LMS/MNT/50083

Monticello, Utah, National Priorities List (NPL) Sites Federal Facility Agreement (FFA) Quarterly Report: October 1–December 31, 2024

February 2025

U.S. DEPARTMENT OF ENERGY | Legacy Management

This document has been designed for online viewing.

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Abbreviations

AOA	Area of Attainment
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DOE	U.S. Department of Energy
EPA	U.S. Environmental Protection Agency
FFA	Federal Facility Agreement
gpad	gallons per acre per day
gpm	gallons per minute
GRO	Groundwater Remedy Optimization
IC	institutional control
LCRS	Leachate Collection and Removal System
LDS	Leak Detection System
LM	Office of Legacy Management
LTS&M	long-term surveillance and maintenance
LTS&M Plan	Long-Term Surveillance and Maintenance Plan
MMTS	Monticello Mill Tailings Site
MVP	Monticello Vicinity Properties
NPL	National Priorities List
OU	Operable Unit
PRB	permeable reactive barrier
P&T	pump-and-treat
TSF	Temporary Storage Facility
UDEQ	Utah Department of Environmental Quality
UDOT	Utah Department of Transportation
ZVI	zero-valent iron

1.0 Introduction

The U.S. Department of Energy (DOE) Office of Legacy Management (LM) submits this quarterly report to inform the U.S. Environmental Protection Agency (EPA) and the Utah Department of Environmental Quality (UDEQ) of the status of the Monticello Vicinity Properties (MVP) and the Monticello Mill Tailings Site (MMTS), collectively called the LM Monticello, Utah, Disposal and Processing Sites, for October 1 through December 31, 2024. The MVP and MMTS are National Priorities List (NPL) sites regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as described in Title 42 *United States Code* Section 9601 et seq. (42 USC 9601 et seq.). Quarterly reports are submitted to EPA and UDEQ in February (for October through December), May (for January through March), August (for April through June), and November (for July through September).

LM assesses MVP and MMTS conditions and remedy protectiveness through (1) monthly, quarterly, and annual inspections of site infrastructure and operations as specified under the *Long-Term Surveillance and Maintenance Plan for Monticello NPL Sites* (DOE 2022a), also called the Long-Term Surveillance and Maintenance Plan (LTS&M Plan); (2) semiannual monitoring of groundwater and surface water under the *Record of Decision for the Monticello Mill Tailings (USDOE) Site Operable Unit III, Surface Water and Ground Water, Monticello, Utah* (DOE 2004); and (3) CERCLA Five-Year Review reports.

The primary long-term surveillance and maintenance (LTS&M) activities at the MVP and MMTS are conducted to (1) provide radiological control at properties where residual soil contamination from uranium mill tailings remains in place (supplemental standards properties), (2) operate and maintain the mill tailings repository, (3) ensure that institutional controls (ICs) restricting the use of land and water remain effective, (4) monitor water quality restoration progress, and (5) operate the Operable Unit (OU) III pump-and-treat (P&T) Groundwater Remedy Optimization (GRO) system. This system, implemented in January 2015, focuses on groundwater remediation within a specified region of the alluvial aquifer called the Area of Attainment (AOA).

Annual groundwater reports present comprehensive data evaluation for the groundwater and surface water OU III remedy. LM has utilized the data presented in the most recent annual groundwater report to update the conceptual site model and develop a three-dimensional numerical fate and transport model to assess remedial time frames.

Project milestones and guiding documents are further described in the *Monticello Site Management Plan* (DOE 2003). Section 5.0 of that document is updated annually.

1.1 Quarterly Site Status

In summary, the activities and observations for this quarter consist of the following:

- The GRO system operated from October 1 to December 31 this quarter. The system pumped approximately 414,000 gallons of water from the AOA.
- The previous period's Federal Facility Agreement (FFA) quarterly report was sent to EPA and UDEQ in November 2024.

- Weekly site inspections were performed by site personnel to verify the integrity of the site's systems and monitor activities that might occur in supplemental standards properties (e.g., City of Monticello streets and utility corridors).
- Site personnel performed monthly and quarterly site inspections in accordance with the LTS&M Plan.
- Routine surveillance identified anomalous conditions for the MVP remedy.
- Routine surveillance did not note any violations of MMTS ICs that restrict land and groundwater use.
- Routine surveillance did not identify any anomalous conditions on the surface features of the disposal cell. However, on September 26, during the 2024 Annual Inspection, a tear was discovered in the liner of Pond 4, the engineered solar evaporation pond. LM is currently exploring inspection and repair options.
- Routine surveillance did not note any operational deficiencies for the Temporary Storage Facility (TSF).

2.0 MVP

LTS&M activities for the MVP consist of providing radiological control at excavations in Monticello site roadway and utility corridors, in Utah Department of Transportation (UDOT) rights-of-way within city limits, and at property MS-00176-VL (a privately owned supplemental standards property).

Surveillance results for this quarter are as follows:

- Anomalous conditions for the MVP remedy were noted.
- LM representatives continued to coordinate with city and UDOT officials via telecommunications regarding construction and excavation activities by the city, UDOT, and utility companies in roadway and utility corridors. LM follows the normal LTS&M protocol to provide radiological control in the affected roadways.
- A small amount of erosion was noticed during the 2023 Annual Inspection on the east side of the U.S. Highway 191 embankment at Montezuma Creek (a supplemental standards property). The erosion is near the top of the embankment near the highway right-of-way. The erosion area was scanned by the site Safety and Health technician for radiological contamination. No radiologically contaminated material was found. UDOT is aware of the erosion issue and has stabilized the erosion on the embankment until permanent repairs can be performed. Site personnel continue to monitor for excessive erosion.
- Three excavations occurred this quarter within roadway and utility corridors, as well as UDOT right-of-way areas. Radiological scanning was done on all excavations and no contaminated material was revealed.
- A surveillance of property MS-00176-VL identified no excessive erosion of supplemental standards material or violation of the land-use restriction on building construction.

3.0 MMTS

LTS&M activities for the MMTS consist of (1) maintaining the onsite repository and operating the associated Leachate Collection and Removal System (LCRS) and Leak Detection System (LDS) for the disposal cell and Pond 4, (2) surveillance of properties affected by groundwater-use and land-use ICs on the former Monticello mill (mill site) and peripheral properties, and (3) operation and maintenance of the OU III GRO system.

3.1 OU I

OU I consists of the properties that contain the mill site and repository. Radioactively contaminated materials were removed from the MVP, the mill site, and peripheral properties (OU II) and encapsulated at the repository as a remedial action completed in 1999. LM owns and manages the repository, and the city owns the former mill site and manages it as a public park.

3.1.1 Repository and Pond 4

Monthly, quarterly, and annual inspections of the repository ensure that remedy controls remain intact and the waste remains isolated from the environment.

Inspection observations and maintenance activities for the quarter consisted of the following:

- No area of the repository cover showed settling, slumping, fracturing, seepage, ponding, or significant erosion.
- No anomalous surface feature conditions were observed at the disposal cell. However, an anomalous condition was observed at Pond 4, the engineered solar evaporation pond. During the 2024 Annual Inspection on September 26, 2024, a tear was discovered in the liner above the water level. LM is actively monitoring the tear and exploring repair options. Surveillance checklists for this quarter are attached as Appendix A. No additional minor burrowing by voles and small ground squirrels was observed this quarter on the disposal cell and Pond 4 berm. However, during the 2024 Annual Inspection, a small amount of erosion was identified on the eastern side of Pond 4, though it does not require repairs. Site personnel are continuing to monitor the erosion.
- The disposal cell LCRS and LDS were operated in accordance with the requirements specified in the LTS&M Plan. Findings for the disposal cell LCRS and LDS this quarter include the following:
  - Leachate production from the disposal cell was approximately 290 gallons per week combined for sumps LCRS 1 and LCRS 2. There is no action level for the disposal cell LCRS. See Appendix B for a graphical depiction of leachate production history.
- The disposal cell LDS continues to receive no water; therefore, the disposal cell LDS action level was not exceeded.
- Operation of the OU III GRO system resulted in increased water collection in the Pond 4 LCRS. Pond 4 LCRS and LDS action levels, approved by EPA and UDEQ, were formally developed in the *Repository and Pond 4 Groundwater Contingency Plan-Final* (DOE 1998) and are also found in Appendix D, Section 5.0 of the LTS&M Plan. The leakage rate action level established for the Pond 4 LCRS is 851 gallons per acre per day (gpad) (2000 gallons

per day), and the leakage rate action level for the LDS is 20 gpad (47 gallons per day), which is averaged over a 7-day period. These leakage rates are based on the area of the floor of Pond 4, which is 2.35 acres. Currently, the LCRS and LDS monitoring and pumping systems are functioning as designed to recirculate water back into Pond 4.

- Findings for the Pond 4 LCRS and LDS for this quarter are as follows:
  - Water collection at the Pond 4 LCRS continued but did not exceed the action level this quarter (Appendix B)
  - Water collection at the Pond 4 LDS remained below the action level (Appendix B)

3.1.2 TSF

Routine surveillance of the TSF ensures that the maintenance and radiological controls that govern the access to and placement, storage, and transfer of contaminated material in the TSF are current and effective. Surveillance this quarter (see the surveillance checklists in Appendix A) revealed that:

- The TSF cover, fencing, radiological controls, and signs have been maintained in accordance with the LTS&M Plan, and the TSF has been inspected and verified as being ready to receive contaminated materials.

LM is required to initiate the transfer of TSF materials for permanent disposal at the Grand Junction, Colorado, Disposal Site when the contents reach a volume of approximately 75 cubic yards. Recent TSF activity consists of the following:

- Approximately 6.5 cubic yards of soil excavated from the city streets is currently stored in the TSF

3.1.3 Mill Site

LM conducts surveillance of the mill site (properties MP-00181-VL and MS-00893-OT) to ensure compliance with ICs implemented to preserve the OU I remedy for soil and groundwater. ICs applicable to the mill site include prohibitions on installing domestic-use wells in the alluvial aquifer, using the property for residential purposes, constructing habitable structures, and overnight camping, as well as preserving the property for day use as a public park.

Surveillance results for this quarter revealed:

- No nonconformance with water-use and land-use restrictions.
- Significant erosion on the walking paths in the Mill Site Recreational Area. Site personnel notified City of Monticello employees about this issue on October 17, 2024. City employees confirmed they were already aware of the erosion and plan to perform repairs in spring or summer 2025. A formal letter from LM that highlighted the erosion that had occurred on city-owned property and including maps and photos for reference was emailed to the City of Monticello manager on January 6, 2025. All repairs on city-owned properties are the responsibility of the City of Monticello and are outside the jurisdiction and authority of LM.

3.2 OU II

OU II consists of private and city-owned properties peripheral to the mill site. LM conducts surveillance of OU II properties to verify compliance with ICs implemented to preserve the OU II remedy for soil and groundwater.

Surveillance results for this quarter are summarized below for the different components of OU II.

- **Montezuma Creek Restrictive Easement Area (supplemental standards properties, both city-owned and privately owned):** No evidence of nonconformance with land-use restrictions (e.g., prohibitions on soil removal and construction of habitable structures in supplemental standards properties) was observed.
- **Groundwater-Use Restrictions:** These were applied to several OU II properties under the 2000 quitclaim deed by which DOE transferred selected properties to the city. No evidence of nonconformance with these restrictions (e.g., prohibition on installing domestic-use wells in the alluvial aquifer) was observed.
- **Property MP-00211-VL (city-owned):** No evidence of nonconformance with the land-use restriction on building construction was observed.
- **Pinyon-Juniper Supplemental Standards Properties (city-owned):** No evidence of nonconformance with land-use and groundwater-use restrictions was observed. A small amount of erosion was observed near the GRO building during the 2024 Annual Inspection. Additionally, a small amount of radiologically contaminated material was detected, and site personnel are monitoring the area for any worsening conditions.
- **Excessive Erosion:** No storm events resulted in more than 2.8 inches of precipitation in 24 hours, which would require surveillance of supplemental standards cleanup properties for excessive erosion.

3.3 OU III

OU III consists of groundwater and surface water contamination resulting from operation of the mill site. Routine monitoring of OU III (water quality and water level) is normally performed semiannually in April (spring) and October (fall).

The contaminated groundwater is within the alluvial aquifer beneath the valley of Montezuma Creek, some sections of which are contaminated by the influent of contaminated groundwater. A portion of the aquifer is subject to ICs restricting use. Montezuma Creek is used for limited irrigation and livestock watering. There are currently no ICs in place to prevent surface water use; however, LM is actively developing ICs to prohibit its domestic use.

LM mailed certified letters on September 26, 2024, notifying potentially impacted property owners of existing ICs, associated restrictions, the intent to develop surface water ICs, and other conditions applicable to privately owned parcels. The notification addressed EPA's request to evaluate the use of Montezuma Creek surface water and assess the potential need for additional protections for domestic use of surface water in the area, ensuring the long-term protection of human health and the environment.

The current groundwater remedy includes (1) monitored natural attenuation with ICs and (2) P&T remediation by evaporation that was implemented as the GRO system in January 2015. Operation and performance of the groundwater remedy are reported annually. Previous remediation efforts have included (1) in situ treatment by zero-valent iron (ZVI) within a permeable reactive barrier (PRB) and (2) P&T remediation that used ex situ ZVI treatment. The ex situ ZVI treatment system was deactivated in December 2014 and replaced by the GRO system, which is described in greater detail in Section 3.3.2. The PRB remains a component of the GRO system as a groundwater flow barrier.

3.3.1 Groundwater Restricted Area

During spring and fall, LM conducts surveillance of properties where groundwater contamination is present to ensure compliance with the groundwater-use restriction (i.e., no installation of domestic-use wells in the alluvial aquifer). The affected OU III properties constitute the Monticello Groundwater Restricted Area as defined and administered by the State of Utah Division of Water Rights. Surveillance found:

- No evidence of nonconformance with the groundwater-use restriction since its implementation in May 1999.

3.3.2 OU III GRO System

The GRO system includes eight vertical extraction wells strategically placed in the AOA to extract contaminated groundwater and an associated monitoring system. The water from the extraction wells is transmitted in buried pipelines to an aboveground holding tank in the Groundwater Transfer Building; from there, it is pumped through a buried water transmission line for about 1 mile to Pond 4 for evaporation.

The associated monitoring system consists of 22 wells installed in the AOA. Sixteen of the 22 wells were installed south of Montezuma Creek in 2014, and 6 wells were installed north of Montezuma Creek in 2017. These 22 monitoring wells are sampled recurrently following the extraction of approximately 1,000,000 gallons of water from the GRO system as stated in Section 1.5 of the *Remedial Action Completion Report for Operable Unit III Groundwater Contingency Remedy Optimization System, Monticello Mill Tailings Site, Monticello, Utah* (DOE 2016). A sampling event of 1,000,000 gallons was performed on October 15, 2024.

On August 7, 2023, a water transmission line leak was identified approximately 1360 feet southeast of the Groundwater Transfer Building on City of Monticello property. The leak was attributed to mechanical failure caused by ground subsidence. On October 25, 2023, site personnel conducted construction activities to repair the transmission line. On July 2, 2024, all soil samples were collected in accordance with the *Soil Sampling and Analysis Plan for Groundwater Transmission Line Leak, Monticello, Utah, Disposal and Processing Sites* (DOE 2024e) and the *Sampling and Analysis Plan for U.S. Department of Energy Office of Legacy Management Sites* (DOE 2024d). LM is currently preparing a report to summarize analytical results from data validated on November 26, 2024, with an estimated completion date by the end of February 2025.

3.3.2.1 GRO System Quarterly Performance Summary

The GRO system performance for the quarter is summarized here.

- Groundwater extraction during the quarter was approximately 414,000 gallons, equivalent to an average flow rate of 3.13 gallons per minute (gpm). Assuming the uranium concentration in groundwater extracted throughout the quarter was equal to the uranium concentration of the holding tank effluent on October 15, 2024 (the date of the most recent sample collected), approximately 1.1 pounds of uranium were removed during this quarter.
- During the quarter, the volume of water stored in Pond 4 increased by approximately 30,000 gallons. The GRO system operates by balancing the extraction rate and the Pond 4 evaporation rate while maintaining the Pond 4 storage volume between 5,000,000 and 8,000,000 gallons (the maximum storage volume of Pond 4 is approximately 15,600,000 gallons).
- Water-level monitoring during the quarter consisted of:
  - Continuous water-level monitoring in AOA extraction and monitoring wells using pressure transducers and dataloggers (programmed to record at 5-minute intervals) connected to the LM System Operation and Analysis at Remote Sites (SOARS) system.
- Cumulatively, the system has removed 34,500,000 gallons of contaminated groundwater from the aquifer since system startup in January 2015 (Table 1).
- Assuming a minimum AOA uranium plume pore volume of 2,400,000 gallons and a maximum pore volume of 3,300,000 gallons, the GRO system has removed between 10.4 and 14.4 pore volumes since system startup.
- From January 2015 through October 15, 2024, the GRO system removed approximately 165 pounds of uranium from the AOA aquifer (Table 2). Estimates of the cumulative uranium mass removed are updated only at sampling events.

Table 1. GRO System Treatment: Monthly Volumes and Rates for This Quarter and Cumulative Volumes Since January 2015

Calendar Month	Approximate Volume Pumped (millions of gallons)	Effective Pumping Rate (gpm)	Approximate Cumulative Volume (millions of gallons)[a]
October 2024	0.19	4.29	34.3
November 2024	0.11	2.53	34.4
December 2024	0.11	2.55	34.5

Note:
[a] Cumulative volume is based on the volume of groundwater extracted by the GRO system since system startup in January 2015.

Table 2. Uranium Mass Removal from Groundwater in the AOA

Tank Effluent Sample Date[a]	Effluent Tank Uranium Concentration (µg/L)	Volume Removed Between Tank Samples (millions of gallons)	Uranium Removed (pounds)[b]	Cumulative Mass of Uranium Removed (pounds)[c]
July 1, 2024	304	1.03	2.8	162
October 15, 2024	326	1.00	2.6	165

Notes:
[a] Sampling occurs following the extraction of approximately 1,000,000 gallons.
[b] Uranium removed since last sampling event. Estimate is based on the median concentration between sampling dates.
[c] Since GRO system startup in January 2015. Estimates of cumulative mass removed are updated every sampling event.

Abbreviation:
µg/L = micrograms per liter

Monitoring and reporting guidelines for the GRO system are described in the *Final Groundwater Contingency Remedy Optimization Remedial Design/Remedial Action Work Plan for the Monticello Mill Tailings Site Operable Unit III, Monticello, Utah* (DOE 2014). Evaluation of water quality trends and whether remediation goals are being met, in the AOA and sitewide, is beyond the scope of this FFA quarterly report but is provided in annual groundwater reports submitted to EPA and UDEQ.

3.3.3 OU III Closure Strategy

Regarding the OU III closure strategy, LM submitted the *Draft Feasibility Study for the Operable Unit III, Monticello Mill Tailings Site, Monticello, Utah* (DOE 2024a), to EPA and UDEQ on August 7, 2024. EPA and UDEQ provided comments to LM on the draft Feasibility Study on January 21, 2025. Several scenarios are being evaluated to develop a closure strategy for OU III; these are detailed in the *OU III Closure Strategy for the Monticello Mill Tailings Site, Monticello, Utah* (DOE 2018).

4.0 Schedule of Activities and Deliverables

Table 3 summarizes the completion dates of recently completed and near-term planned activities and deliverables for the Monticello NPL sites.

Table 3. Monticello Sites' Recent and Near-Term Activities and Deliverables

Activity or Deliverable	Schedule
Monticello, Utah, National Priorities List (NPL) Sites Federal Facility Agreement (FFA) Quarterly Report: July 1–September 30, 2024 (DOE 2024c)	Submitted to EPA and UDEQ on November 19, 2024.
Monticello Site Management Plan, Section 5.0, "Project Schedules and Milestones (FY 2024–FY 2026)" (DOE 2024b)	Submitted to regulators on August 1, 2024. LM received approval via acceptance letters from UDEQ on October 3, 2024, and EPA on September 26, 2024.

Table 3. Monticello Sites' Recent and Near-Term Activities and Deliverables (continued)

Activity or Deliverable	Schedule
CERCLA Sixth Five-Year Review reports for the MVP and MMTS: • *Sixth Five-Year Review Report for Monticello Mill Tailings (USDOE) Site, San Juan County, Monticello, Utah* (DOE 2022b) • *Sixth Five-Year Review Report for Monticello Radioactively Contaminated Properties Superfund Site, San Juan County, Monticello, Utah* (DOE 2022c)	Submitted to EPA and UDEQ on May 2, 2022.
Five-Year Review addendum activities include the following:	**Submittal and proposed dates for Five-Year Review addendum documents:**
Submittal and resolution of errata sheets	Errata sheets were resolved and submitted on April 6, 2023.
DOE to confirm human health risk evaluation using EPA Preliminary Remediation Goals calculator	Submitted on July 29, 2022.
LTS&M Plan clarification letter regarding Table 7	Letter submitted on March 2, 2023.
DOE to create and send an informational letter to landowners with deed restrictions that clearly explains the restrictions on their property	Letters were sent to landowners on December 19, 2022.
DOE to update the Uniform Federal Policy for the Quality Assurance Project Plan (DOE 2023), Sampling and Analysis Plan, Program Directive 2021-10-MNT, and the LTS&M Plan to be consistent regarding the monitoring well network	Update was submitted on April 5, 2023.
DOE to evaluate ecological risk to aquatic organisms and terrestrial wildlife using current Utah water quality standards	Ecological Risk Evaluation response to EPA and UDEQ comments was submitted to EPA and UDEQ on December 31, 2023. DOE received approval from EPA and UDEQ via email on February 1, 2024, requesting inclusion in the Feasibility Study.
DOE to evaluate risk to human health and environment using current Utah water quality standards	Submitted on December 31, 2023.
DOE to complete a Feasibility Study to evaluate the following: • IC options to prevent human consumption of water from Montezuma Creek as a domestic drinking water source against the nine criteria of the National Contingency Plan • Remedial alternatives for achieving the water quality restoration Remedial Action Objectives	Draft Feasibility Study was submitted on August 7, 2024.
DOE to complete a vulnerability and resilience assessment for Monticello sites, provide the assessment to EPA and UDEQ, and schedule a meeting to discuss findings	Assessment will be submitted by December 31, 2025.
DOE received the Addendum to the Monticello Mill Tailings Five-Year Review Report, dated December 17, 2024	The document is currently under review, and DOE will provide a response.
Near-Term Activities and Deliverables	**Schedule**
Revising the *Quality Assurance Project Plan, Monticello, Utah, Disposal and Processing Sites* (DOE 2023)	The updated Quality Assurance Project Plan will be submitted in Spring 2025.
Fall semiannual groundwater and surface water sampling event	Completed on October 14–17, 2024.
1,000,000-gallon sampling event (AOA wells and Pond 4)	Completed on October 14–17, 2024.
Monticello Mill Tailings Site Operable Unit III Annual Groundwater Report, May 2023–April 2024	Submitted on October 29, 2024.

5.0 References

42 USC 9601 et seq. "Comprehensive Environmental Response, Compensation, and Liability Act" as amended, *United States Code.*

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DOE (U.S. Department of Energy), 2003. *Monticello Site Management Plan*, GJO-2003-493-TAC, E0399101, Office of Legacy Management, October.

DOE (U.S. Department of Energy), 2004. *Record of Decision for the Monticello Mill Tailings (USDOE) Site Operable Unit III, Surface Water and Ground Water, Monticello, Utah*, DOE-LM/GJ629-2004, Office of Legacy Management, May.

DOE (U.S. Department of Energy), 2014. *Final Groundwater Contingency Remedy Optimization Remedial Design/Remedial Action Work Plan for the Monticello Mill Tailings Site Operable Unit III, Monticello, Utah*, LMS/MNT/S10629, Office of Legacy Management, May.

DOE (U.S. Department of Energy), 2016. *Remedial Action Completion Report for Operable Unit III Groundwater Contingency Remedy Optimization System, Monticello Mill Tailings Site, Monticello, Utah*, LMS/MNT/S13373, Office of Legacy Management, May.

DOE (U.S. Department of Energy), 2018. *OU III Closure Strategy for the Monticello Mill Tailings Site, Monticello, Utah*, LMS/MNT/S18146, Office of Legacy Management, May.

DOE (U.S. Department of Energy), 2022a. *Long-Term Surveillance and Maintenance Plan for Monticello NPL Sites*, LMS/MNT/S00387-0.1, Office of Legacy Management, December.

DOE (U.S. Department of Energy), 2022b. *Sixth Five-Year Review Report for Monticello Mill Tailings (USDOE) Site, San Juan County, Monticello, Utah*, LMS/MNT/S35986, Office of Legacy Management, July.

DOE (U.S. Department of Energy), 2022c. *Sixth Five-Year Review Report for Monticello Radioactively Contaminated Properties Superfund Site, San Juan County, Monticello, Utah*, LMS/MNT/S36208, Office of Legacy Management, June.

DOE (U.S. Department of Energy), 2023. *Quality Assurance Project Plan, Monticello, Utah, Disposal and Processing Sites*, LM-Plan-3-21-1.0-1.0, LMS/MNT/S27252-1.0, Office of Legacy Management, August.

DOE (U.S. Department of Energy), 2024a. *Draft Feasibility Study for the Operable Unit III, Monticello Mill Tailings Site, Monticello, Utah*, LMS/MNT/48273, Office of Legacy Management, July.

DOE (U.S. Department of Energy), 2024b. *Monticello Site Management Plan*, Section 5.0, "Project Schedules and Milestones (FY 2024–FY 2026)," Office of Legacy Management, August.

DOE (U.S. Department of Energy), 2024c. *Monticello, Utah, National Priorities List (NPL) Sites Federal Facility Agreement (FFA) Quarterly Report: July 1–September 30, 2024*, LMS/MNT/49408, Office of Legacy Management, January.

DOE (U.S. Department of Energy), 2024d. *Sampling and Analysis Plan for U.S. Department of Energy Office of Legacy Management Sites*, LMS/PRO/S04351-16.8, Office of Legacy Management, December.

DOE (U.S. Department of Energy), 2024e. *Soil Sampling and Analysis Plan for Groundwater Transmission Line Leak, Monticello, Utah, Disposal and Processing Sites*, LMS/MNT/46277, Office of Legacy Management, April.

Appendix A

Monthly and Quarterly Surveillance Checklists

Monthly Pond 4 Surveillance Checklist

Level of water in Pond 4: 6.73 ft

Inspection Item	Acceptable Yes	Acceptable No	Comments and Recommendation
Condition of:			
Fences, gates, and locks	☒	☐	
Roads	☒	☐	
Signs	☒	☐	
Visible piping	☒	☐	
Visible liner and anchors	☒	☐	
Rescue equipment	☒	☐	Boat remains at pond.
Evidence of erosion of:			
Top of Pond 4 berm	☒	☐	
Pond 4 sideslopes	☒	☐	
Ditches	☒	☐	
Surrounding area	☒	☐	
Seepage from Pond 4	☒	☐	
Overtopping of Pond 4	☒	☐	
Evidence of:			
Vandalism	☒	☐	
Intrusion by wildlife	☒	☐	
Intrusion by humans	☒	☐	
Accumulation of trash	☒	☐	

Additional comments: Winterized and put new cover on backup generator at pond 4.

Monticello LM Representative: CALEB BAILEY (Affiliate) Digitally signed by CALEB BAILEY (Affiliate) Date: 2024.10.30 07:39:53 -06'00' Date: 10/30/2024

Repository Area Surveillance Checklist

☒ Monthly surveillance ☐ Quarterly surveillance: ☐ February ☐ May ☐ August ☐ November

☐ Storm event triggered surveillance due to _____ inches of rainfall over the past 24 hours.

Inspection Item	Acceptable Yes	Acceptable No	Comments and Recommendation
Condition of:			
Fences, gates, and locks	☒	☐	
Roads[a]	☒	☐	
Signs	☒	☐	
Site monuments	☒	☐	
Drainage ditches[a]	☒	☐	
Manholes	☒	☐	
Vegetation	☒	☐	
Evidence of erosion of:			
Top of disposal cell[a]	☒	☐	
Disposal cell sideslopes[a]	☒	☐	
Ditches	☒	☐	
Surrounding area	☒	☐	
Evidence of:			
Vandalism	☒	☐	
Intrusion by livestock	☒	☐	
Burrowing animal damage	☒	☐	
Intrusion by humans	☒	☐	
Accumulation of trash	☒	☐	
Additional Quarterly Surveillance Requirements			
Note: *All transects, shown in Figure 3-1, must be walked during this inspection.*			
Condition of:			
Settlement plate structures	☐	☐	
Manholes[b]	☐	☐	
Sediment ponds	☐	☐	
Evidence of:	☐	☐	
Structural instability	☐	☐	

Additional comments: Thumb area East and South fence lines degrading.

Signature: CALEB BAILEY (Affiliate) Digitally signed by CALEB BAILEY (Affiliate) Date: 2024.10.31 07:38:54 -06'00' Date: 10/31/2024

Monticello LM Representative

[a]Inspections required following a significant storm event
[b]Open to inspect quarterly

MONTHLY CLIMATOLOGICAL SUMMARY for OCT. 2024

NAME: OFFICE CITY: STATE:
ELEV: 0 ft LAT: LONG:

TEMPERATURE (°F), RAIN (in), WIND SPEED (mph)

DAY	MEAN TEMP	HIGH	TIME	LOW	TIME	HEAT DEG DAYS	COOL DEG DAYS	RAIN	AVG WIND SPEED	HIGH	TIME	DOM DIR
1	68.9	80.4	2:30p	59.4	5:30a	1.2	5.1	0.00	6.2	17.0	3:00p	WNW
2	66.5	79.3	4:00p	54.6	7:30a	2.7	4.2	0.00	6.2	18.0	2:00p	WSW
3	66.9	77.6	3:00p	55.3	1:00a	2.4	4.2	0.00	9.0	24.0	1:30p	NW
4	65.3	78.9	3:30p	53.2	8:00a	3.7	4.0	0.00	6.7	26.0	3:30p	SSE
5	66.0	74.5	4:00p	55.6	12:00m	2.2	3.1	0.00	9.4	27.0	1:30p	NW
6	64.6	75.4	3:30p	55.6	12:30a	3.2	2.8	0.00	8.8	20.0	4:30p	WNW
7	63.7	75.7	3:00p	52.9	8:00a	4.4	3.0	0.00	5.5	20.0	12:30p	WNW
8	63.1	73.1	12:30p	51.7	8:00a	4.3	2.3	0.00	5.1	45.0	4:00p	WSW
9	62.8	75.0	1:30p	48.8	7:00a	4.7	2.5	0.00	4.9	18.0	5:30p	WSW
10	63.7	74.4	5:00p	52.5	6:30a	3.9	2.6	0.00	4.8	22.0	3:30p	WSW
11	64.1	76.3	3:00p	50.5	7:30a	3.9	3.0	0.00	6.1	25.0	3:00p	SW
12	63.3	74.6	3:00p	54.2	2:30a	4.3	2.6	0.00	6.1	25.0	1:30p	S
13	61.8	74.4	3:30p	50.2	6:00a	5.6	2.3	0.00	5.3	24.0	4:30p	SW
14	61.9	68.9	12:30p	53.3	8:00a	3.7	0.6	0.00	6.4	24.0	2:00a	WSW
15	57.6	71.9	2:30p	48.5	7:30a	8.2	0.8	0.00	5.4	30.0	9:30p	WNW
16	54.3	65.3	2:00p	44.1	10:30p	10.7	0.0	0.00	7.7	28.0	11:30a	S
17	52.7	63.5	4:00p	44.1	2:30a	12.3	0.0	0.01	8.6	34.0	4:00p	SSE
18	44.6	54.6	12:30a	35.2	2:30p	20.4	0.0	0.73	8.5	39.0	9:30a	SSE
19	44.8	51.3	2:00p	38.0	5:30a	20.2	0.0	0.28	3.7	17.0	11:00p	NNW
20	42.0	49.0	1:30p	37.7	12:00m	23.0	0.0	0.21	3.6	22.0	3:30p	SSE
21	43.1	54.7	4:00p	33.6	6:30a	21.9	0.0	0.01	5.0	15.0	12:30a	SE
22	47.4	59.9	3:30p	35.8	4:30a	17.6	0.0	0.00	4.4	17.0	2:30p	SSE
23	50.4	63.2	4:30p	38.6	7:00a	14.6	0.0	0.00	6.6	23.0	2:30p	SW
24	52.9	64.3	1:30p	43.8	11:00p	12.1	0.0	0.00	7.9	26.0	7:30a	S
25	52.8	66.6	4:00p	41.9	2:00a	12.3	0.1	0.00	6.6	25.0	12:00p	S
26	54.8	67.8	3:00p	42.9	2:00a	10.6	0.3	0.00	6.1	24.0	11:30a	SSE
27	55.5	66.1	3:30p	45.7	2:00a	9.5	0.0	0.00	7.2	22.0	3:30p	S
28	52.3	57.3	3:30p	47.0	8:00a	12.7	0.0	0.01	10.4	35.0	4:00p	SSE
29	41.8	50.3	12:30a	31.8	11:30p	23.2	0.0	0.82	11.9	36.0	11:30a	SSW
30	32.9	41.9	4:30p	27.4	8:00a	32.1	0.0	0.06	3.4	19.0	10:00a	SE
31	35.1	42.9	5:00p	27.9	2:00a	29.9	0.0	0.00	8.2	28.0	1:30p	SSE
	55.4	80.4	1	27.4	30	341.5	43.5	2.13	6.6	45.0	8	SSE

Max >= 90.0: 0
Max <= 32.0: 0
Min <= 32.0: 3
Min <= 0.0: 0
Max Rain: 0.82 ON 10/29/24
Days of Rain: 5 (>.01 in) 4 (>.1 in) 0 (>1 in)
Heat Base: 65.0 Cool Base: 65.0 Method: Integration

Monthly Pond 4 Surveillance Checklist

Level of water in Pond 4: 6.71 ft

Inspection Item	Acceptable Yes	Acceptable No	Comments and Recommendation
Condition of:			
Fences, gates, and locks	☒	☐	
Roads	☒	☐	
Signs	☒	☐	
Visible piping	☒	☐	
Visible liner and anchors	☒	☐	
Rescue equipment	☒	☐	Boat remains at pond.
Evidence of erosion of:			
Top of Pond 4 berm	☒	☐	
Pond 4 sideslopes	☒	☐	
Ditches	☒	☐	
Surrounding area	☒	☐	
Seepage from Pond 4	☒	☐	
Overtopping of Pond 4	☒	☐	
Evidence of:			
Vandalism	☒	☐	
Intrusion by wildlife	☒	☐	Small burrowing on south fence line near center.
Intrusion by humans	☒	☐	
Accumulation of trash	☒	☐	

Additional comments: Hose still stuck in Pond, tear in East wall still visible.

Monticello LM Representative: CALEB BAILEY (Affiliate) Digitally signed by CALEB BAILEY (Affiliate) Date: 2024.11.27 15:32:42 -07'00' Date: 11/27/2024

Repository Area Surveillance Checklist

☒ Monthly surveillance ☒ Quarterly surveillance: ☐ February ☐ May ☐ August ☒ November

☐ Storm event triggered surveillance due to _____ inches of rainfall over the past 24 hours.

Inspection Item	Acceptable Yes	Acceptable No	Comments and Recommendation
Condition of:			
Fences, gates, and locks	☒	☐	Fence tighted and re-fixed to posts at P17.
Roads[a]	☒	☐	
Signs	☒	☐	
Site monuments	☒	☐	
Drainage ditches[a]	☒	☐	
Manholes	☒	☐	
Vegetation	☒	☐	
Evidence of erosion of:			
Top of disposal cell[a]	☒	☐	
Disposal cell sideslopes[a]	☒	☐	
Ditches	☒	☐	
Surrounding area	☒	☐	
Evidence of:			
Vandalism	☒	☐	
Intrusion by livestock	☒	☐	
Burrowing animal damage	☒	☐	Few new burrow piles between South road and center monument.
Intrusion by humans	☒	☐	
Accumulation of trash	☒	☐	Lots of trash collected between posts P36 and P38.
Additional Quarterly Surveillance Requirements			
Note: *All transects, shown in Figure 3-1, must be walked during this inspection.*			
Condition of:			
Settlement plate structures	☒	☐	
Manholes[b]	☒	☐	
Sediment ponds	☒	☐	
Evidence of:	☐	☐	
Structural instability	☒	☐	

Additional comments: Thumb area East and South fence lines degrading.

Signature: CALEB BAILEY (Affiliate) Digitally signed by CALEB BAILEY (Affiliate) Date: 2024.11.27 15:34:17 -07'00' Date: 11/27/2024

Monticello LM Representative

[a]Inspections required following a significant storm event
[b]Open to inspect quarterly

MONTHLY CLIMATOLOGICAL SUMMARY for NOV. 2024

NAME: OFFICE CITY: STATE:
ELEV: 0 ft LAT: LONG:

TEMPERATURE (°F), RAIN (in), WIND SPEED (mph)

DAY	MEAN TEMP	HIGH	TIME	LOW	TIME	HEAT DEG DAYS	COOL DEG DAYS	RAIN	AVG WIND SPEED	HIGH	TIME	DOM DIR
1	40.4	50.8	4:30p	29.9	6:00a	24.6	0.0	0.00	5.6	20.0	1:30p	SSE
2	42.7	51.0	2:30p	34.9	1:30a	22.3	0.0	0.00	6.7	21.0	11:00a	S
3	33.6	40.2	1:30p	29.6	7:00p	31.4	0.0	0.04	9.2	30.0	12:00m	S
4	31.9	37.8	2:00p	27.6	12:00m	33.1	0.0	0.01	15.8	37.0	8:00a	NW
5	30.3	40.5	11:00a	23.8	8:00p	34.7	0.0	0.00	9.4	37.0	8:00p	SSE
6	24.7	28.0	3:00p	21.8	6:30a	40.3	0.0	0.00	13.9	28.0	5:30a	NW
7	30.1	36.7	2:00p	21.9	3:00a	34.9	0.0	0.00	9.5	25.0	10:30a	NW
8	32.5	38.5	2:30p	27.9	7:30a	32.5	0.0	0.01	3.9	15.0	1:00a	NW
9	37.5	49.7	3:30p	29.5	7:00a	27.5	0.0	0.00	3.5	12.0	2:00a	SE
10	38.4	51.7	2:30p	28.4	5:00a	26.6	0.0	0.00	3.2	14.0	11:30a	WSW
11	42.1	53.3	2:30p	29.9	4:00a	22.9	0.0	0.00	7.0	21.0	12:00p	SSE
12	37.8	44.2	1:30p	29.6	12:00m	27.2	0.0	0.00	10.2	31.0	12:00p	S
13	35.3	46.9	2:30p	25.4	5:30a	29.7	0.0	0.00	7.5	21.0	3:30a	SSE
14	41.9	52.3	2:00p	31.7	6:30a	23.1	0.0	0.00	9.3	22.0	3:30a	SSE
15	43.5	54.1	2:00p	31.2	12:00m	21.5	0.0	0.00	12.4	40.0	1:00p	S
16	31.1	41.5	1:30p	22.3	5:30a	33.9	0.0	0.00	4.1	19.0	1:30p	WNW
17	31.8	43.4	2:00p	24.0	6:30a	33.2	0.0	0.00	5.3	15.0	4:30p	WNW
18	33.3	44.2	2:30p	23.3	5:30a	31.7	0.0	0.00	7.3	23.0	12:00p	SSE
19	25.5	32.3	2:30p	18.6	10:00p	39.5	0.0	0.00	9.2	34.0	11:30a	NW
20	29.7	42.6	2:30p	17.5	12:30a	35.3	0.0	0.00	4.0	18.0	12:00p	SSE
21	37.6	50.6	1:00p	24.6	6:00a	27.4	0.0	0.00	6.2	26.0	12:30p	SE
22	42.0	53.3	2:00p	32.8	2:00a	23.0	0.0	0.00	8.5	25.0	11:30a	S
23	43.0	52.6	2:30p	32.5	12:30a	22.0	0.0	0.00	8.3	23.0	2:00p	SSE
24	39.3	50.3	1:30p	29.4	12:00m	25.7	0.0	0.00	9.0	27.0	12:00p	SSE
25	34.2	43.6	2:00p	22.1	7:30a	30.8	0.0	0.00	6.9	27.0	11:30p	SSE
26	39.4	44.1	6:00p	32.6	12:00m	25.6	0.0	0.25	11.3	28.0	3:30p	S
27	28.5	32.8	1:30p	23.7	10:00p	36.5	0.0	0.01	10.6	37.0	3:00a	NW
28	24.6	33.3	1:30p	17.3	7:00a	40.4	0.0	0.00	5.6	17.0	3:00p	WNW
29	25.6	36.8	3:00p	17.5	6:30a	39.4	0.0	0.00	4.3	14.0	11:00a	WSW
30	30.1	44.2	3:30p	17.6	12:30a	34.9	0.0	0.00	3.0	9.0	12:30a	WSW
	34.6	54.1	15	17.3	28	911.6	0.0	0.32	7.7	40.0	15	SSE

Max >= 90.0: 0
Max <= 32.0: 1
Min <= 32.0: 26
Min <= 0.0: 0
Max Rain: 0.25 ON 11/26/24
Days of Rain: 2 (>.01 in) 1 (>.1 in) 0 (>1 in)
Heat Base: 65.0 Cool Base: 65.0 Method: Integration

Monticello Long-Term Surveillance and Maintenance Temporary Storage Facility (TSF) Record Book Inspection Report

Are these areas acceptable?		
Yes	**No**	
☒	☐	Was the gate locked upon arrival?
☒	☐	Are signs posted in accordance with 10 CFR 835.602[a]?
☒	☐	Are all postings legible?
☒	☐	Are enclosures on the concrete bin and stored drum containers tight?
☒	☐	Are containers in good physical condition (no rust, no holes, no bulges, etc.)?
☒	☐	How much radiologically-contaminated material is in the concrete bin? *Note: the material should be shipped when the volume in storage approaches 75 percent of the storage capacity.*
☒	☐	Is the surface area of the TSF in good physical condition (no erosion, no flood damage, no excessive vegetation growth, etc.)?
☒	☐	Has radiological monitoring been conducted in accordance with 10 CFR 835.405[d]?
☒	☐	Is the security fence in good condition?

Comments:

The concrete bin contains 6 cubic yards of radiologically contaminated material.

WILLIAM CARY (Affiliate) Digitally signed by WILLIAM CARY (Affiliate) Date: 2024.11.27 14:30:07 -07'00'

Signature of Monticello LM Representative

11/27/2024

Date of Inspection

Monthly Pond 4 Surveillance Checklist

Level of water in Pond 4: 6.75 ft

Inspection Item	Acceptable Yes	Acceptable No	Comments and Recommendation
Condition of:			
Fences, gates, and locks	☒	☐	
Roads	☒	☐	
Signs	☒	☐	
Visible piping	☒	☐	
Visible liner and anchors	☒	☐	
Rescue equipment	☒	☐	Boat remains at pond.
Evidence of erosion of:			
Top of Pond 4 berm	☒	☐	
Pond 4 sideslopes	☒	☐	
Ditches	☒	☐	
Surrounding area	☒	☐	
Seepage from Pond 4	☒	☐	
Overtopping of Pond 4	☒	☐	
Evidence of:			
Vandalism	☒	☐	
Intrusion by wildlife	☒	☐	Small burrowing on south fence line near center.
Intrusion by humans	☒	☐	
Accumulation of trash	☒	☐	

Additional comments: Pond partially frozen on surface. Hose still stuck in Pond, tear in East wall still visible.

Monticello LM Representative: CALEB BAILEY (Affiliate) Digitally signed by CALEB BAILEY (Affiliate) Date: 2024.12.31 15:40:24 -07'00' Date: 12/31/2024

Repository Area Surveillance Checklist

☒ Monthly surveillance ☐ Quarterly surveillance: ☐ February ☐ May ☐ August ☐ November

☐ Storm event triggered surveillance due to _____ inches of rainfall over the past 24 hours.

Inspection Item	Acceptable Yes	Acceptable No	Comments and Recommendation
Condition of:			
Fences, gates, and locks	☒	☐	Fence fixed at P17 (multiple wires broken).
Roads[a]	☒	☐	
Signs	☒	☐	
Site monuments	☒	☐	
Drainage ditches[a]	☒	☐	
Manholes	☒	☐	
Vegetation	☒	☐	
Evidence of erosion of:			
Top of disposal cell[a]	☒	☐	
Disposal cell sideslopes[a]	☒	☐	
Ditches	☒	☐	
Surrounding area	☒	☐	
Evidence of:			
Vandalism	☒	☐	
Intrusion by livestock	☒	☐	
Burrowing animal damage	☒	☐	
Intrusion by humans	☒	☐	
Accumulation of trash	☒	☐	Trash collected near P1.
Additional Quarterly Surveillance Requirements			
Condition of:			
Settlement plate structures	☐	☐	
Manholes[b]	☐	☐	
Sediment ponds	☒	☐	
Evidence of:	☐	☐	
Structural instability	☐	☐	

Note: *All transects, shown in Figure 3-1, must be walked during this inspection.*

Additional comments: Thumb area East and South fence fixed and tightened in 4 different areas.

Signature: CALEB BAILEY (Affiliate) Digitally signed by CALEB BAILEY (Affiliate) Date: 2024.12.31 15:46:56 -07'00' Date: 12/31/2024

Monticello LM Representative

[a]Inspections required following a significant storm event
[b]Open to inspect quarterly

MONTHLY CLIMATOLOGICAL SUMMARY for DEC. 2024

NAME: OFFICE CITY: STATE:
ELEV: 0 ft LAT: LONG:

TEMPERATURE (°F), RAIN (in), WIND SPEED (mph)

DAY	MEAN TEMP	HIGH	TIME	LOW	TIME	HEAT DEG DAYS	COOL DEG DAYS	RAIN	AVG WIND SPEED	HIGH	TIME	DOM DIR
1	33.9	46.2	3:00p	25.2	4:30a	31.1	0.0	0.00	3.5	14.0	11:00a	WNW
2	36.6	49.4	2:00p	27.7	2:00a	28.4	0.0	0.00	2.9	10.0	2:30p	NNW
3	37.8	51.3	2:30p	29.0	7:30a	27.2	0.0	0.00	3.6	13.0	12:00p	W
4	39.1	50.6	2:00p	30.2	9:30p	25.9	0.0	0.00	3.8	11.0	12:00p	W
5	38.4	50.6	2:30p	28.3	7:30a	26.6	0.0	0.00	4.0	16.0	11:30a	W
6	38.2	50.1	2:00p	31.0	7:30a	26.8	0.0	0.00	4.3	12.0	3:00p	WNW
7	37.1	51.5	2:30p	28.6	11:00p	27.9	0.0	0.00	4.3	18.0	3:00p	W
8	34.8	47.1	3:00p	25.3	4:30a	30.2	0.0	0.00	2.6	12.0	1:30p	WNW
9	27.1	34.0	1:00a	20.9	7:00p	38.0	0.0	0.00	10.7	35.0	10:00a	NW
10	23.0	31.2	3:00p	16.2	11:00p	42.0	0.0	0.00	8.6	23.0	9:30a	NW
11	26.1	38.8	2:00p	15.7	6:00a	38.9	0.0	0.00	3.6	16.0	12:00p	S
12	32.0	40.2	4:00p	21.2	1:00a	33.0	0.0	0.00	7.8	23.0	10:30a	SSE
13	30.4	39.9	12:30p	23.3	7:00a	34.6	0.0	0.00	5.3	20.0	1:00p	SW
14	30.4	37.7	4:00p	20.7	4:00a	34.6	0.0	0.00	7.3	31.0	11:30a	SE
15	33.9	44.1	3:00p	24.1	11:00p	31.1	0.0	0.00	4.2	18.0	12:30a	SE
16	33.5	42.4	1:00p	22.9	5:00a	31.5	0.0	0.00	8.9	37.0	9:30p	SSE
17	37.2	48.4	1:30p	27.6	8:00a	27.8	0.0	0.00	7.7	25.0	12:30a	SSE
18	35.8	46.9	2:30p	26.4	6:00a	29.2	0.0	0.00	4.2	15.0	1:00p	NW
19	38.5	51.0	1:00p	26.2	2:30a	26.5	0.0	0.00	4.6	13.0	1:00p	W
20	38.5	51.8	2:00p	27.8	6:00a	26.5	0.0	0.00	4.7	16.0	10:30a	W
21	37.1	50.4	2:30p	29.4	8:00a	27.9	0.0	0.00	4.6	21.0	1:00p	W
22	36.7	48.1	1:30p	26.3	5:00a	28.3	0.0	0.00	4.5	19.0	12:00p	SE
23	38.9	48.8	1:00p	28.9	7:30a	26.1	0.0	0.00	6.1	22.0	2:00p	WNW
24	37.3	47.2	1:00p	30.5	2:00a	27.7	0.0	0.00	5.6	21.0	2:00p	SSE
25	35.3	42.2	12:30p	27.1	8:00a	29.7	0.0	0.00	6.6	22.0	4:00a	WNW
26	29.6	39.5	10:30p	22.4	7:00a	35.4	0.0	0.00	5.9	25.0	9:30a	SE
27	31.8	38.0	8:30p	26.3	1:00a	33.2	0.0	0.00	8.8	33.0	8:30p	SSE
28	35.7	43.2	3:00p	26.9	8:00a	29.3	0.0	0.00	6.3	25.0	11:30p	SE
29	41.3	50.8	9:00p	28.1	7:30a	23.7	0.0	0.00	12.0	40.0	11:30p	SSW
30	34.3	46.4	12:30a	22.6	12:00m	30.7	0.0	0.00	10.5	29.0	10:00a	NW
31	26.1	35.9	2:00p	19.2	7:30a	38.9	0.0	0.00	6.8	22.0	1:00p	NW
	34.4	51.8	20	15.7	11	948.7	0.0	0.00	5.9	40.0	29	WNW

Max >= 90.0: 0
Max <= 32.0: 1
Min <= 32.0: 31
Min <= 0.0: 0
Max Rain: 0.00 ON 12/01/24
Days of Rain: 0 (>.01 in) 0 (>.1 in) 0 (>1 in)
Heat Base: 65.0 Cool Base: 65.0 Method: Integration

Appendix B

Graphs Showing Performance History for Disposal Cell and Pond 4 LCRS and LDS

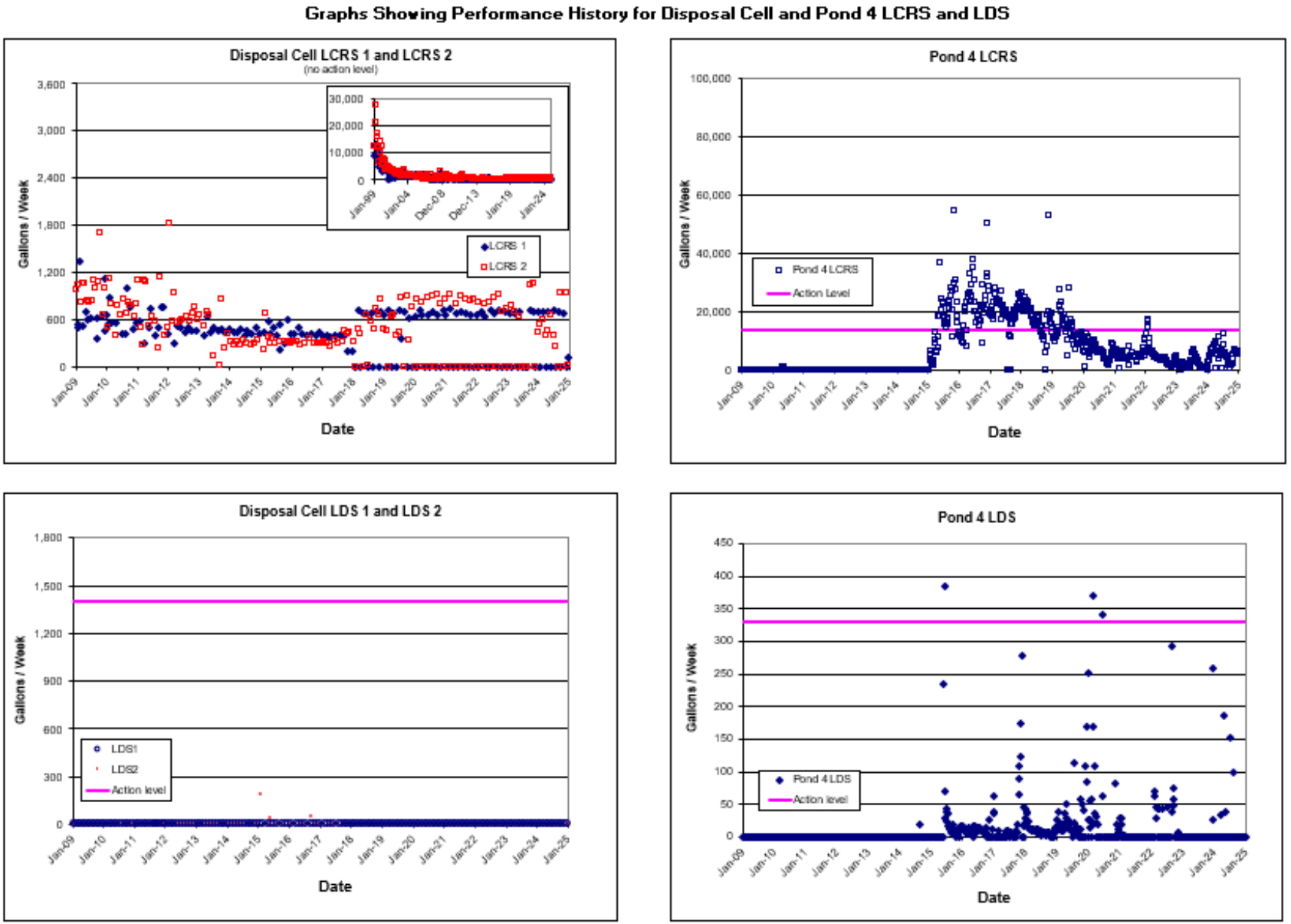

Figure B-1. Graphs Showing Performance History for Disposal Cell and Pond 4 LCRS and LDS