

## PERMIT PART 9

### CORRECTIVE ACTION FOR REGULATED UNITS

#### HIGHLIGHTS

##### Introduction

This Part contains permit conditions that ensure an appropriate response in the event of a release of hazardous wastes or constituents from a regulated unit at the Triassic Park Hazardous Waste Disposal Facility (the Facility). Nothing herein shall be construed to prevent or limit the Secretary from requiring corrective action at the Facility pursuant to an administrative order or other authority.

Corrective action permit conditions in this Permit Part include initial response actions, notification requirements, release verification procedures, ground water monitoring requirements, and recordkeeping and reporting requirements for regulated units. Longer-term response actions, such as release investigation, remedy selection, interim measures, and others, are also required under this Permit Part.

The principal method of detecting a release of waste from a regulated unit is the Vadose Zone Monitoring System (VZMS). Permit conditions associated with the VZMS are described in Permit Part 7.

The corrective action permit conditions of this Permit Part address significant contaminant releases from regulated units that generally originate subsurface or escape secondary containment and cannot be appropriately managed and ultimately resolved through Permit Attachment C, *Contingency Plan*, and/or Permit Attachment J, *Action Leakage Rate and Response Action Plan*.

##### Regulated Units

Regulated units are those land-based units that received hazardous wastes after July 26, 1982. There are two regulated units at the Facility, the Landfill and the Surface Impoundment.

The Landfill is a final disposal unit for hazardous wastes and is therefore subject to corrective action permit conditions throughout the post-closure care period addressed at Permit Part

8. Potential releases from the Landfill are anticipated to be in the form of leachates escaping through a breach in the liner system. Although no free liquids will be placed in the Landfill, fluids will enter the Landfill in the form of precipitation that will inevitably leach hazardous constituents and accumulate in a Landfill sump. Engineered controls to address the accumulated leachates and to preclude a release outside the Landfill liner system include a Leachate Collection and Removal System (LCRS) and a Leak Detection and Removal System (LDRS). Requirements for these controls are contained at Permit Part 6.

The Surface Impoundment is a treatment unit that is not expected to leave hazardous wastes in place after closure and will therefore not be subject to corrective action permit conditions under this Part after the closure period if the clean closure performance standard identified at Permit Part 8 is attained. Potential releases from the Surface Impoundment are anticipated to be in the form of leachates escaping through a breach in the liner system. The engineered control to address accumulated fluids and to preclude a release outside the Surface Impoundment's primary liner is a Leak Detection and Removal System (LDRS). Requirements for these controls are contained at Permit Part 5.

### **Regulatory Background**

Corrective action for all solid waste management units (SWMUs) is required in New Mexico's Hazardous Waste Management Regulations, 20.4.1.500 NMAC, (incorporating 40 CFR Part 264, Subpart F) (*Releases from Solid Waste Management Units*). The regulated units of this Permit Part are considered a subset of SWMUs, and as such are subject to the corrective action requirements contained at 20.4.1.500 NMAC (incorporating 40 CFR 264.101). Regulated units must comply also with the requirements of 20.4.1.500 NMAC (incorporating 40 CFR 264.91 through 264.101) for purposes of detecting, characterizing, and responding to releases from any solid waste management unit. Ground water monitoring is conditionally waived at the Facility for reasons specified at Permit Attachment H, *Ground water Monitoring Waiver Request and Approval*. The corrective action requirements for regulated units stipulated in this Permit Part are also conditions of the Ground Water Monitoring Waiver approval.

### **1.1 APPLICABILITY**

Permit Conditions in this Part apply to regulated units (i.e., the Surface Impoundment and the Landfill).

### **1.2 ACTION LEVELS**

Vadose zone fluid action levels shall be used by the Permittee to determine when the corrective action requirements of this Permit Part will be both initiated and terminated. Upon significant exceedance of a vadose zone fluid action level, the Permittee shall initiate the corrective actions contained in this Permit Part. Significance shall be determined, unless otherwise specified, using the procedures at Permit Attachment Q, *Statistics for Release Determination*. The Permittee shall continue to implement corrective action to ensure that released contaminants are removed or otherwise mitigated to below action levels.

Vadose zone fluid action levels are established in this Permit for both anthropogenic hazardous constituents and non-anthropogenic constituents. The methods of establishing and monitoring for vadose zone fluid action levels are described at Permit Part 7, *Vadose Zone Monitoring*, Permit Condition 7.5, *Release Assessment*. Action levels will be incorporated into this Permit as they are developed at Permit Attachment U, *Action Levels for Corrective Action*. Baseline chemical concentrations (i.e., action levels) for non-leachates are maintained in Permit Appendix U2, *Background Values for Non-Leachates*.

### **1.3 IMMEDIATE RESPONSE ACTIONS UPON DETERMINATION OF A RELEASE**

When the Permittee identifies evidence of a release (i.e., exceedance of an action level) in accordance with Permit Condition 9.2, the Permittee shall comply with the requirements of Permit Conditions 9.3.1 through 9.3.8.

#### **1.3.1 Notification of Release**

The Permittee shall notify the Secretary verbally within 24 hours and shall provide the Secretary a written report within seven calendar days of discovery of a release.

### 1.3.2 Verification Sampling

For any substances found in an original analysis obtained in accordance with Permit Condition 7.4, the Permittee shall resample and repeat the analysis using the same methodology used for the original analysis. If evidence of an obvious release exists, the Permittee shall immediately initiate the response actions required at Permit Condition 9.3.3, and shall proceed with verification sampling. The Permittee shall furthermore comply with the following requirements:

- a written Verification Sampling Report shall be submitted to the Secretary as soon as possible, but in no case shall the verification sampling results be reported to the Secretary later than 15 calendar days after the Permittee's receipt of the original results. The report must describe the sampling and analysis procedures and must include all pertinent laboratory analytical and quality assurance documentation;
- if the results of the second analysis confirm the original analysis, the verified constituents, as well as all other constituents listed at 20.4.1.500 NMAC (incorporating 40 CFR 264, Appendix IX) detected in accordance with Permit Condition 9.3.5, shall form the basis for further corrective action in accordance with the requirements contained in this Permit Part;
- if the results of the second analysis do not confirm the original analysis, a third sampling and analysis of the impacted medium shall be performed. The Permittee shall provide the Secretary an opportunity to be present during the third sampling event through advance notice as soon as the second analysis results are received, so that the New Mexico Environment Department (NMED) may obtain split samples;
- if the results of the third analysis do not confirm the existence of contamination as demonstrated by the original analysis, the Secretary will assume that the original analysis was in error and the Permittee shall return to

the original monitoring process and schedule identified in Permit Condition 7.4.2; and

- if the results of the third analysis do confirm the existence of a release as demonstrated by the original analysis, the verified constituents, as well as all other constituents listed at 20.4.1.500 NMAC (incorporating 40 CFR 264, Appendix IX) detected in accordance with Permit Condition 9.3.5, shall form the basis for further corrective action in accordance with this Permit Part.

### **1.3.3 Response Actions**

When the Permittee identifies evidence of a release, the Permittee shall immediately (i.e., within 24 hours after the release is first detected and before verification sampling has been completed) initiate the following response actions at the unit associated with the release:

- determine whether the contamination can be attributed to some operational disturbance such as an equipment or power failure;
- verify that the VZMS is working as designed;
- verify that the associated leak detection system(s) is working as designed;
- evaluate the need to increase the pumping rate on the LDRS and LCRS pumps, as appropriate;
- repair any damage to exposed portions of the liner;
- investigate alternative sources of liquids, leachates, or contamination; and
- (Landfill only) review the analysis of the contamination, compare it to the Landfill Operating Record for the previous five years, and attempt to match fingerprint or indicator parameters, generator analyses, and waste placement records, to determine the source of the leaks.

#### **1.3.3.a Immediate Response Action Report**

The Permittee shall submit a written assessment of the immediate response actions to the Secretary within 14 days of the Permittee's verification of the release. The report shall contain, at a minimum, the amount and nature of the contamination; available information on size, location, and cause of the leak; and any immediate and short-term actions to be taken.

#### **1.3.3.b Response Action Effectiveness Report**

The Permittee shall submit a follow-up Response Action Effectiveness Report to the Secretary within 30 calendar days of the Permittee's determination of the release. The Report shall describe how effective the response actions have been in stopping the migration of hazardous wastes or constituents out of the associated regulated unit. This report shall also describe the verification sampling required at Permit Condition 9.3.2.

#### **1.3.4 Independent Assessment**

The Permittee shall have a third-party assessment of the immediate response actions conducted by an independent professional engineer registered in New Mexico, or other qualified professional approved by the Secretary. Should the verification sampling determine that a release has occurred, the assessment shall include a determination of whether waste receipt should be temporarily discontinued, or if waste should be removed for liner inspection, repair, or controls.

A written summary of the assessment shall be submitted to the Secretary within 45 days following the initiation of the immediate response actions.

#### **1.3.5 40 CFR, Part 264, Appendix IX Sampling**

Upon verification of a release from a regulated unit in accordance with Permit Condition 9.3.2, but no later than 30 calendar days after the verification, the Permittee shall analyze the fluids in all VZMS wells for concentrations of the constituents identified at 20.4.1.500 NMAC (incorporating 40 CFR 264, Appendix IX).

### **1.3.6 Monthly Progress Reports**

The Permittee shall, upon verification of a release, initiate the submittal of monthly Corrective Action Progress Reports.

### **1.3.7 Submittal of Regulated Unit Investigation Work Plan**

The Permittee shall, within 45 calendar days of the verification of a release from a regulated unit as specified at Permit Condition 9.3.2, submit to the Secretary an Investigation Work Plan that conforms with the investigation requirements of Permit Condition 10.7.

### **1.3.8 Submittal of Ground Water Monitoring Work Plan**

The Permittee shall, within 90 calendar days of the verification of a release as specified at Permit Condition 9.3.2, submit to the Secretary an application for a Permit modification to establish a ground water monitoring program meeting the requirements of 20.4.1.500 NMAC (incorporating 40 CFR 264.97) and the detection monitoring requirements of 20.4.1.500 NMAC (incorporating 40 CFR 264.98), and shall establish the ground water action levels as specified at Permit Condition 10.3.3.

## **1.4 CORRECTIVE MEASURES STUDY**

Based on the results of the reports submitted in accordance with Permit Conditions 9.3.3.b, 9.3.4, 9.3.5 and 9.3.7, the Secretary will determine the need for a Corrective Measures Study. The Secretary will inform the Permittee of his decision in writing. If the Secretary determines that further action is necessary, the Permittee may be required to comply with the requirements of Permit Condition 10.9, *Corrective Measures Study*.

### **1.4.1 Financial Assurance**

If the Secretary requires a Corrective Measures Study in accordance with Permit Condition 9.4, the Permittee shall submit to the Secretary evidence of financial responsibility for completing the corrective actions in Permit Condition 10.10.2; and as required by 20.4.1.500 NMAC (incorporating 40 CFR 264.90(a)(2)).

### **1.5 RECORDKEEPING**

For a unit undergoing corrective action under this Part, the Permittee shall retain, until completion of the corrective action has been approved by the Secretary, records of all monitoring information and all other pertinent data and information used to prepare the appropriate documents required by this Part.

### **1.6 REPORTING**

The Permittee shall submit reports to the Secretary for approval in accordance with the schedule contained at Table 9-1, *Compliance Schedule for Regulated Units*.

### **1.7 DISPUTE RESOLUTION**

The dispute resolution procedure contained at Permit Condition 10.14 shall apply to this Permit Part.

### **1.8 INTERIM MEASURES**

If the Secretary determines that a release or potential release of hazardous wastes or constituents poses a threat to human health and the environment, the Secretary may require interim measures that shall conform to the requirements of Permit Condition 10.8. The Secretary shall determine the specific measure(s) or require the Permittee to propose a measure(s). The Secretary shall notify the Permittee in writing of the requirement to perform interim measures. The Permittee may propose interim measures at any time.

**TABLE 9-1**

**COMPLIANCE SCHEDULE FOR REGULATED UNITS**

DOCUMENT OR INFORMATION	DUE DATE
Release - Oral report (Permit Condition 9.3.1)	24 hours following Permittee's determination of a release above action levels
Release - Written report (Permit Condition 9.3.1)	Seven days following Permittee's determination of a release above action levels
Verification Sampling Report (Permit Condition 9.3.2)	15 days following the Permittee's receipt of original analysis results for sample above action levels
Immediate Response Action Report (Permit Condition 9.3.3.a)	14 days following verification of a release
Response Action Effectiveness Report (Permit Condition 9.3.3.b)	30 days following Permittee's determination of a release
Third Party Immediate Response Assessment (Permit Condition 9.3.4)	45 days following initiation of immediate response actions
Regulated Unit Investigation Work Plan (Permit Condition 9.3.7)	45 days following Permittee's verification of a release
Permit modification request to initiate Ground Water Monitoring Program (Permit Condition 9.3.8)	90 days following verification of a release