC	10/21/2015	11/2/2015	9364	WQSP-4	Acetone	67-64-1	PPBV		0.58 NJ
CEMRC	10/21/2015	11/2/2015	9364	WQSP-4	Butane	106-97-8	PPBV		4.1 NJ
CEMRC	10/21/2015	11/2/2015	9364	WQSP-4	Dichlorodifluoromethane	75-71-8	PPBV		0.48 NJ
CEMRC	10/21/2015	11/2/2015	9364	WQSP-4	Isobutane	75-28-5	PPBV		2.44 NJ
CEMRC	10/21/2015	11/2/2015	9364	WQSP-4	Pentane	109-66-0	PPBV		1.5 NJ
CEMRC	10/21/2015	11/2/2015	9364	WQSP-4	Propane	74-98-6	PPBV		3.4 NJ
CEMRC	10/21/2015	11/2/2015	9364	WQSP-4	1,1,1-Trichloroethane	71-55-6	PPTV	200	U

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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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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	UNITS	MRL*	Concentration
CEMRC	10/21/2015	11/2/2015	9364	WQSP-4	1,1,2,2-Tetrachloroethane	79-34-5	PPTV	200	U
CEMRC	10/21/2015	11/2/2015	9364	WQSP-4	1,1-Dichloroethylene	75-35-4	PPTV	200	U
CEMRC	10/21/2015	11/2/2015	9364	WQSP-4	1,2-Dichloroethane	107-06-2	PPTV	200	19.34 J
CEMRC	10/21/2015	11/2/2015	9364	WQSP-4	Carbon Tetrachloride	56-23-5	PPTV	200	96.62 J
CEMRC	10/21/2015	11/2/2015	9364	WQSP-4	Chlorobenzene	108-90-7	PPTV	200	U
CEMRC	10/21/2015	11/2/2015	9364	WQSP-4	Chloroform	67-66-3	PPTV	200	18.58 J
CEMRC	10/21/2015	11/2/2015	9364	WQSP-4	Methylene Chloride	75-09-2	PPTV	200	60.7 J
CEMRC	10/21/2015	11/2/2015	9364	WQSP-4	Toluene	108-88-3	PPTV	200	184.4 J
CEMRC	10/21/2015	11/2/2015	9364	WQSP-4	Trichloroethylene (1)	79-01-6	PPTV	200	U
CEMRC	10/21/2015	11/2/2015	9366	Building 489 Air Intake	1,1,1-Trichloroethane	71-55-6	PPBV	0.6	U
CEMRC	10/21/2015	11/2/2015	9366	Building 489 Air Intake	1,1,2,2-Tetrachloroethane	79-34-5	PPBV	0.6	U
CEMRC	10/21/2015	11/2/2015	9366	Building 489 Air Intake	1,1-Dichloroethylene	75-35-4	PPBV	0.6	U
CEMRC	10/21/2015	11/2/2015	9366	Building 489 Air Intake	1,2-Dichloroethane	107-06-2	PPBV	0.6	U
CEMRC	10/21/2015	11/2/2015	9366	Building 489 Air Intake	Carbon Tetrachloride	56-23-5	PPBV	0.6	0.39 J
CEMRC	10/21/2015	11/2/2015	9366	Building 489 Air Intake	Chlorobenzene	108-90-7	PPBV	0.6	U
CEMRC	10/21/2015	11/2/2015	9366	Building 489 Air Intake	Chloroform	67-66-3	PPBV	0.6	U
CEMRC	10/21/2015	11/2/2015	9366	Building 489 Air Intake	Methylene Chloride	75-09-2	PPBV	0.6	U
CEMRC	10/21/2015	11/2/2015	9366	Building 489 Air Intake	Toluene	108-88-3	PPBV	0.6	0.15 J
CEMRC	10/21/2015	11/2/2015	9366	Building 489 Air Intake	Trichloroethylene (1)	79-01-6	PPBV	0.6	U
CEMRC	10/21/2015	11/2/2015	9366	Building 489 Air Intake	Butane	106-97-8	PPBV		3.96 NJ
CEMRC	10/21/2015	11/2/2015	9366	Building 489 Air Intake	Butane, 2-methyl-	78-78-4	PPBV		1.95 NJ
CEMRC	10/21/2015	11/2/2015	9366	Building 489 Air Intake	Isobutane	75-28-5	PPBV		2.22 NJ
CEMRC	10/21/2015	11/2/2015	9366	Building 489 Air Intake	Pentane	109-66-0	PPBV		1.29 NJ

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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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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	UNITS	MRL*	Concentration
CEMRC	10/21/2015	11/2/2015	9366	Building 489 Air Intake	Propane	74-98-6	PPBV		4.23 NJ
CEMRC	10/21/2015	11/2/2015	9366	Building 489 Air Intake	1,1,1-Trichloroethane	71-55-6	PPTV	300	86.79 J
CEMRC	10/21/2015	11/2/2015	9366	Building 489 Air Intake	1,1,2,2-Tetrachloroethane	79-34-5	PPTV	300	U
CEMRC	10/21/2015	11/2/2015	9366	Building 489 Air Intake	1,1-Dichloroethylene	75-35-4	PPTV	300	U
CEMRC	10/21/2015	11/2/2015	9366	Building 489 Air Intake	1,2-Dichloroethane	107-06-2	PPTV	300	18.12 J
CEMRC	10/21/2015	11/2/2015	9366	Building 489 Air Intake	Carbon Tetrachloride	56-23-5	PPTV	300	404.91
CEMRC	10/21/2015	11/2/2015	9366	Building 489 Air Intake	Chlorobenzene	108-90-7	PPTV	300	U
CEMRC	10/21/2015	11/2/2015	9366	Building 489 Air Intake	Chloroform	67-66-3	PPTV	300	39.36 J
CEMRC	10/21/2015	11/2/2015	9366	Building 489 Air Intake	Methylene Chloride	75-09-2	PPTV	300	71.49 J
CEMRC	10/21/2015	11/2/2015	9366	Building 489 Air Intake	Toluene	108-88-3	PPTV	300	166.05 J
CEMRC	10/21/2015	11/2/2015	9366	Building 489 Air Intake	Trichloroethylene (1)	79-01-6	PPTV	300	115.8 J
CEMRC	10/22/2015	11/2/2015	9367	WQSP-4	1,1,1-Trichloroethane	71-55-6	PPBV	0.6	U
CEMRC	10/22/2015	11/2/2015	9367	WQSP-4	1,1,2,2-Tetrachloroethane	79-34-5	PPBV	0.6	U
CEMRC	10/22/2015	11/2/2015	9367	WQSP-4	1,1-Dichloroethylene	75-35-4	PPBV	0.6	U
CEMRC	10/22/2015	11/2/2015	9367	WQSP-4	1,2-Dichloroethane	107-06-2	PPBV	0.6	U
CEMRC	10/22/2015	11/2/2015	9367	WQSP-4	Carbon Tetrachloride	56-23-5	PPBV	0.6	U
CEMRC	10/22/2015	11/2/2015	9367	WQSP-4	Chlorobenzene	108-90-7	PPBV	0.6	U
CEMRC	10/22/2015	11/2/2015	9367	WQSP-4	Chloroform	67-66-3	PPBV	0.6	U
CEMRC	10/22/2015	11/2/2015	9367	WQSP-4	Methylene Chloride	75-09-2	PPBV	0.6	U
CEMRC	10/22/2015	11/2/2015	9367	WQSP-4	Toluene	108-88-3	PPBV	0.6	U
CEMRC	10/22/2015	11/2/2015	9367	WQSP-4	Trichloroethylene (1)	79-01-6	PPBV	0.6	U
CEMRC	10/22/2015	11/2/2015	9367	WQSP-4	Butane	106-97-8	PPBV		1.74 NJ

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Notes:

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Lab	Sample Date	Analysis Date	Sample ID	Location	Compound	CAS	UNITS	MRL*	Concentration
CEMRC	10/22/2015	11/2/2015	9367	WQSP-4	Propane	74-98-6	PPBV		1.98 NJ
CEMRC	10/22/2015	11/2/2015	9367	WQSP-4	1,1,1-Trichloroethane	71-55-6	PPTV	300	U
CEMRC	10/22/2015	11/2/2015	9367	WQSP-4	1,1,2,2-Tetrachloroethane	79-34-5	PPTV	300	U
CEMRC	10/22/2015	11/2/2015	9367	WQSP-4	1,1-Dichloroethylene	75-35-4	PPTV	300	U
CEMRC	10/22/2015	11/2/2015	9367	WQSP-4	1,2-Dichloroethane	107-06-2	PPTV	300	13.89 J
CEMRC	10/22/2015	11/2/2015	9367	WQSP-4	Carbon Tetrachloride	56-23-5	PPTV	300	111.45 J
CEMRC	10/22/2015	11/2/2015	9367	WQSP-4	Chlorobenzene	108-90-7	PPTV	300	U
CEMRC	10/22/2015	11/2/2015	9367	WQSP-4	Chloroform	67-66-3	PPTV	300	15.99 J
CEMRC	10/22/2015	11/2/2015	9367	WQSP-4	Methylene Chloride	75-09-2	PPTV	300	65.52 J
CEMRC	10/22/2015	11/2/2015	9367	WQSP-4	Toluene	108-88-3	PPTV	300	97.98 J
CEMRC	10/22/2015	11/2/2015	9367	WQSP-4	Trichloroethylene (1)	79-01-6	PPTV	300	U
CEMRC	10/22/2015	11/2/2015	9368	Building 489 Air Intake	1,1,1-Trichloroethane	71-55-6	PPBV	0.6	0.18 J
CEMRC	10/22/2015	11/2/2015	9368	Building 489 Air Intake	1,1,2,2-Tetrachloroethane	79-34-5	PPBV	0.6	U
CEMRC	10/22/2015	11/2/2015	9368	Building 489 Air Intake	1,1-Dichloroethylene	75-35-4	PPBV	0.6	U
CEMRC	10/22/2015	11/2/2015	9368	Building 489 Air Intake	1,2-Dichloroethane	107-06-2	PPBV	0.6	U
CEMRC	10/22/2015	11/2/2015	9368	Building 489 Air Intake	Carbon Tetrachloride	56-23-5	PPBV	0.6	0.87
CEMRC	10/22/2015	11/2/2015	9368	Building 489 Air Intake	Chlorobenzene	108-90-7	PPBV	0.6	U
CEMRC	10/22/2015	11/2/2015	9368	Building 489 Air Intake	Chloroform	67-66-3	PPBV	0.6	U
CEMRC	10/22/2015	11/2/2015	9368	Building 489 Air Intake	Methylene Chloride	75-09-2	PPBV	0.6	U
CEMRC	10/22/2015	11/2/2015	9368	Building 489 Air Intake	Toluene	108-88-3	PPBV	0.6	U
CEMRC	10/22/2015	11/2/2015	9368	Building 489 Air Intake	Trichloroethylene (1)	79-01-6	PPBV	0.6	0.27 J
CEMRC	10/22/2015	11/2/2015	9368	Building 489 Air Intake	Acetone	67-64-1	PPBV		0.93 NJ

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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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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	UNITS	MRL*	Concentration
CEMRC	10/22/2015	11/2/2015	9368	Building 489 Air Intake	Butane	106-97-8	PPBV		1.59 NJ
CEMRC	10/22/2015	11/2/2015	9368	Building 489 Air Intake	Isobutane	75-28-5	PPBV		2.22 NJ
CEMRC	10/22/2015	11/2/2015	9368	Building 489 Air Intake	Propane	74-98-6	PPBV		1.86 NJ
CEMRC	10/22/2015	11/2/2015	9368	Building 489 Air Intake	1,1,1-Trichloroethane	71-55-6	PPTV	300	165.21 J
CEMRC	10/22/2015	11/2/2015	9368	Building 489 Air Intake	1,1,2,2-Tetrachloroethane	79-34-5	PPTV	300	U
CEMRC	10/22/2015	11/2/2015	9368	Building 489 Air Intake	1,1-Dichloroethylene	75-35-4	PPTV	300	U
CEMRC	10/22/2015	11/2/2015	9368	Building 489 Air Intake	1,2-Dichloroethane	107-06-2	PPTV	300	U
CEMRC	10/22/2015	11/2/2015	9368	Building 489 Air Intake	Carbon Tetrachloride	56-23-5	PPTV	300	835.32
CEMRC	10/22/2015	11/2/2015	9368	Building 489 Air Intake	Chlorobenzene	108-90-7	PPTV	300	U
CEMRC	10/22/2015	11/2/2015	9368	Building 489 Air Intake	Chloroform	67-66-3	PPTV	300	79.23 J
CEMRC	10/22/2015	11/2/2015	9368	Building 489 Air Intake	Methylene Chloride	75-09-2	PPTV	300	78.12 J
CEMRC	10/22/2015	11/2/2015	9368	Building 489 Air Intake	Toluene	108-88-3	PPTV	300	103.71 J
CEMRC	10/22/2015	11/2/2015	9368	Building 489 Air Intake	Trichloroethylene (1)	79-01-6	PPTV	300	281.82 J
CEMRC	10/28/2015	11/11/2015	9369	WQSP-4	1,1,1-Trichloroethane	71-55-6	PPBV	0.4	U
CEMRC	10/28/2015	11/11/2015	9369	WQSP-4	1,1,2,2-Tetrachloroethane	79-34-5	PPBV	0.4	U
CEMRC	10/28/2015	11/11/2015	9369	WQSP-4	1,1-Dichloroethylene	75-35-4	PPBV	0.4	U
CEMRC	10/28/2015	11/11/2015	9369	WQSP-4	1,2-Dichloroethane	107-06-2	PPBV	0.4	U
CEMRC	10/28/2015	11/11/2015	9369	WQSP-4	Carbon Tetrachloride	56-23-5	PPBV	0.4	0.1 J
CEMRC	10/28/2015	11/11/2015	9369	WQSP-4	Chlorobenzene	108-90-7	PPBV	0.4	U
CEMRC	10/28/2015	11/11/2015	9369	WQSP-4	Chloroform	67-66-3	PPBV	0.4	U
CEMRC	10/28/2015	11/11/2015	9369	WQSP-4	Methylene Chloride	75-09-2	PPBV	0.4	U
CEMRC	10/28/2015	11/11/2015	9369	WQSP-4	Toluene	108-88-3	PPBV	0.4	0.18 J

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Notes:

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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	UNITS	MRL*	Concentration
CEMRC	10/28/2015	11/11/2015	9369	WQSP-4	Trichloroethylene (1)	79-01-6	PPBV	0.4	U
CEMRC	10/28/2015	11/11/2015	9369	WQSP-4	Butane	106-97-8	PPBV		3.66 NJ
CEMRC	10/28/2015	11/11/2015	9369	WQSP-4	Isobutane	75-28-5	PPBV		2.2 NJ
CEMRC	10/28/2015	11/11/2015	9369	WQSP-4	Pentane	109-66-0	PPBV		1.94 NJ
CEMRC	10/28/2015	11/11/2015	9369	WQSP-4	Propane	74-98-6	PPBV		4.04 NJ
CEMRC	10/28/2015	11/11/2015	9369	WQSP-4	1,1,1-Trichloroethane	71-55-6	PPTV	200	U
CEMRC	10/28/2015	11/11/2015	9369	WQSP-4	1,1,2,2-Tetrachloroethane	79-34-5	PPTV	200	U
CEMRC	10/28/2015	11/11/2015	9369	WQSP-4	1,1-Dichloroethylene	75-35-4	PPTV	200	U
CEMRC	10/28/2015	11/11/2015	9369	WQSP-4	1,2-Dichloroethane	107-06-2	PPTV	200	20.92 J
CEMRC	10/28/2015	11/11/2015	9369	WQSP-4	Carbon Tetrachloride	56-23-5	PPTV	200	113 J
CEMRC	10/28/2015	11/11/2015	9369	WQSP-4	Chlorobenzene	108-90-7	PPTV	200	11.04 J
CEMRC	10/28/2015	11/11/2015	9369	WQSP-4	Chloroform	67-66-3	PPTV	200	15.9 J
CEMRC	10/28/2015	11/11/2015	9369	WQSP-4	Methylene Chloride	75-09-2	PPTV	200	59.28 J
CEMRC	10/28/2015	11/11/2015	9369	WQSP-4	Toluene	108-88-3	PPTV	200	168.34 J
CEMRC	10/28/2015	11/11/2015	9369	WQSP-4	Trichloroethylene (1)	79-01-6	PPTV	200	U
CEMRC	10/28/2015	11/11/2015	9370	Building 489 Air Intake	1,1,1-Trichloroethane	71-55-6	PPBV	0.6	U
CEMRC	10/28/2015	11/11/2015	9370	Building 489 Air Intake	1,1,2,2-Tetrachloroethane	79-34-5	PPBV	0.6	U
CEMRC	10/28/2015	11/11/2015	9370	Building 489 Air Intake	1,1-Dichloroethylene	75-35-4	PPBV	0.6	U
CEMRC	10/28/2015	11/11/2015	9370	Building 489 Air Intake	1,2-Dichloroethane	107-06-2	PPBV	0.6	U
CEMRC	10/28/2015	11/11/2015	9370	Building 489 Air Intake	Carbon Tetrachloride	56-23-5	PPBV	0.6	0.15 J
CEMRC	10/28/2015	11/11/2015	9370	Building 489 Air Intake	Chlorobenzene	108-90-7	PPBV	0.6	U
CEMRC	10/28/2015	11/11/2015	9370	Building 489 Air Intake	Chloroform	67-66-3	PPBV	0.6	U

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Notes:

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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	UNITS	MRL*	Concentration
CEMRC	10/28/2015	11/11/2015	9370	Building 489 Air Intake	Methylene Chloride	75-09-2	PPBV	0.6	U
CEMRC	10/28/2015	11/11/2015	9370	Building 489 Air Intake	Toluene	108-88-3	PPBV	0.6	0.18 J
CEMRC	10/28/2015	11/11/2015	9370	Building 489 Air Intake	Trichloroethylene (1)	79-01-6	PPBV	0.6	U
CEMRC	10/28/2015	11/11/2015	9370	Building 489 Air Intake	Butane	106-97-8	PPBV		3.63 NJ
CEMRC	10/28/2015	11/11/2015	9370	Building 489 Air Intake	Pentane	109-66-0	PPBV		1.65 NJ
CEMRC	10/28/2015	11/11/2015	9370	Building 489 Air Intake	Propane	74-98-6	PPBV		4.68 NJ
CEMRC	10/28/2015	11/11/2015	9370	Building 489 Air Intake	1,1,1-Trichloroethane	71-55-6	PPTV	300	16.5 J
CEMRC	10/28/2015	11/11/2015	9370	Building 489 Air Intake	1,1,2,2-Tetrachloroethane	79-34-5	PPTV	300	U
CEMRC	10/28/2015	11/11/2015	9370	Building 489 Air Intake	1,1-Dichloroethylene	75-35-4	PPTV	300	U
CEMRC	10/28/2015	11/11/2015	9370	Building 489 Air Intake	1,2-Dichloroethane	107-06-2	PPTV	300	18.42 J
CEMRC	10/28/2015	11/11/2015	9370	Building 489 Air Intake	Carbon Tetrachloride	56-23-5	PPTV	300	155.88 J
CEMRC	10/28/2015	11/11/2015	9370	Building 489 Air Intake	Chlorobenzene	108-90-7	PPTV	300	U
CEMRC	10/28/2015	11/11/2015	9370	Building 489 Air Intake	Chloroform	67-66-3	PPTV	300	17.34 J
CEMRC	10/28/2015	11/11/2015	9370	Building 489 Air Intake	Methylene Chloride	75-09-2	PPTV	300	59.19 J
CEMRC	10/28/2015	11/11/2015	9370	Building 489 Air Intake	Toluene	108-88-3	PPTV	300	172.65 J
CEMRC	10/28/2015	11/11/2015	9370	Building 489 Air Intake	Trichloroethylene (1)	79-01-6	PPTV	300	21.21 J
CEMRC	10/29/2015	11/11/2015	9371	WQSP-4	1,1,1-Trichloroethane	71-55-6	PPBV	0.4	U
CEMRC	10/29/2015	11/11/2015	9371	WQSP-4	1,1,2,2-Tetrachloroethane	79-34-5	PPBV	0.4	U
CEMRC	10/29/2015	11/11/2015	9371	WQSP-4	1,1-Dichloroethylene	75-35-4	PPBV	0.4	U
CEMRC	10/29/2015	11/11/2015	9371	WQSP-4	1,2-Dichloroethane	107-06-2	PPBV	0.4	U
CEMRC	10/29/2015	11/11/2015	9371	WQSP-4	Carbon Tetrachloride	56-23-5	PPBV	0.4	0.1 J
CEMRC	10/29/2015	11/11/2015	9371	WQSP-4	Chlorobenzene	108-90-7	PPBV	0.4	U

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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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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	UNITS	MRL*	Concentration
CEMRC	10/29/2015	11/11/2015	9371	WQSP-4	Chloroform	67-66-3	PPBV	0.4	U
CEMRC	10/29/2015	11/11/2015	9371	WQSP-4	Methylene Chloride	75-09-2	PPBV	0.4	U
CEMRC	10/29/2015	11/11/2015	9371	WQSP-4	Toluene	108-88-3	PPBV	0.4	0.18 J
CEMRC	10/29/2015	11/11/2015	9371	WQSP-4	Trichloroethylene (1)	79-01-6	PPBV	0.4	U
CEMRC	10/29/2015	11/11/2015	9371	WQSP-4	Butane	106-97-8	PPBV		4.96 NJ
CEMRC	10/29/2015	11/11/2015	9371	WQSP-4	Isobutane	75-28-5	PPBV		2.66 NJ
CEMRC	10/29/2015	11/11/2015	9371	WQSP-4	Pentane	109-66-0	PPBV		2.68 NJ
CEMRC	10/29/2015	11/11/2015	9371	WQSP-4	Propane	74-98-6	PPBV		5.12 NJ
CEMRC	10/29/2015	11/11/2015	9371	WQSP-4	1,1,1-Trichloroethane	71-55-6	PPTV	200	U
CEMRC	10/29/2015	11/11/2015	9371	WQSP-4	1,1,2,2-Tetrachloroethane	79-34-5	PPTV	200	U
CEMRC	10/29/2015	11/11/2015	9371	WQSP-4	1,1-Dichloroethylene	75-35-4	PPTV	200	U
CEMRC	10/29/2015	11/11/2015	9371	WQSP-4	1,2-Dichloroethane	107-06-2	PPTV	200	20.62 J
CEMRC	10/29/2015	11/11/2015	9371	WQSP-4	Carbon Tetrachloride	56-23-5	PPTV	200	96.46 J
CEMRC	10/29/2015	11/11/2015	9371	WQSP-4	Chlorobenzene	108-90-7	PPTV	200	U
CEMRC	10/29/2015	11/11/2015	9371	WQSP-4	Chloroform	67-66-3	PPTV	200	15.16 J
CEMRC	10/29/2015	11/11/2015	9371	WQSP-4	Methylene Chloride	75-09-2	PPTV	200	53.14 J
CEMRC	10/29/2015	11/11/2015	9371	WQSP-4	Toluene	108-88-3	PPTV	200	183.38 J
CEMRC	10/29/2015	11/11/2015	9371	WQSP-4	Trichloroethylene (1)	79-01-6	PPTV	200	U
CEMRC	10/29/2015	11/11/2015	9372	Building 489 Air Intake	1,1,1-Trichloroethane	71-55-6	PPBV	0.4	U
CEMRC	10/29/2015	11/11/2015	9372	Building 489 Air Intake	1,1,2,2-Tetrachloroethane	79-34-5	PPBV	0.4	U
CEMRC	10/29/2015	11/11/2015	9372	Building 489 Air Intake	1,1-Dichloroethylene	75-35-4	PPBV	0.4	U
CEMRC	10/29/2015	11/11/2015	9372	Building 489 Air Intake	1,2-Dichloroethane	107-06-2	PPBV	0.4	U

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Notes:

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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	UNITS	MRL*	Concentration
CEMRC	10/29/2015	11/11/2015	9372	Building 489 Air Intake	Carbon Tetrachloride	56-23-5	PPBV	0.4	0.14 J
CEMRC	10/29/2015	11/11/2015	9372	Building 489 Air Intake	Chlorobenzene	108-90-7	PPBV	0.4	U
CEMRC	10/29/2015	11/11/2015	9372	Building 489 Air Intake	Chloroform	67-66-3	PPBV	0.4	U
CEMRC	10/29/2015	11/11/2015	9372	Building 489 Air Intake	Methylene Chloride	75-09-2	PPBV	0.4	U
CEMRC	10/29/2015	11/11/2015	9372	Building 489 Air Intake	Toluene	108-88-3	PPBV	0.4	0.2 J
CEMRC	10/29/2015	11/11/2015	9372	Building 489 Air Intake	Trichloroethylene (1)	79-01-6	PPBV	0.4	U
CEMRC	10/29/2015	11/11/2015	9372	Building 489 Air Intake	Butane	106-97-8	PPBV		4.68 NJ
CEMRC	10/29/2015	11/11/2015	9372	Building 489 Air Intake	Isobutane	75-28-5	PPBV		2.7 NJ
CEMRC	10/29/2015	11/11/2015	9372	Building 489 Air Intake	Pentane	109-66-0	PPBV		2.5 NJ
CEMRC	10/29/2015	11/11/2015	9372	Building 489 Air Intake	Propane	74-98-6	PPBV		4.94 NJ
CEMRC	10/29/2015	11/11/2015	9372	Building 489 Air Intake	1,1,1-Trichloroethane	71-55-6	PPTV	200	12.16 J
CEMRC	10/29/2015	11/11/2015	9372	Building 489 Air Intake	1,1,2,2-Tetrachloroethane	79-34-5	PPTV	200	U
CEMRC	10/29/2015	11/11/2015	9372	Building 489 Air Intake	1,1-Dichloroethylene	75-35-4	PPTV	200	U
CEMRC	10/29/2015	11/11/2015	9372	Building 489 Air Intake	1,2-Dichloroethane	107-06-2	PPTV	200	19.34 J
CEMRC	10/29/2015	11/11/2015	9372	Building 489 Air Intake	Carbon Tetrachloride	56-23-5	PPTV	200	127.42 J
CEMRC	10/29/2015	11/11/2015	9372	Building 489 Air Intake	Chlorobenzene	108-90-7	PPTV	200	U
CEMRC	10/29/2015	11/11/2015	9372	Building 489 Air Intake	Chloroform	67-66-3	PPTV	200	20.36 J
CEMRC	10/29/2015	11/11/2015	9372	Building 489 Air Intake	Methylene Chloride	75-09-2	PPTV	200	52.44 J
CEMRC	10/29/2015	11/11/2015	9372	Building 489 Air Intake	Toluene	108-88-3	PPTV	200	186.94 J
CEMRC	10/29/2015	11/11/2015	9372	Building 489 Air Intake	Trichloroethylene (1)	79-01-6	PPTV	200	21.64 J

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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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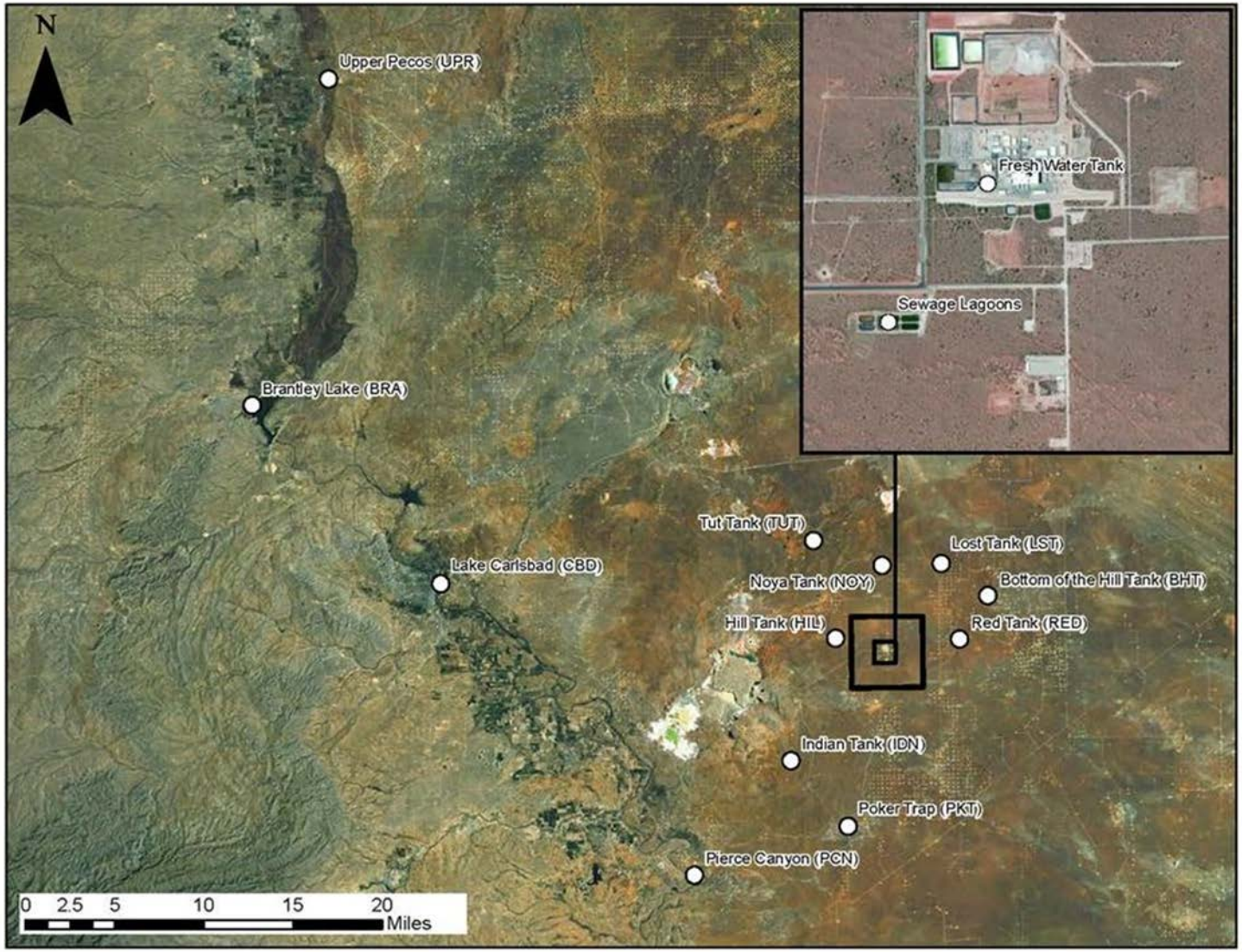


Surface Water Sampling Locations

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)
Sewage Lagoons	WS-SOO-20151015-1.1	10/15/2015	Below MDC	Below MDC	Below MDC
Upper Pecos River	WS-UPR-20151026-1.2	10/26/2015	Below MDC	Below MDC	Below MDC
Upper Pecos River (Dup)	WS-UPR-20151026-2.2	10/26/2015	Below MDC	Below MDC	Below MDC

MDC ranges are:

MDC Am-241 (dpm/L): 4.34E-02 to 1.51E-01

MDC Pu-238 (dpm/L): 2.84E-02 to 1.16E-01

MDC Pu-239/240 (dpm/L): 2.79E-02 to 1.24E-01

Environmental Monitoring & Hydrology Biota Sampling – Fauna

Tissue Type/Location	Sample ID Number	Sample Date	WIPP Labs Radiochemistry		
			Am-241 (dpm/g)	Pu-238 (dpm/g)	Pu-239/240 (dpm/g)
Biotic Fish/Pecos	BF-PEC-20151016-1.2	10/16/2015	Below MDC	Below MDC	Below MDC
Biotic Fish/Pecos (Dup)	BF-PEC-20151016-2.2	10/16/2015	Below MDC	Below MDC	Below MDC

MDCs ranges are:

MDC Am-241 (dpm/g): 2.01E-02 to 5.60E-02

MDC Pu-238 (dpm/g): 1.27E-02 to 2.78E-02

MDC Pu-239/240 (dpm/g): 8.63E-03 to 2.52E-02

Attachment 4

Surface & Underground Derived Waste Currently in Storage at the WIPP Facility (reserved)

[Last updated June 30, 2015]

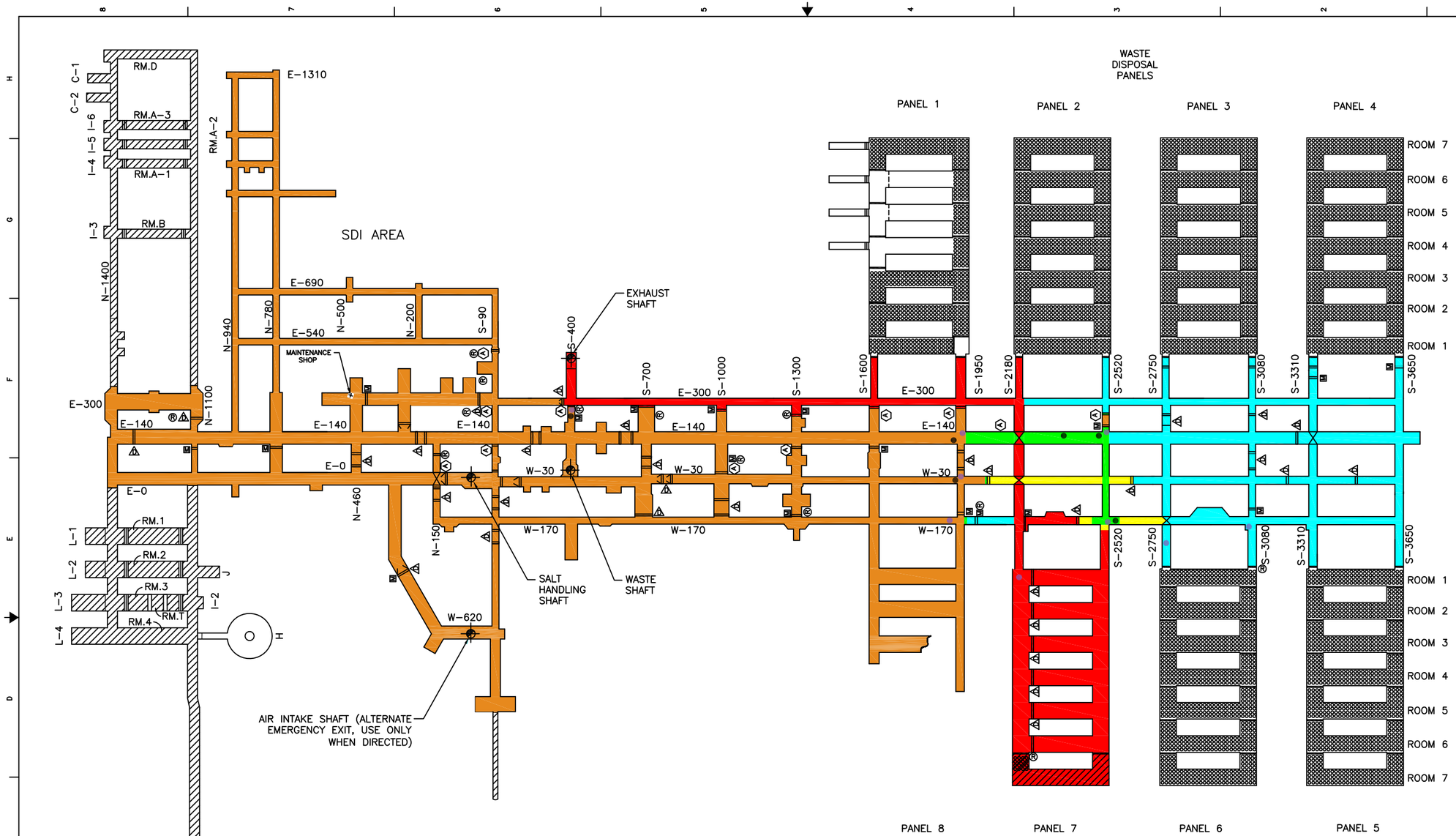
Attachment 5

Status of RCRA Contingency Plan Required Activities (reserved)

[Last updated September 30, 2015]

Attachment 6
Corrective Actions Required for Recovery (reserved)
[Last updated October 31, 2015]

Attachment 7
Panel 7 & Other Recovery-Related Work



REV	
AW	DECEMBER 17, 2015

RAD-014-066

WASTE ISOLATION PILOT PLANT
CARLSBAD, NEW MEXICO

UNDERGROUND RBA MAP

DEFINITIONS

RBA – < 20 dpm/100cm² ALPHA REMOVABLE
< 200 dpm/100cm² BETA REMOVABLE

CA – > 20 dpm/100cm² ALPHA REMOVABLE
> 200 dpm/100cm² BETA REMOVABLE

HCA – > 2,000 dpm/100cm² ALPHA REMOVABLE
> 20,000 dpm/100cm² BETA REMOVABLE

ARA – > 0.3 DAC

PANEL 7 – 2,000–17,000 dpm/100cm²

PANEL 7, ROOM 7 – > 1 million dpm/cm² ALPHA ON THE EXPOSED WASTE

LEGEND

- CONTROLLED AREA
- RBA
- CONTAMINATION AREA
- CONTAMINATION AREA/AIRBORNE RADIOACTIVITY AREA
- HIGH CONTAMINATION AREA/AIRBORNE RADIOACTIVITY AREA
- CAM
- PAS
- INACCESSIBLE

NOTES

1. DRIFT WIDTHS NOT TO SCALE, ENLARGED 2X FOR CLARITY.
2. EXISTING EXCAVATION REFLECTS STATUS AS OF 08/19/14.

Attachment 8
Interim Ventilation System & Supplemental Ventilation System Equipment and Work Activities

IVS Ductwork Installation Progress

IVS Ductwork Installation Progress

Attachment 9
WIPP Nitrate Salt Bearing Waste Container Isolation Plan
Information Required by Administrative Order 3 (reserved)
[Last updated November 30, 2015]