



Executive Summary

Status of Operations, Maintenance, and Remedial Actions

July 1, 2025 - Dec. 31, 2025

INTRODUCTION

Since the last report six months ago, the City and County of Denver, Waste Management of Colorado, Inc., and Chemical Waste Management Inc., collectively referred to as the Work Settling Defendants (WSDs) conducted routine operations and maintenance (O&M) activities at and north of the Superfund Site.

Operations & Maintenance Activities (O&M)

The activities included extracting and treating approximately 9.1 million gallons of groundwater, analyzing 105 samples from 74 monitoring wells, operating the Landfill Gas Collection and Control System, maintaining stormwater conveyance ditches, and inspecting and maintaining landfill covers and buffer properties, all in compliance with regulatory requirements.

Site Plans

- The Water Treatment Plant (WTP) O&M Manual is being updated, addressing regulatory agency comments, and a revised version will be submitted for approval and signature in first half of 2026.
- The Stormwater Monitoring Plan Revision 1 was approved and signed by USEPA on 9/30/2025.

Voluntary Activities Around the Site

- The WSD's conducted a Tetrahydrofuran (THF) augmentation pilot study in the water treatment plant to determine if the effectiveness of the biological treatment system can be increased to destroy more 1,4-dioxane and chlorinated solvent mass faster. The study began on January 22, 2025 and ran until September 2, 2025. Results from the study demonstrated augmenting the biological system with THF reduces the retention time in which 1,4-dioxane co-metabolism takes place, allowing for greater treatment flow rates of the biological system during periods of heavy precipitation. Details of the study are included in a Technical Memorandum in Appendix A-5. An extended THF augmentation study continues to operate at the plant to assess long term performance improvements in the BTS.
- A voluntary 1,4-Dioxane plume remedy study (bench scale study) to determine if aerobic microbiological destruction is a technology that could be further developed for application at Lowry was completed during the previous reporting period, and a technical memo with the findings was written and shared with USEPA. Based on the success of the study, an extended lab study will be performed in 2026, to confirm 1,4-dioxane degradation rates using impacted groundwater collected from the NBBW and a well north of the NBBW. Details of this study and results will be presented in the second half of 2026.
- A focused feasibility study was completed to evaluate remedial technologies for addressing nitrate in the PM-15 area. The study identified low voltage electrochemical reduction as a potential technology fit for the Site to reduce nitrate directly to nitrogen gas, bypassing nitrite. In 2026 this technology will be demonstrated in the lab using Lowry matrices (soil and groundwater) before a field application is considered. A technical memorandum will be prepared at the end of the lab demonstration.
- A Long-Term Monitoring Optimization (LTMO) evaluation is currently being performed for depth-to-water (DTW) monitoring in the Alluvium/Weathered Dawson and Weathered Denver Formation monitoring well network at the Site. The evaluation was planned during the fourth quarter of 2025 and performed during the first quarter of 2026. A technical memorandum with the findings and approach will be prepared in the first half of 2026 and will be presented in the first half of 2026 Lowry Landfill Site Status Report (SSR).

Area Around the Site

The site is surrounded by landfilling, residential, and commercial areas, with institutional controls in place to prevent land use that is not supportive of the Lowry remedy.

Geotechnical soil sampling occurred in Section 1 by a Solar Developer and a hearing on a vested rights agreement in Section 7 was held by a battery storage operator.

Community Outreach

As part of the ongoing commitment to transparency and community engagement, the WSDs share all site monitoring data on websites maintained by the USEPA, CDPHE, and WSDs, providing access to documents, videos, and other materials. Updates and community involvement opportunities are ongoing through the USEPA's outreach coordinator. A public meeting, with regulatory agencies, Lowry Trust representatives, and the public, occurred on February 18th, 2026 and the next public meeting is scheduled for August 26, 2026.

Water Treatment Plant (WTP) Upgrades

A plan was developed and executed to upgrade WTP computers, software, alarm notification system, and the main programmable logic controller (PLC) to modern standards to enhance WTP processes and cyber security. In the first half of 2026, the project reporting phase, including updates to the O&M manual and a new cyber/site security manual, will be completed. Annual audits will be performed going forward during third quarter of each year.

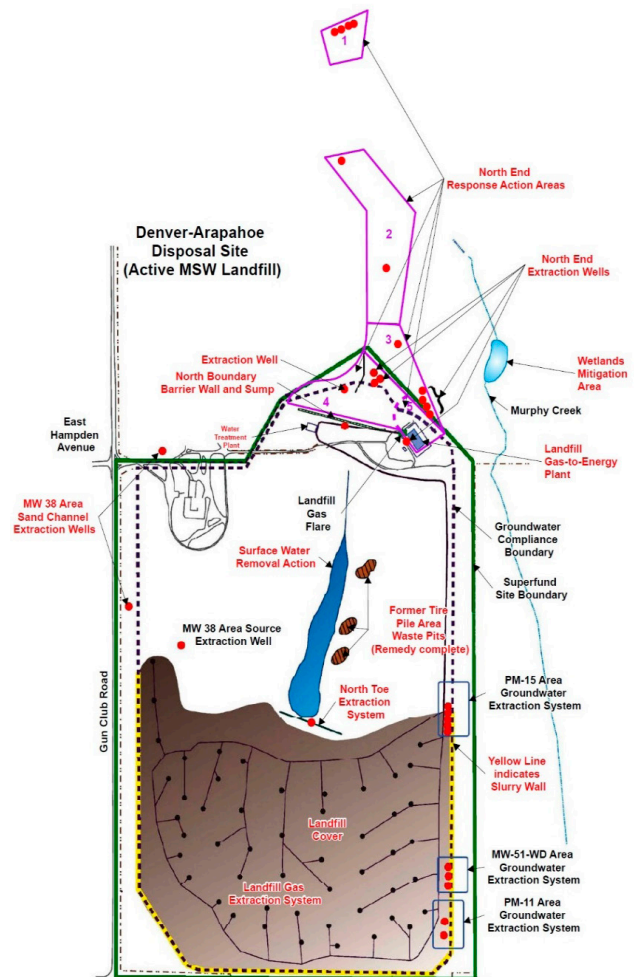
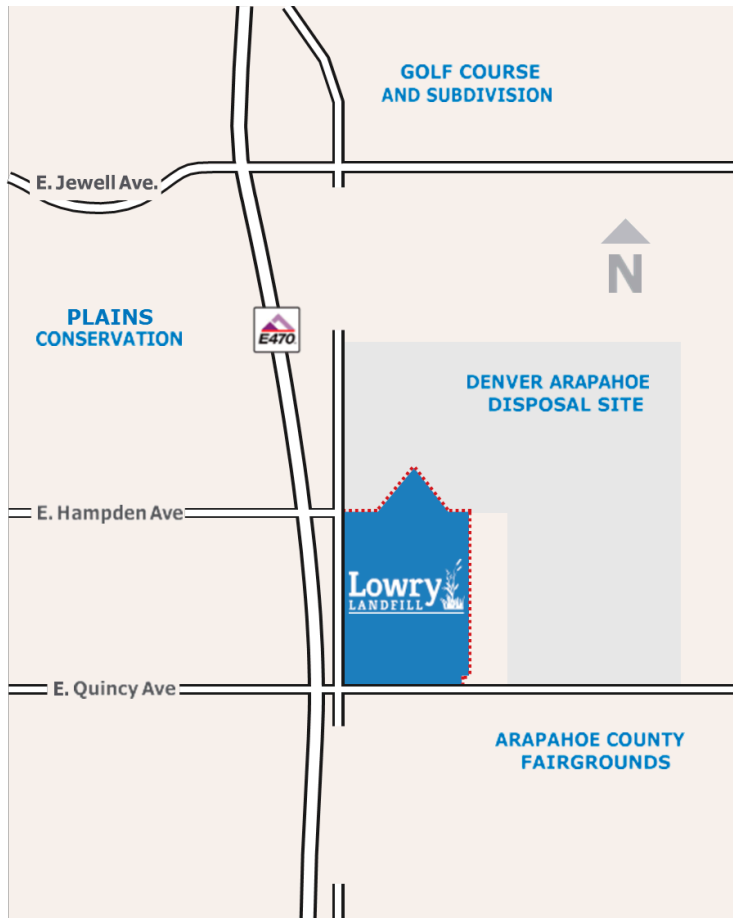
Five-Year Reviews (FYR)

During the fifth FYR, the EPA concluded that the remedy at the Site is protective of human health and the environment.

FYRs are generally required by CERCLA or program policy when hazardous substances remain on-site above levels that permit unlimited use and unrestricted exposure. FYRs provide an opportunity to evaluate the implementation and performance of a remedy to determine whether it remains protective of human health and the environment.

Generally, reviews take place five years following the start of a CERCLA response action, and are repeated every succeeding five years so long as future uses remain restricted. FYRs can be performed by EPA, or the lead agency for a site. EPA retains responsibility for determining the protectiveness of the remedy.

During 2026, data collection, evaluations, and interviews will take place for the upcoming sixth FYR submittal in early 2027.



Note:
Red Labels
Denote Remedy Components



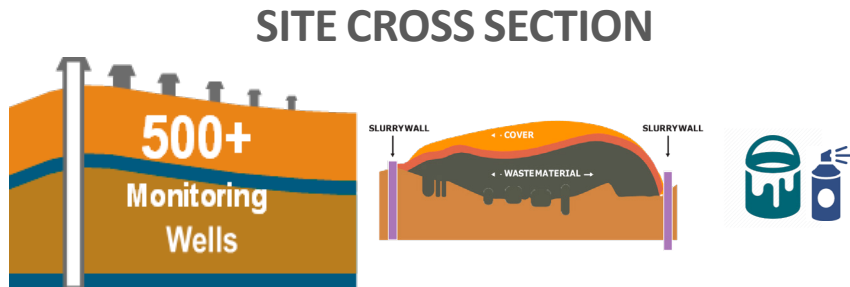
Water Treatment

1,515,984 gallons per month
In compliance with discharge standards

LOCATION & CONTAINMENT REMEDY MAPS

GROUNDWATER MONITORING

More than 500 monitoring wells extending into both shallow and deep aquifers have been installed within and outside the site to ensure that environmental resources and the community continues to be protected. Well and infrastructure inspections are a routine and critical part of the Lowry monitoring program and are conducted daily. Data shows that the monitoring system continues to be effective.



A 2021 evaluation confirmed remedial systems are effective, with the slurry wall containing contamination inside the eastern, southern, and western limits of the landfill as designed and prevents clean groundwater from migrating into the site. The North Toe Extraction System, which collects and pumps water to the treatment plant at approximately 0.45 gallons per minute, continues to capture the most

contaminated groundwater emanating from the landfill. The 960-foot long North Boundary Barrier Wall (NBBW) located at the north end of the site is the most significant groundwater extraction feature, removing on average 9.05 gallons per minute, preventing contamination from migrating offsite.

Groundwater extraction in the MW38 area also halts potential contaminant migration. Vertical migration monitoring shows no contamination in deeper aquifers, and of the 60 compliance wells that are monitored for 29 chemicals, 52 wells are in compliance or potentially in compliance, and 8 wells, are out of compliance, potentially out of compliance, or indeterminant for chemicals such as 1,4-dioxane, PCE, nitrate, nitrite, and chloroform. The 8 wells that are out of, or potentially out of compliance, or indeterminant are being addressed by supplemental groundwater extraction and the conveyance of contaminated water to the treatment plant and monitoring, as discussed above. This method has proven to be effective at stopping groundwater flow in these areas and reducing chemical concentrations.

1,4-dioxane

- Synthetic industrial chemical sometimes added to solvents to prolong their useful life
- Used in some consumer products such as cosmetics, deodorants, soaps, toothpaste, anti-freeze and paint
- Site groundwater standard = 0.9 ppb

FACTORS AFFECTING CONTAMINANTS IN GROUNDWATER

1,4-dioxane and the North End

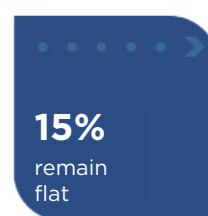
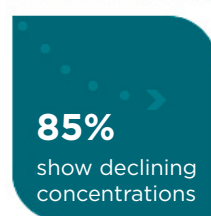
In 2005, the Colorado Water Quality Control Commission set a groundwater standard for 1,4-dioxane, later revised to 0.35 ppb. Due to matrix effects and natural groundwater quality, a site-specific standard of 0.9 ppb was established for Lowry Landfill, with annual reviews. Response actions have reduced 1,4-dioxane levels in the North End Area, with 33 (85%) of the 39 monitored wells showing declining trends and 6 (15%) showing no trend. The 2022 Five-Year Review

confirmed no impact on residential areas, no completed exposure pathways and no risk to people or the environment. Groundwater extraction and monitoring continue to lower concentrations and prevent plume migration. The two figures on the next page show the 1,4-dioxane plume extent in 2005 and again in 2025. **The extent of the plume has shrunk by 3280 feet over the last twenty years, indicating the site's remedy components are effectively controlling the plume. More details, including a plume animation of the North End, are available at www.lowrylandfillinfo.com.**

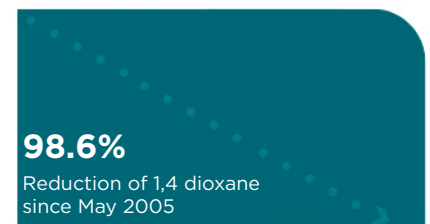
At Lowry

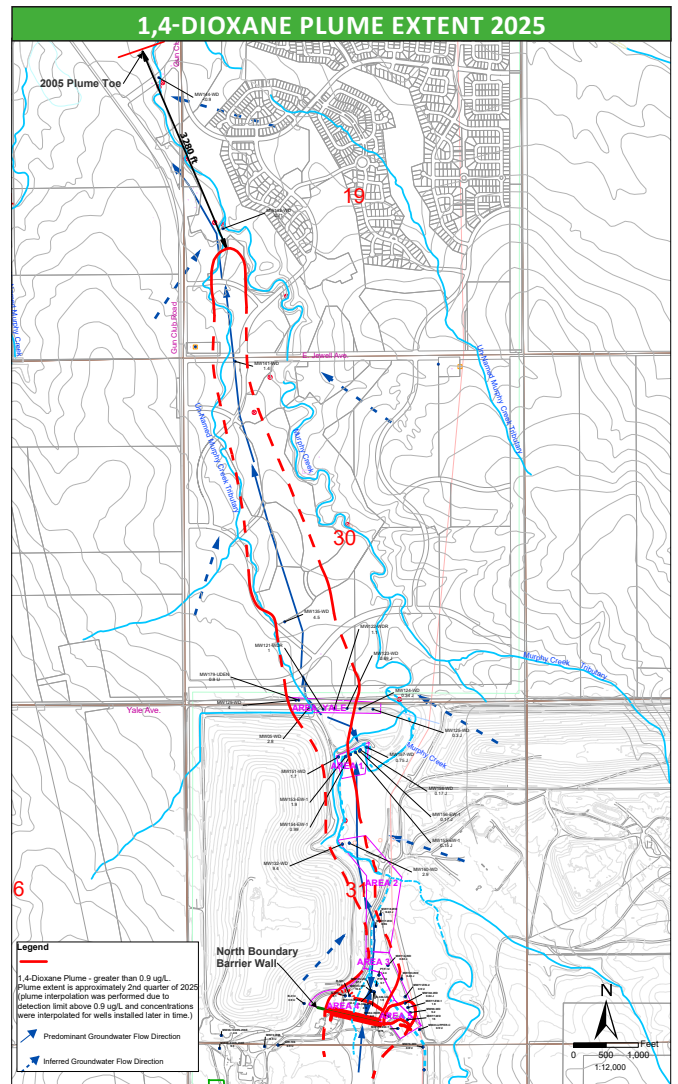
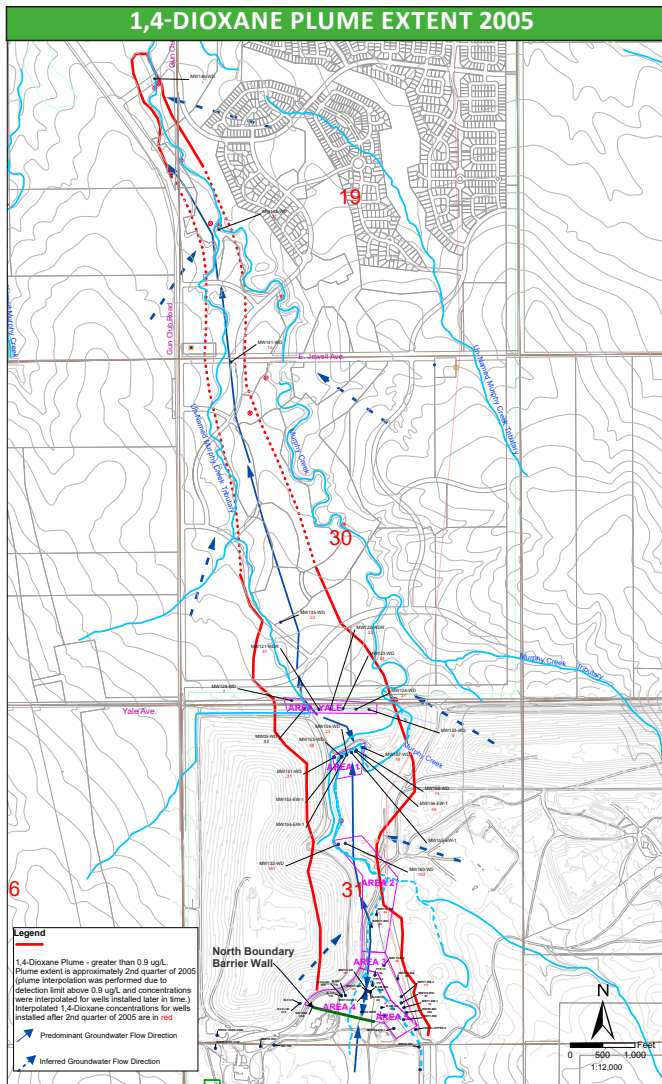
Extraction and treatment continue to decrease concentrations

North End Area: 39 Wells



MW38 Channel





MW38 Sand Channel

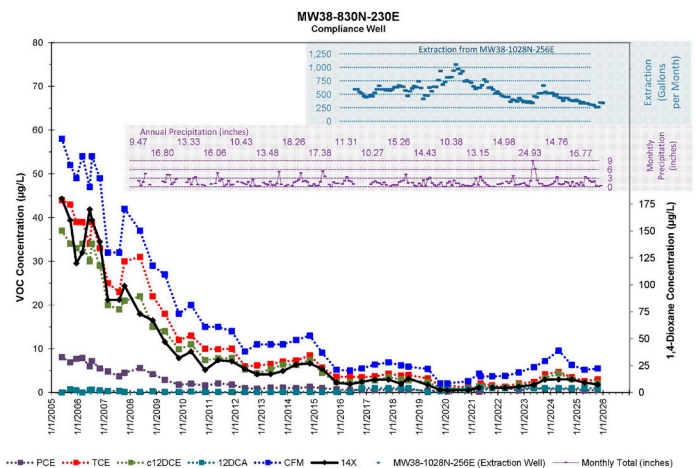
Remedial actions in the MW38 sand channel have successfully contained groundwater and reduced contaminant levels. Groundwater is pumped to maintain inward flow, preventing offsite migration, and the extracted water is treated and disposed of. Since pumping began in May 2005, 1,4-dioxane levels have decreased by 98.6%. Chloroform and trichloroethene concentrations increased after late 2022 and 2023 precipitation. They continued to increase in the first half of 2024 but have decreased or stabilized in the second half of 2024 and in 2025.

Nitrate in the NBBW Area

Two wells near the site's northern boundary exceed the nitrate standard in areas of historical sewage sludge land farming. Significant off-site nitrate migration above the standard is unlikely, and monitoring continues. Groundwater extraction from North End wells further prevents potential migration.

WATER TREATMENT PLANT

WTP treats 1.52 million gallons of contaminated groundwater monthly, using microbiological processes, advanced oxidation, and ion exchange to remove over 99.5% of organic compounds and reduce molybdenum by 92%. Pretreated water is sent to a public wastewater facility, ensuring safe chemical levels, minimal environmental impact, and compliance with discharge standards.



LANDFILL GAS REMEDY

Landfill gas, primarily methane, naturally forms as organic waste decomposes in low-oxygen conditions. Lowry's landfill gas collection and control system removes 500 tons of methane annually, equal to taking 2,200 cars of the road.

LANDFILL COVER

The former landfill is covered by 4 to 12 feet of compacted clay and soil, which minimizes groundwater contamination by preventing rain and snow infiltration. The landfill cap is routinely monitored for settlement or other issues. No cap settlement areas were identified during the monitoring period covered by this report.