

March 22, 2024

Sarah Foreman Brian Long Colorado Department of Public Health and Environment Transmitted via email

RE: Response to Compliance Advisory, September 20, 2023, Twin Enviro Milner Landfill

Dear Sarah and Brian,

Twin Enviro Services (Twin) is transmitting this response to address the Compliance Advisory received September 20, 2023, for comments related to the Milner landfill. Twin has prepared this RTC document based on our discussions since issuance of the September 20 letter. The original Colorado Department of Public Health and Environment (CDPHE) Compliance Advisory text is provided below for reference, in *italics*.

Deficiency 4: Records reviewed during and after the inspection event indicate that leachate levels in the MOD 1 sump are consistently higher than permitted by the Solid Waste Regulations and Facility's EDOP, in apparent violation of Section 4.0 "Leachate Storage and Disposal" of Appendix G "Leachate Management Plan" of the Facility's EDOP, Section 3.2.5(D) of the Solid Waste Regulations, and CRS § 30-20-110.

Requested Action 4: Within ninety (90) days of your receipt of this Compliance Advisory, the Department requests that Twin provide an addendum to Appendix G, "Leachate Management Plan", of the Facility's EDOP that provides additional details on how Twin will manage leachate at the Facility to maintain less that one (1) foot of head on the liner system at all times. Since the procedures outlined in Appendix G have apparently been ineffective in keeping less than one foot of head on the liner system, the submittal should include additional detail than what is found in Appendix G to the EDOP, and should outline new and/or alternative work practices, equipment, and/or processes for the management of leachate at the Facility. The Department requests that a monthly leachate reporting form, including leachate level measurements, be included in the addendum to be submitted to the Department for review on a monthly basis.

Twin prepared an initial response on September 26, 2023, and provided operational options to be evaluated prior to submittal of this response. Since then, Twin has had several phone conversations with CDPHE regarding status, extension of the 90-day initial response requirement, and path forward. Twin has since reviewed the options presented and is proposing increased measurements and increased hauling as the best and most feasible option to maintain compliance with leachate levels on the liner system.

Leachate pumping data since 2019 has ranged from a maximum annual pumped volume of 717,000 gallons in 2021 to a minimum of 345,000 gallons in 2022. The average annual pumped volume from 2019 through 2023 is 529,000 gallons, or approximately 11 trucks per month. Recognizing that pumping rates recently have been insufficient to maintain proper leachate levels, Twin is confident that it can manage at least 11 trucks a month, and additional as needed. The data summary is meant to inform the operational decisions, and compare annual averages to understand operation limitations, if any. In this case, the volume necessary to pump on a routine basis is within the operational abilities of the landfill.

Twin recognizes that the State is currently reviewing the December 2023 EDOP, which includes construction of Mod 8. Mod 8 will add up to 89,000 gallons of leachate to the Mod 1 system annually, until the waste depth is sufficient to reach a steady state condition, which we approximate to be 4-5 years after initial waste placement in the cell. Therefore, as part of this response and update to operations, Twin is including contributions of Mod 8 leachate to the Mod 1 sump. Mod 8 represents a 17% increase in potential leachate volume within the Mod sump, or an additional approximate 2 trucks per month over current averages. Twin has evaluated this additional trucking and finds it within their operational abilities to maintain the routine pumping.

Operational revisions will include developing a routine pumping schedule, where trucks are scheduled to pump on scheduled days of the week, currently planned for Monday, Wednesday, and Friday. This will initially meet the anticipated 3 trucks per week average, 11 to 12 trucks monthly. Additionally, Twin will complete and record leachate measurements once a week, at a minimum, to ensure that the pumping is appropriate for seasonal fluctuations. If leachate recordings are still high at any given time, the pump truck will be on call to complete an additional pump the same day as the reading. If there are consistently high readings (defined as 3 or more weeks in a row), the pumping rate will be increased to 4 days a week until readings are stabilized. After one year of measurements and routine, scheduled pumping, Twin will evaluate the seasonality of the pumping and may propose changes to the routine pumping schedule as appropriate.

These proposed operational revisions will be incorporated into the EDOP Appendix, Leachate Management, following initial review of the document by CDPHE. CDPHE additionally requested a monthly reporting form be prepared as part of this submittal. Twin already utilizes the "Weekly Module 1 Leachate Sump Inspection Form" that is included in the Leachate Management Plan within the EDOP. Twin proposes to continue utilizing the form and will submit to CDPHE monthly, as per your request. The form is attached for your reference and review. The requested monthly reporting form template is attached for your consideration. If CDPHE has edits to the form, those can be reviewed and incorporated at that time.

> Mailing Address • P O BOX 774362 • Steamboat Springs, CO • 80477 Milner Landfill • 20650 RCR 205 • Steamboat Springs, CO • 80487 Voice 970-879-6985 • www.twinenviro.com • milner@twinenviro.com

Operational changes include:

- Weekly monitoring of Mod 1 leachate levels, or more as warranted.
- Submission of the Reporting Form to CDPHE monthly.
- Regularly scheduled pumping and hauling of Mod 1 leachate.

Twin has been successful in maintaining leachate levels this winter by implementing this proposed regular leachate haul schedule since the start of 2024. Twin is equipped to maintain these operational changes moving forward.

Twin will additionally look to prioritize completing interim cover installation on Mods 1 through 5, where practicable based on current operations and working face, to limit infiltration through the waste in these slope areas.

Twin appreciates the additional time granted by CDPHE for full review of operational options and preparation of this response letter. Please reach out to discuss further, or to provide any additional comments.

Respectfully,

Jacie & Compl

Lacie Coupe CEO cc: Alan Goldich, Routt County Scott Cowman, Routt County Rebecca Lindeman, PE, Jardon E&I Mike Pretti, PE, SMA

WEEKLY MODULE 1/PHASE 2 LEACHATE SUMP INSPECTION FORM

INSPECTED BY:

MILNER LANDFILL

DATES COMPLETED:

WEEKLY MODULE 1 LEACHATE SUMP INSPECTION FORM

SUMP INSPECTION					
DATE/INITIALS	LEACHATE LEVEL (FT) BEFORE PUMPING	LEACHATE LEVEL (FT) AFTER PUMPING	DEFICIENCY	REPAIR	COMMENTS