



STATE OF
COLORADO

Carter - DNR, Jocelyn <jocelyn.carter@state.co.us>

Pueblo Cement Plant and Limestone Quarry, Permit M-2002-004, Q2 2024 Exceedance Response

1 message

Carter - DNR, Jocelyn <jocelyn.carter@state.co.us>

Tue, Jun 18, 2024 at 3:30 PM

To: Amy Rodrigues <aveek@gcc.com>

Cc: Amy Eschberger - DNR <amy.eschberger@state.co.us>, "Lennberg - DNR, Patrick" <patrick.lennberg@state.co.us>

Good afternoon Amy,

Please see the attached letter regarding the exceedances reported to the Division on June 12, 2024.

I am requesting a response to the exceedances observed in MW-11 of Se concentrations. I am asking for a relatively quick response (by July 2, 2024), the reason is because I will be on an extended leave during July and the beginning of August. I would like to have this situation resolved by then. If you need more time to prepare a response, please let me know as soon as possible so I can update another EPS on this matter.

Thank you so much,
Jocelyn

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Jocelyn Carter
Environmental Protection Specialist
Division of Reclamation, Mining, and Safety
1313 Sherman St Suite 215
Denver, CO 80203
cell: (720) 666-1065



20240618_M2002004_ExceedanceNotificationResponse.pdf

219K



June 18, 2024

Amy Rodrigues
GCC Rio Grande, Inc.
3372 Lime Rd
Pueblo, CO 81004

RE: Notice of Groundwater Discharge Exceedance Quarter 2, 2024, Pueblo Cement and Limestone, Permit# M-2002-004

Dear Ms. Rodrigues,

The Division received the notification of groundwater discharge exceedance of Agricultural Standards (Table 3) of Regulation 41 – The Basic Standards for Groundwater (Reg. 41) from the 2024 second quarter monitoring period on June 12, 2024.

Manganese Exceedance

The Mn exceedance detected at MW-6, 444 µg/L, and the duplicate sample MW-2B, 437 µg/L, from MW-6, is within the historical range of Mn concentrations for this location, ranging from 100 to 1,100 µg/L. Well MW-6, located near the center of the permit area north of mine panels and south of the plant area, has been above the standard 200 µg/L for Mn since January 2018.

The exceedance at MW-9, 408 µg/L, is within the historical range of Mn concentrations for this location, ranging from 410 to 780 µg/L. Concentration of Mn have been decreasing at this location since the third quarter of 2022. Well MW-9 is located upgradient from mining activities.

Reg-41 Table 3 includes a footnote (j) for Mn, “This standard is only appropriate where irrigation water is applied to soils with pH values lower than 6.0.” Groundwater at the site is not being used for irrigation purposes and therefore the standard is not appropriate for this site.

Selenium Exceedance

The Se exceedance at well MW-7, 38.6 µg/L, is within the historical range of Se concentrations for this location, which has ranged from non-detected to 98.1 µg/L. The Se concentrations have been variable at this location since 2018. Well MW-7 is located approximately 25 feet west of well MW-6 on the other side of a mapped fault. The presence of Se can be attributed to the Fort Hayes Limestone formation and naturally occurring seleniferous minerals of the marine deposit, which MW-7 is screened in.

The Se exceedance at well MW-11, 487 µg/L, is about three times higher than the highest concentration recorded since installation. On November 7, 2022, MW-11 was tested and exceeded Se concentration limits at 162 µg/L. With MW-11 situated in the Fort Hayes Limestone formation, higher Se concentration can be expected. However, this magnitude of an



increased concentration is of note. Please provide an explanation as to why there was such a significant increase in Se concentration at MW-11 and state if there were any events that occurred during mining operations and their nature, and if these events can be attributed to the elevated Se concentrations.

The TR-12 issued by the Division on November 3, 2023, approved the location and installation of ten additional monitoring wells, MW-15 through MW-24. In addition to providing a possible explanation of the extreme spike in Se concentration in MW-11, please provide a status update on wells MW-17, MW-19, and MW-20. Include any sampling results for these wells, if available. The locations and depths of these wells are of interest to the Division with respect to the location and depth of MW-11.

Fluoride Exceedance

The exceedances of fluoride were detected in wells MW-13 and MW-14 at 6,220 µg/L and 2,870 µg/L, respectfully. Since the installation of both wells in April 2022, fluoride concentrations have ranged from 520 and 690 µg/L in MW-13 and 220 and 400 µg/L in MW-14. In the 2023 Annual Hydrology Report the Operator states that fluoride concentrations increase in groundwater where calcium concentrations are low. Recent calcium concentrations are low in both wells, MW-13 and MW-14, according to the quantities reported in 2024's first quarter hydrology report.

This concludes the Divisions response to the exceedance notification. The Division reserves the right to further supplement this document with additional items and/or details necessary. Provide a response regarding the exceedance amounts of Se in MW-11 to the Division by **July 2, 2024**.

The Division asks that GCC Rio Grande, Inc. provide an explanation for exceedances being reported for future exceedance notifications.

The Division appreciates GCC Rio Grande, Inc.'s dedication to the shared mission of protecting the environment and maintaining vigilance regarding the safety of groundwaters.

If you have any questions, please contact me by email at Jocelyn.carter@state.co.us or by phone at (720) 666-1065.

Sincerely,



Jocelyn Carter
Environmental Protection Specialist
Division of Reclamation, Mining, and Safety

Ec: Amy Eschberger, DRMS
Patrick Lennberg, DRMS