

June 21, 2022

Dustin Czapla
Colorado Division of Reclamation, Mining and Safety
1313 Sherman Street, Room 215
Denver, CO 80203
303-866-3567

Delivered Via Email and CDRMS ePermitting

RE: Colorado Stone Quarries, Inc., Pride of America Mine, M-1999-058, Technical Revision 09

Mr. Czapla:

On behalf of Colorado Stone Quarries, Inc. (CSQ) and the Pride of America Mine, please allow this letter to serve to complete the following permit revisions:

1. CSQ seeks to stop conducting microblaze bioremediation treatments of the April 23, 2019 fuel spill affected fill area.
2. Use of fuel tank containment captured water for road dust suppression following water quality sampling.
3. Request to include sporadic surface blasting and submittal of blast plan.

Cessation of April 23, 2019 fuel spill area bioremediation treatments

Please refer to the January 28, 2020 submittal by CSQ to the Division regarding the April 23, 2019 fuel spill outside of their Portal 4 when reviewing this request. Currently, CSQ, via its consultants HRL Compliance Solutions, have been applying microblaze treatments to the area of contamination adjacent to Portal 4. Prior to adjusting their haul road pathways, CSQ and HRL installed subsurface bioremediation injection ports that were used to continue to introduce the microblaze application to the affected area following construction of their haul road infrastructure.

Over the summers of 2020 and 2021, CSQ continued monthly applications of microblaze to the Portal 4 adjacent affected area. Treatments were limited to the warm season months as bioremediation action turns dormant during freezing temperatures. Over the entire years of 2020 and 2021, CSQ completed monthly water quality sampling as detailed in Technical Revision 7 approved by the Division on August 11, 2020. Additionally, following over two years of monthly water quality sampling that never yielded result values exceeding regulatory thresholds, the Division approved Technical Revision 8 on February 22, 2022 to transition to quarterly sampling from monthly sampling and cease microblaze treatment of the October 2019 spill area.

As the April spill area drains into the same area impacted by the October 19, 2019 fuel spill, and the Division has already approved the cessation of October 2019 spill area microblaze treatments, CSQ requests that the same standard be applied to the April 2019 fuel spill area

with the same rationale that microblaze treatments have provided maximum impact, to date, and continued microblaze treatments are now unnecessary. As detailed in Technical Revision 8, CSQ will continue to submit quarterly water quality sampling data with their CDRMS Annual Report by August 20 each year.

Use of fuel tank containment water for onsite road dust suppression

The Division approved CSQ's Technical Revision 6 on March 25, 2020 that confirms the movement of their primary and only permanent fuel storage area. This fuel storage area houses tanks that all feature secondary containment via double walls capable of holding 110% of the volume of each tank. The entire fueling and generator area is also encased in an HDPE liner that serves as final mitigation to ensure no fuels or hydrocarbon products leave the area.

The HDPE liner is, by design, impermeable and annually captures thousands of gallons of snow melt and other precipitation. Multiple times throughout the spring, summer and fall months, CSQ is required to pump water from the liner for disposal to an approved facility. However, as hydrocarbons float on the surface of water, the vast majority of water removed from the liner can be considered 'clean' and free from hydrocarbon contaminants. Therefore, rather than dispose of all the water from within the liner, CSQ proposes to pump the water from within the liner into their water truck for use as dust suppression on their haul roads.

CSQ proposes the following additional parameters to ensure that all water pumped from the liner for use as dust suppression is free of hydrocarbon constituents. First, prior to any pumping, CSQ will sample the liner water and will wait for and review appropriate water quality sampling results. Sampling will occur <2 weeks prior to every pumping event; the 2-week duration is required to account for laboratory analysis timeframes. See the enclosed May 27, 2022 liner water quality sample results and parameters proposed to be used prior to any liner pumping; sample was collected on May 18, 2022. Please advise if the Division will require additional analytes be assessed prior to pumping and use on any roadways. If water samples results are beyond CDPHE Water Quality Control Division (WQCD) regulatory standards, then the water will *NOT* be used for dust suppression and will, instead, be disposed of appropriately off site.

Second, all liner water intended for disposal will be pumped into a temporary holding tank at the time of sampling. This will ensure that the water intended for use on the roadway will not be further contaminated during the ~2 weeks of time between the sampling date and the date that results are delivered to CSQ. As needed, CSQ may use more than one holding tank. All holding tanks will be stored within the liner such that if a tank were to become damaged, all potentially contaminated water would still flow into the liner and thus continue to protect the environment. Prior to placing tanks within the liner, the area below each intended tank location will be assessed and fortified, as necessary, to ensure that settling and damage to the liner does not occur from the empty or filled tanks. Examples of under liner settling mechanisms may include applying and compacting pea gravel and/or rearranging and compacting crushed marble to strengthen the under liner and under tank areas.

Third, during pumping, the pump will be submerged >12 inches below the water surface to ensure that all surface sheen or contamination does not enter the holding tank for distribution along the haul roads.

Surface Blasting and Blast Plan

As CSQ mines their surface quarries or opens new portals from the surface, large amounts of fractured and unsaleable 'waste' marble needs to be removed prior to reaching marketable and intact stone. During these instances, small scale blasting provides the most expeditious solution to removing this unsaleable surface rind. Therefore, CSQ proposes to sporadically use small scale surface blasting to open new working areas and remove difficult and slow to cut surface rock. Please see the attached Blast Plan that details how blasting will occur on site.

CSQ will use a contracted and licensed blasting provider to complete all blasting work. The contractor will follow all BMPs and safety practices required for blasting and the area and roads will be watered to minimize airborne dust during the operation. Broken waste material generated as a result of the blast will be disposed of onsite in CSQ's waste rock landforms.

All blasts will be executed such that no impacts to any surrounding properties, structures, or the undisturbed natural environment are realized. Structure owners within a 1-mile radius of the DRMS permit boundary will be noticed via certified mail prior to blasting as detailed in the Blast Plan. Final notices will be populated and updated with the dates of blasting and will be submitted to the Division via email submittal prior to the start of blasting.

Prior to submitting this Technical Revision, the DRMS provided applicable requirements to Rule 6.5(4) and requirements to be included in blast plans. These requirements were included in a June 9, 2022 email from Dustin Czapla and are addressed below.

1. *Identify all man-made structures within 1 mile of the blasting area (type of structure, age of the structure, type of material the structure is constructed of, etc.).*
 - a. Please see the enclosed Blast Plan for discussion of structures within 1-mile of the blasting area.
2. *Identify all potential unstable geologic conditions within 200 feet of any structure (ie. highly fractured cliffs, etc.).*
 - a. No geologically unstable structures exist surrounding any of the man-made 'housing' structures. While bedrock in the area hosts fractures, they are >200 feet away from any housing structures included in the blast plan. Gunnison County culverts and stormwater structures are within 200 feet of a known highly fractured bedrock area at the location known as Mud Gulch. However, impacts to and repair of said structures are exclusively detailed in CSQ's Road Maintenance Agreement with Gunnison County that was renewed on January 18, 2022 and need not be considered by the Division further.
3. *Commit to complying with the maximum allowed peak particle velocity and the maximum allowed airblast (air overpressure), which are 1.0 in./sec. PV and 129 dBL respectively.*
 - a. Please see the enclosed Blast Plan for blasting commitments.
4. *Commit to monitor every shot with an instrument capable of detecting both ground motion and airblast until such a time that the accumulated data demonstrates, to the satisfaction of the Division, that the blasting operation will not negatively affect off-site structures. Once demonstrated, monitoring operations may cease as long as no change in blasting conditions occurs (i.e. more explosives used, new structure constructed within one mile of the blasting area, etc).*
 - a. Please see the enclosed Blast Plan for blasting commitments.
5. *Commit to placing a monitoring instrument at the nearest structure (if permitted by the landowner) or at an accessible location nearest the structure.*

- a. CSQ and its licensed and contracted blasting contractor commit to placing blast monitoring equipment at the DRMS permit boundary. As the closest structure is guarded by a bedrock outcrop, CSQ's contracted and licensed blasters posit that placing monitoring equipment at the DRMS boundary will better analyze the impacts from the blast.
6. *Commit to keeping records of each and every blast event. Record keeping requirements are attached. Copies of the monitoring records must be provided to the Division.*
 - a. CSQ and its licensed and contracted blasting contractor commit to keeping records of each and every blast event. Copies of said reports will be provided to the Division in a timely manner following each blast event. Please see the enclosed Blast Plan for blast monitoring commitments.
7. *When blasting occurs within 1,000 feet of any public road, traffic shall be cleared from the road. Guards, wearing safety vests and using traffic flags, shall block vehicles from coming within ¼ mile of the blast site.*
 - a. Please see the enclosed Blast Plan for blasting commitments associated with road closures, BMPs and general safety during blasting.
8. *No blasting shall occur within 50 feet of any buried utility lines.*
 - a. CSQ and its licensed and contracted blasting contractor commit to not blasting within 50-feet of any buried utility lines.

It is anticipated that CSQ will complete blasting ≤ 1 instance annually; therefore, blasting at the PAM should be considered sporadic and is not part of the standard and regular mining procedure. Prior to completing blasting within their permit area, CSQ commits to noticing the Division via email to their assigned Environmental Protection Specialist >10 days prior to the initiation of blasting.

Please do not hesitate to contact me with questions.

Cheers,



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Enclosures:

- CSQ Marble - Containment Waste Water Analysis (L1496214) 5.18.2022.pdf
- CSQ PAM Blast Plan 220621 – compiled.pdf

Ec:

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