



November 3, 2025

Scott Legg
Brannan Sand and Gravel Company, L.L.C.
2500 E. Brannan Way
Denver, CO 80229

RE: West Farm Pit, Permit No. M-2008-078, Status of Required Corrective Actions

Mr. Legg:

The Division of Reclamation, Mining and Safety (Division) is providing the following status update on the required correction actions from its inspection report issued on July 28, 2025:

INSPECTION TOPIC: Hydrologic Balance

PROBLEM #1: The Division has no evidence that the operator has a valid well permit, substitute water supply plan (SWSP), or approved water augmentation plan for the exposed groundwater at the site. The most recent SWSP on file was approved for the period of May 1, 2024 through April 30, 2025, which covered a total groundwater exposure of 7 acres at the site for dewatering trenches and settling ponds. During this inspection, the Division observed much more than 7 acres of exposed groundwater at the site, potentially more than 15 acres, including the settling ponds in Phase 9 and the standing water in the Phase 8 pit. This is a problem related to C.R.S. 34-32.5-116(4)(h) and Rule 3.1.6(1)(a) governing injury to existing water rights.

CORRECTIVE ACTIONS: By the corrective action due date, the operator shall demonstrate that the operation is in compliance with the Office of the State Engineer (SEO) or show evidence that the operator is taking measures to bring the site into compliance with the SEO. If the operator is currently unable to provide evidence of compliance with the SEO for the existing amount of exposed groundwater at the site, the operator must provide the Division with proof that the total exposed groundwater at the site has been reduced to 7 acres approved in the most recent SWSP.

CORRECTIVE ACTION DUE DATE: August 27, 2025

CORRECTIVE ACTION STATUS: *The operator provided a copy of a renewed Substitute Water Supply Plan (SWSP) for the site which was approved on September 10, 2025 by the Division of Water Resources (DWR) for the period of May 1, 2025 through April 30, 2027. Based on this plan, no more than 9.66 acres of groundwater may be exposed at the site each year, including in dewatering trenches and settling ponds. It is the Division's understanding that the maximum 9.66 acres is to cover all groundwater exposed within the slurry wall lined pits being mined (in dewatering trenches and settling ponds/sumps) as well as water retained in settling ponds outside of the lined pits, regardless of whether the water was pumped from within the lined pit or from the onsite well (for processing), as a distinction is not made in the SWSP.*

Because the operator has demonstrated that a SWSP is in place for the site, this problem is considered abated at this time. However, it should be noted, the Division has some concerns about the amount of water being reported to DWR versus the amount of water actually being exposed at the site, and also



about the Phase 8 slurry wall liner having potentially been damaged or otherwise compromised since the 90-day leak test was performed for the approval obtained by the SEO on April 25, 2024. The Division will continue to evaluate these potential issues during future inspections and data reviews for the site.

INSPECTION TOPIC: Hydrologic Balance

PROBLEM #2: The operator has failed to demonstrate that they have minimized disturbances to the prevailing hydrologic balance of the affected land and of the surrounding area, as required by C.R.S. 34-32.5-116(4)(h) and Rule 3.1.6. In particular, the operator has failed to submit the required groundwater level monitoring data for the last 4 years, including the baseline data that should have been collected prior to installing the slurry wall liners around Phases 3 and 8. Per Amendment No. 2 (AM-2; issued on December 29, 2021), the operator committed to monitoring groundwater levels from 17 monitoring wells on a monthly basis and submitting the monitoring report to the Division every year with the Annual Report (due by April 7th). The Division was unable to find the required groundwater monitoring report with the 2022, 2023, 2024, or 2025 Annual Report submittals. Additionally, in AM-2 the operator committed to providing an updated groundwater model if needed after additional water data is collected, and to analyzing the data to determine whether groundwater levels deviate +/- 2 feet from the seasonal peak/low water levels for 2 consecutive months for each well compared with the baseline data collected prior to slurry wall installation. If this trigger level is reached, the operator committed to initiating mitigation measures (e.g., perimeter drain).

CORRECTIVE ACTIONS: By the corrective action due date, the operator shall submit a Technical Revision (see enclosed form), with the required \$216 revision fee, that includes all groundwater monitoring data collected at the site since 2021; an analysis of that data, including a description of any changes observed in the data after slurry wall installation, any data that met the +/- 2 foot trigger level, and whether any mitigation measures are needed; an updated groundwater model (if the data shows any discrepancies with the model submitted in AM-2); the details for any groundwater mitigation measures that have been installed or are proposed; the final construction drawings and SEO approval letter (if obtained) for the Phase 3 and Phase 8 slurry wall liners; and an updated plan for future reporting of groundwater monitoring data, which should include, at a minimum: a narrative analysis of the data with trends and anomalies identified, a table with basic location and installation details for each monitoring well, a map showing the locations of all monitoring wells, a table (or tables) with all data collected from each monitoring well and the date it was collected, and graphs/plots showing the water level data collected from each monitoring well over time and identifying the times when mining activities with the potential to impact groundwater (e.g., slurry wall installation) occurred.

CORRECTIVE ACTION DUE DATE: August 27, 2025

CORRECTIVE ACTION STATUS: *The operator has not provided the Technical Revision required for this corrective action. In its corrective action response submitted on August 27, 2025, the operator submitted an incomplete data record for groundwater levels at the site, with several months of data missing for all monitoring wells, and almost two years of data missing for monitoring well MW-P2X2 (which is described as "buried"). Based on the information submitted, groundwater monitoring is not being conducted consistently and regularly, and the data is not being presented in a consistent or easily decipherable manner. The operator has not provided a detailed analysis of the groundwater data*

collected for the site since 2021, a description of any changes observed in the data (for each well) from baseline conditions to conditions observed after slurry wall installation (for each mine phase), or identification of any data that met the +/- 2 foot trigger level including a description of the seasonal peak/low flow levels observed in the baseline data (for each well) prior to installation of the slurry wall (for each mine phase). The operator did not provide an updated groundwater model, which the Division believes is necessary based on the data collected since the last groundwater model was prepared for the site on March 25, 2021. Additionally, the operator did not provide a plan for future reporting of groundwater monitoring data, as required.

The data spreadsheets and figures provided for the groundwater level data are not acceptable. For example, each of the two figures present the data differently ("Depth to Groundwater" for phases 1 and 2 vs "Elevation of Groundwater" for phases 3 and 8). This data must be presented as the depth of groundwater from the ground surface for all wells. Additionally, the figure for "Phase 3 and Phase 8" include data for other phases – Phases 5, 6, 7, and 9. The data for these wells should be plotted on a separate figure. The figures provided do not identify the dates when slurry wall installations were completed. Therefore, it is not clear which portions of the data presented are considered baseline data for each of the phases, particularly for Phases 3 and 8, which were installed in association with AM-2. During review of the water level data provided, it appears that well MW-P3-3, an upgradient monitoring well for Phase 3, shows mounding of groundwater to less than 4 feet from the ground surface. A review of the 2021 groundwater model submitted with AM-2 does not appear to account for this level of mounding. Figure 11 – Modeled Changes in Groundwater Conditions – Phase 1, 2, 8, and 3 Pit Slurry Walls predicts less than 2.5 feet of mounding in the area of well MW-P3-3. This mounding, beyond what was predicted and possibly further exacerbated by seasonal fluctuations, could flood existing structures such as basements or cause cropland damage and impact phreatophyte growth. In the Division's experience, mounding groundwater close to the ground surface has resulted in farm equipment getting stuck and negative impacts to cattle grazing. Ground surface elevations are not accounted for in the AM-2 groundwater model. Based on the predictions made in the AM-2 groundwater model and the monitoring data that was recently provided, the Division believes that groundwater mitigation measures are likely needed. The operator will need to provide an updated groundwater model that accounts for the monitoring data that has been collected to date, analyzes the mounding observed relative to ground surface elevations, and proposes the type and location of groundwater mitigation measures that are needed. If no mitigation measures are proposed, a detailed discussion explaining this determination shall be provided. Additionally, a more appropriate "trigger level" must be defined within the updated groundwater model.

More information must also be provided on the monitoring well that was described as "buried", MW-P2X2. Was this well plugged and abandoned in accordance with DWR guidelines? If so, a copy of the final abandonment report filed with their office must be provided to the Division. Since this well was part of the approved groundwater monitoring network for the site, a replacement well must be proposed and a schedule for its installation provided. Note that an improperly abandoned well may provide for a preferential pathway for contaminants to reach groundwater, thereby failing to minimize impacts to the hydrologic balance. It also does not comply with DWR's regulations on appropriate well abandonment practices.

Due to the discrepancies and lack of consistency with the groundwater level monitoring occurring at this site, the Division will require an increased reporting frequency from annually to quarterly. This revised frequency shall be included in the plan for future reporting of groundwater monitoring data (submitted with the Technical Revision). The groundwater monitoring report will need to be submitted by the end of each calendar quarter.

The operator's August 27, 2025 corrective action response did include the final construction drawings and SEO approval letters for the Phase 3 and 8 slurry wall liners; therefore, this portion of the required corrective action has been satisfied. However, because the operator has not submitted a Technical Revision with all the required information (stated above), this problem is being recited, and a new due date established 60 days from the date of this letter (see below). Failure to submit the required Technical Revision by the new deadline may result in enforcement actions.

NEW CORRECTIVE ACTION DUE DATE: January 2, 2026

INSPECTION TOPIC: Gen. Compliance With Mine Plan

PROBLEM #3: The operator has failed to follow the approved mining plan, specifically the portion pertaining to management of the settling ponds, which includes routinely cleaning out the settling ponds to maintain proper capacity to treat water at the site.

CORRECTIVE ACTIONS: By the corrective action due date, the operator shall provide photographic evidence to the Division demonstrating that the sediment has been cleaned out of the settling ponds.

CORRECTIVE ACTION DUE DATE: August 27, 2025

CORRECTIVE ACTION STATUS: *In its August 27, 2025 corrective action response, the operator stated the "West Farm Pit now has adequate capacity to run its wash cycle and comply with its water quality/discharge permit" and "Settling ponds are part of a closed-loop system to contain and re-use process water". The operator pointed to the approved mining plan in AM-2 which states the settling ponds are to be "cleaned as needed". The operator did not provide photographic evidence demonstrating the sediment has been cleaned out of the settling ponds. Please note, the approved mining plan in AM-2 states "The (sediment) ponds are routinely maintained and cleaned out so they can continue to function in removing the sediment from the water before it is re-used in the washing of materials or discharged back to the Arkansas River". Additionally, the location and dimensions of the current settling ponds being utilized at the site (as observed during the Division's recent inspection) may not be consistent with the approved mining plan and map. Therefore, the approved plans and maps, and possibly the water management plan for the site, may need to be revised to account for actual site conditions. This problem is considered abated at this time. However, the Division will evaluate this matter further during its next inspection of the site.*

INSPECTION TOPIC: Financial Warranty

PROBLEM #4: The financial warranty is not adequate to reclaim the site in accordance with the approved reclamation plan. This is a failure to maintain the proper financial warranty amount to complete reclamation of the affected lands pursuant to C.R.S. 34-32.5-117(4)(b) and Rule 4.2.1(1).

CORRECTIVE ACTIONS: The operator shall review the enclosed bond estimate and provide any comments by the corrective action due date. If, by the corrective action due date, no comments have been received, the Division will send a separate surety increase notice to the operator regarding the

increase of the financial warranty. The operator will have 60 days from the date on the surety increase notice to post the additional financial warranty.

CORRECTIVE ACTION DUE DATE: August 27, 2025

CORRECTIVE ACTION STATUS: *The operator had 60 days to review the Division's bond estimate and provide comments. In its August 27, 2025 corrective action response, the operator stated the installation of new slurry walls and other progressive changes at the site would offset the Division's costs. Please be advised, the Division must calculate the required financial warranty for a mining operation based on the approved mining and reclamation plans. The costs for reclaiming the West Farm Pit were last calculated in 2021 with the Division's review and approval of AM-2. Every time the Division inspects a permitted site, it must reassess the required financial warranty for reclaiming the site in accordance with the approved plans, accounting for any inflationary increases since the last estimate was calculated.*

To obtain a reduction in the required financial warranty amount for reclamation achieved at a site, the operator must submit a Surety Reduction (SR) request. In its review of the SR request, the Division will inspect the site to assess any reclamation achieved and recalculate the required financial warranty accordingly. Per the Division's policy, if an operator has completed the installation of a slurry wall lined enclosure and obtained approval of the liner from the State Engineer's Office (SEO), the operator could submit an SR request to propose a reduction to no less than 20% of the total costs of installing the lined enclosure. This applies to all slurry wall enclosures that have been installed in accordance with the SEO's guidelines and continue to meet the SEO's performance standards.

Until such time that an SR is submitted and approved, the Division must hold a sufficient financial warranty for completing reclamation of the site in accordance with the approved plans. Accordingly, a notice of Surety Increase will be issued to the operator under separate cover, giving the operator 60 days (from the date of that letter) to submit the additional required financial warranty.

If you have any questions, you may contact me by telephone at (303) 945-9014 or by email at amy.eschberger@state.co.us.

Sincerely,



Amy Eschberger
Senior Environmental Protection Specialist

Cc: Alex Schatz, Brannan Sand and Gravel Company, L.L.C.
Patrick Lennberg, DRMS Groundwater Specialist