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July 15, 2019

Mr. Patrick Lennberg
Environmental Protection Specialist
Division of Reclamation, Mining and Safety
1313 Sherman St., Room 215
Denver, CO 80203

Electronically submitted to Patrick.lennberg@state.co.us

Reference: Pueblo Cement Plant and Limestone Quarry. DRMS Permit No. M-2002-004

Subject: Response to DRMS May 31, 2019 Meeting Summary

Dear Mr. Lennberg,

GCC appreciated the opportunity to meet with your office on May 31, 2019, in order to discuss current groundwater monitoring at our facility located in Pueblo, CO. In response to your Memorandum, dated June 12, 2019, where you summarized the key points to the discussion, provided below are our acknowledgements and/or responses to the key points.

- 1) It was agreed that the current groundwater sampling and analysis plan (SAP) needs to be updated to reflect current site conditions, document procedural and analytical requirements, and provide a framework to define reporting permit conditions and ensure they will be met. The new SAP is being drafted by Close Consulting Group and will be submitted as Technical Revision (TR) as soon as it is ready.

GCC acknowledges and agrees to this key point. GCC anticipates the TR will be submitted by the end of July.

- 2) It was agreed that wells MW-6 and MW-7 are located in a fracture groundwater flow regime.

GCC acknowledges and agrees to this key point.

- 3) DRMS expressed the desire to collect samples from MW-6, a very low yielding well, using an approved method rather than purging dry and not collecting a sample.

GCC acknowledges DRMS' desire to collect samples from MW-6 using an approved method. GCC was able to obtain a sample during the second quarter sampling. In addition, GCC is evaluating



additional approved methods for future sampling and will include information in the SAP update referenced in the response to key point #1.

- 4) The Operator was reminded that there is a requirement to report groundwater exceedances within 5 working days of receiving laboratory results pursuant to Rule 3.1.7(9). Notification can be in the form of an email.

GCC acknowledges and agrees to this key point.

- 5) DRMS reminded the Operator that installation of MW-8 into the Codell Sandstone is a condition of the Reclamation Permit and must be constructed as approved. However, GCC could submit a new TR to provide a technical justification for not installing MW-8. GCC shall, within 30 days of the date of this letter, either provide the Division with a schedule to construct MW-8 or submit a TR with technical justification for not installing MW-8.

GCC acknowledges this key point and has provided a schedule below for installing MW-8. Please note that this schedule also includes monitoring of the groundwater to determine the action plan for additional monitoring at the facility.

Action Item	Date
Solicit hydrogeologist contractor bids and select contractor	July 2019
Prepare & submit MW-8 installation and development work plan to CDRMS	August 2019
Solicit drilling contractor bids for MW-8 installation and select contractor	October 2019
Submit monitoring well GWS-46 permit application for MW-8 to CDWR, permit approval process typically 1-2 weeks but up to 6 weeks	October 28, 2019
Obtain One-Call utility clearance for MW-8 location	Week of January 6, 2020
Drill, complete and develop MW-8	Week of January 13, 2020
Start monitoring MW-8 with baseline GW sample for lab analysis, water level, field parameters; also at this time collect GW samples for lab analysis, water levels and field parameters at MW-6, MW-7	Week of January 27, 2020
MW-8, MW-7, MW-6 monthly water levels & field parameters	Week of February 24, 2020
MW-8, MW-7, MW-6 monthly water levels & field parameters	Week of March 23, 2020
Submit technical memorandum to CDRMS documenting interpretation of MW-8, MW-7, MW-6 data to refine hydrogeologic conceptual model and guide additional monitoring well installation planning	April 3, 2020
Submit TR to CDRMS with additional monitoring well installation and baseline monitoring work plan to CDRMS	April 24, 2020



- 6) As part of the SAP and TR submittal a point of compliance for the site will be identified. It was discussed that the area around MW-005 would be an adequate location. Currently, MW005 is not a sufficient point of compliance because it is screened in alluvial material and has never produced a sample.

GCC acknowledges this key point and plans to submit a TR upon evaluating the relationship between MW-6, MW-7, and MW-8, as indicated in the schedule provided in response to key point #5.

The primary use of the new Codell monitoring well, with respect to the phased approach to site characterization, is to determine if the Codell Sandstone is hydraulically communicating with the Fort Hays Limestone. If so, and they act as one aquifer, other facility monitoring well locations can be planned for one (1) bedrock well screening both the Fort Hays Limestone and the Codell Sandstone, instead of two (2) separate bedrock wells. This monitoring must include MW-6 and MW-7 for comparison so they will be put on the same sampling schedule. An initial monitoring period of one quarter shall include monthly water levels and field parameters (temperature, pH, specific conductance) from MW-6, MW-7 and the new MW-8 to assess the potential hydraulic communication between the wells.

- 7) The current sump (in-pit sediment detention pond) location will move throughout the life of mine. It was discussed that a TR will be needed to account for the change in location if the current approved mine permit does not already account for the movement.

GCC acknowledges this key point and plans to include an evaluation of the groundwater in this area in the additional monitoring points upon evaluating the relationship between MW-6, MW-7, and MW-8, as indicated in the schedule provided in response to key point #5. After further discussion with GCC personnel, it appears that the sump may or may not be moved throughout the life of the mine.

- 8) Monitoring of future mine panels was also discussed. DRMS explained the need for background monitoring before mine panels are disturbed to help quantify any impacts mining may have on groundwater. The background monitoring will aid DRMS in determining future bond release after mining is complete.

GCC acknowledges this key point and plans to include an evaluation of the groundwater in the future mine panels upon evaluating the relationship between MW-6, MW-7, and MW-8, as indicated in the schedule provided in response to key point #5.

Again, GCC appreciates the feedback and comment from DRMS. If you have any additional questions regarding this letter, please contact me at (719) 647-6861, or dfurman@gcc.com.



Sincerely,

A handwritten signature in black ink, appearing to read 'Diana', with a horizontal line extending from the end of the signature.

Diana Furman
Environmental Engineer