



**COLORADO**  
Department of Public  
Health & Environment

Mr. Jay Brown  
Thornton, LLC  
2503 Crawford Avenue, #102  
Evanston, Illinois 60201

Sent via email to [jaylon7@gmail.com](mailto:jaylon7@gmail.com); [john@quantumwaterco.com](mailto:john@quantumwaterco.com);  
[ralmon@irelandstapleton.com](mailto:ralmon@irelandstapleton.com)

March 22, 2022

**RE: Thornton, LLC - Remedial Measures Implementation Report (Dec. 2021)  
File - EPA ID # COR000212639**

Dear Mr. Brown:

The Colorado Department of Public Health and Environment, Hazardous Materials and Waste Management Division (the "Division") has reviewed Jay Brown and Thornton, LLC (collectively, "Thornton, LLC")'s *Remedial Measures Implementation Report*, dated December 17, 2021 ("Report") discussing Phase I and II BOS-100 injections in offsite areas OFS-1, OFS-2, OFS-3, and OFS-4. This Report was timely submitted to the Division, in accordance with 3.d of the September 3, 2021 *Order Modifying Stipulated Injunction* ("Order"). The Division has reviewed this Report and determined it is deficient. Thornton, LLC must provide additional information to the Division.

Paragraph 3.d of the Order requires, "a detailed, written report describing injections, treatment performance, monitoring, and an analysis of the BOS-100's initial effectiveness." The Division also required Thornton, LLC provide the following information in the Report, "Sampling and monitoring activities, laboratory methods, quality assurance/quality control procedures, and sampling results shall also be described. Sampling methods shall be described in sufficient detail so the quality of the data collected may be evaluated. Field forms, chains of custody, and analytical laboratory reports shall be attached to this report." (CDPHE letter dated June 23, 2020, RE: 2020 Corrective Action Plan Addendum).

The Division notes the need for correction of deficiencies and further information. The facility address on file for Thornton, LLC and this corrective action effort is 8866 Washington Street, not 8804 Washington Street as the Report states. The Report also contains a two-paragraph summary description of Phase I and II injections. Additional information describing the method(s) of BOS-100 injection (e.g. pre-drilling) is needed. For example, how was it determined the predrilling method would be used and what did that entail? The methodology Alpine used to calculate what was injected into the ground should also be discussed or referenced. Field forms are not attached. Further, the Division requests an evaluation of the mass of PCE the amount of BOS-100 injected is expected to treat.

Finally, the Report did not include a future work schedule. A schedule and planning for the on-site phase of the current corrective action plan ("CAP") must be included. To date, a new CAP



has not been submitted to the Division for review and approval. Because a new CAP has not been submitted, the Division plans to send a separate letter with a Division-set schedule and requirements for the next phase of BOS-100 injections under the currently in-effect CAP.

Please submit a corrected report to the Division within **30 calendar days** of the date of this letter. Feel free to contact me at (720) 644-6314 or [lindsay.murl@state.co.us](mailto:lindsay.murl@state.co.us) if you have questions about this letter. Thank you.

Sincerely,

Lindsay Murl  
Environmental Protection Specialist  
Colorado Department of Public Health and Environment

ecc: Robert Beierle, CDPHE  
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Emily Splitek, Colorado AGO  
HMWMD Records

