

STATE OF
COLORADO

REM 9622

Location ID 443091

Document 2495793

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Wilson Creek NE Terrace Area Reclamation Project - Review Requested

1 message

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To: "Lujan - DNR, Carlos" <carlos.lujan@state.co.us>
Cc: "Marcelo Barberis (bmal@chevron.com)" <bmal@chevron.com>

Thu, May 25, 2017 at 4:42 PM

Good Afternoon Carlos,

I wanted to summarize the main topics of our conversation yesterday and provide you with the DRAFT cross-sectional figures for each of the Terrace Areas. As we discussed, based on our 2016 soil assessment data, impacts exceeding 500 mg/kg TPH are present at Terrace 1 through Terrace 5 near the toe of the slope of the adjacent hillside. Based on observations made during the Terrace 6 remediation in 2016 and discussions with our geotechnical engineer during the construction site visit last week, Stantec is concerned about potential slope stability issues with excavations that approach the toe of slope in Terrace 1 through Terrace 5.

The depth of anticipated impacted soils along with their proximity to the toe of slope of slope in portions of the remaining Terrace Areas represent a significant change in the slope stability assessment for excavation work. Stantec has evaluated the available Site information against the potential for slope failure and has determined that to safely complete an open hole excavation, a 15-foot offset from the toe of the slope should be observed. This offset distance is intended to prevent excavation of material inside the subsurface stress envelope that is influenced by the steep mountain side slopes, which are approximately 2H:1V.

As indicated during our discussion, Stantec's geotechnical engineer has developed alternative means and methods to safely excavate within the 15 foot offset using slot trenching techniques. While it is possible to use slot trenching techniques to the toe of the slope, this change presents additional safety concerns and would affect our schedule and overall cost of the project. There is also concern that excavating up to the toe of the slope could affect some of the established trees and woody plant species at the base of the slope. In order to avoid harming high-value vegetation, Stantec recommends no excavation within the drip line of the trees and would establish a 5 foot buffer from the toe of slope. If excavation is advanced closer to the toe of slope, a shored excavation system will likely be required, which will expand the construction footprint, extend the project schedule, and increase the overall scope of work and costs.

The attached figure set provides plan and sectional views of Terraces 1 through 5 with applicable soil boring locations, potential impacted soil zones, and proposed excavation limits.

Stantec requests that the COGCC review the information provided in this email text along with the attached drawings to determine if it will require Chevron to advance excavation activities beyond the proposed limits and into the anticipated stress envelope of the mountain slopes. Stantec believes that the proposed excavation scope of work will remove grossly impacted material along with the vast majority of TPH mass. Additional excavation adjacent to the toe of slope will require additional engineering controls and construction methods, with corresponding schedule delays and impacts to existing vegetation.

If you have time today or tomorrow, I would like to discuss the attached cross-sections and Stantec's proposed construction approach for remediation of the NE Terrace Area.

Thank you for your time,


Brent Lucyk

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