November 18, 2020

Jennifer Johnson
Permit Lead
Mining Act Reclamation Program ("MARP")
New Mexico Mining and Minerals Division
Wendell Chino Building
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Sent Via E-Mail to JenniferE.Johnson@state.nm.us

Subject: Request for Response to MMD Comment Letter of October 27, 2020, Slope Stability Analysis Timeline, Socorro Mine and Mill Revision 19-1 Application, Permit No. SO001RE, Socorro County, New Mexico

Dear Ms. Johnson:

With the above referenced comment letter of October 27, 2020, MMD provided two comments and requested to provide a response within 30 days of receipt of the letter. Please find our response as follows:

1. MMD expressed concern that the proposed boreholes shown on Figure C-1 dated September 2020 and submitted with the Slope Stability Analysis Timeline do not fall within the Proposed Quarry Expansion Location and requested that the CDM Smith Geotechnical Engineer review those proposed borehole locations and describe in writing how their locations were chosen and how they will support slope stability analysis of the Proposed Quarry Expansion, and add additional borehole locations as required for the analysis.

   The CDM Smith Geotechnical Engineer did review the boring locations and provided the following comments:

   a. The locations of 7 boring as shown on Figure C-1 are within the common property boundary and permit limits and were selected by the mine management with the primary objective of determining overburden thickness to assist in mine operation planning and to confirm the economic viability of future mining operations.

b. The CDM Smith Draft Technical Memorandum – Work Plan for Slope Stability Assessment, dated December 30, 2019 (subsequently referred to as Work Plan) suggested that these exploratory borings drilled for mine operation planning purposes are also being utilized to obtain cores of the perlite rock beneath the overburden for laboratory testing of strength characteristics. The mine management is following this suggestion.

c. The Work Plan presented the approach of conducting additional data collection efforts of rock mass characteristics including joint system orientations when the pit slopes are being set back and to add this data to the existing data base to either confirm the continued validity of the kinematic analyses performed to date or to indicate if conditions change. In the case of the latter, more complex modeling of the rock mass would be required. If more complex rock mass modeling is being performed, laboratory testing results of rock core strength characteristics would be needed as model input data. To prepare for this eventuality, taking rock cores as the opportunity arises and performing laboratory testing (unconfined compressive strength (UCS)) was suggested. It should be noted that the rock core test results are not being considered in the kinematic analyses. In the case of continuing reliance on kinematic analyses for slope stability assessment as long as joint system orientations indicate stable slopes from a kinematic viewpoint, these lab test results serve as reference, e.g. to compare perlite rock to other more common rock types, which will allow to respond to related questions.

d. The question if the perlite cores obtained at the proposed boring locations will be representative for the perlite rock exposed when the pit slopes are being set back within the area of the Proposed Quarry Expansion Location per Figure C-1 at this time can be evaluated only based on the perlite deposit that has been mined to date and the perlite rock currently exposed at the pit walls. Based on observations, the deposit appears to be relatively uniform. The rock cores that we anticipate to obtain from the planned exploratory borings will either confirm or invalidate the current expectation of this relative uniformity of the deposit extending to the west. If visual inspection of the perlite cores confirms relative uniformity, selected cores will be shipped to a geotechnical laboratory for UCS testing.

e. Should the results of the planned coring effort indicate that the assumption of continued relative uniformity of the perlite deposit to the west cannot be confirmed, mine management may authorize the drilling of 1 or more additional borings within the Proposed Quarry Expansion Location per Figure C-1 or, in the case of access issues, authorize obtaining rock cores by conducting 1 or more borings on the benches of the existing quarry pit.

2. MMD noted that the Slope Stability Analysis calculation package derived from this investigation, once approved, should be signed and stamped by a licensed PE in the State of New Mexico.

   CDM Smith has confirmed that slope stability analysis calculation packages derived from future site investigations will be signed and stamped by a licensed PE in the State of New Mexico. As per our letter providing the anticipated timeline of the next steps of executing the Work Plan, the results from collecting and testing rock cores and the data collected during the next site visit of a CDM Smith geologist will be added to the existing project data base and the results of the required geotechnical analyses will be summarized in a memorandum that will also provide responses to the specific questions per the EMNRD internal communication dated July 24, 2019.

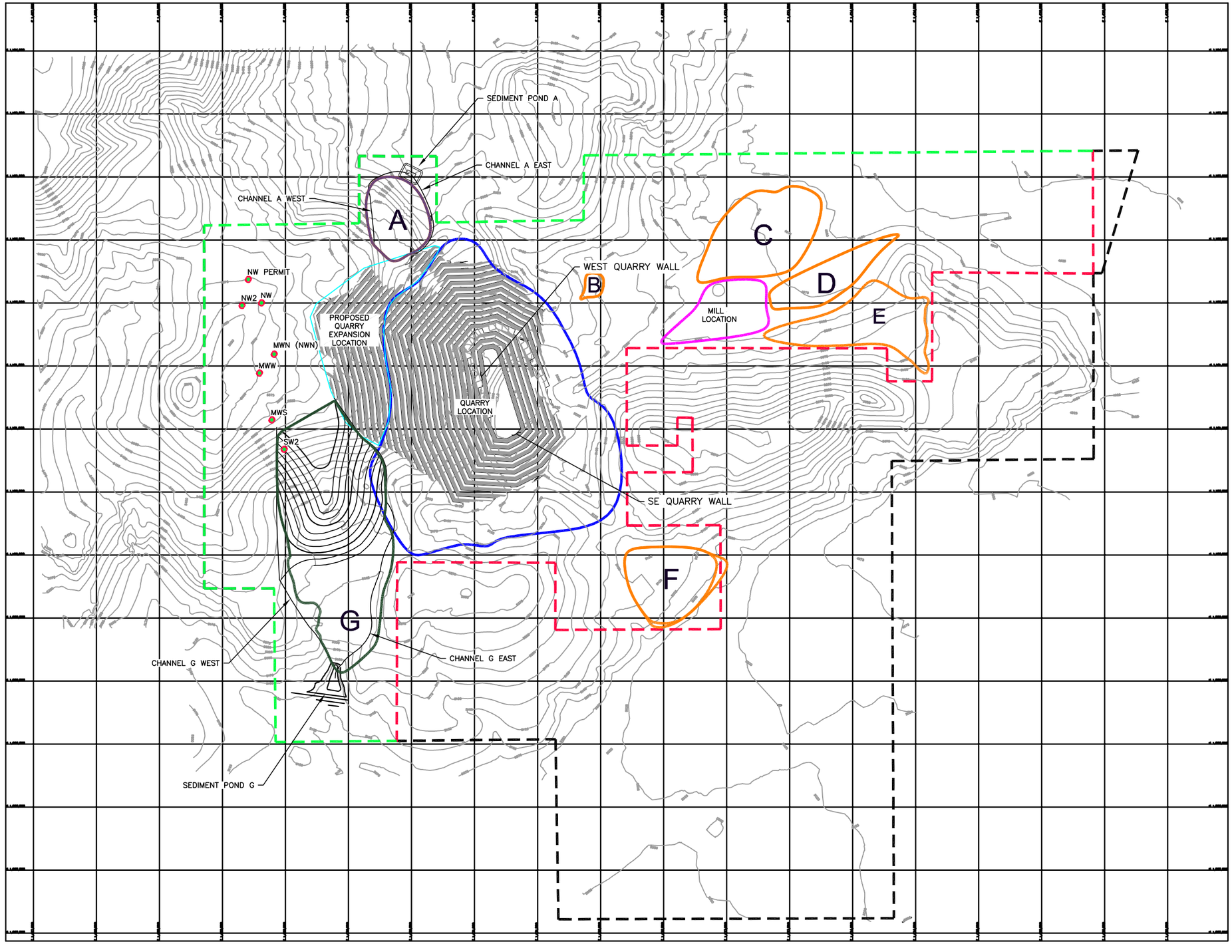
We look forward to working together to get the slope stability assessment completed. If you have any questions regarding the above timeline, please do not hesitate to contact me at (530) 335-5451x102.

Sincerely,

Rocky Torgrimson
Dicalite Management Group, Inc

Attachment: Socorro Mine Site Plan (Figure No. C-1)

cc. Brian Antonioli, CDM Smith
Ulf Gwildis, CDM Smith



LEGEND

- QUARRY
- SOCORRO MILL
- PRIOR RECLAIMATION WASTE DUMPS (B,C,D,E,F)
- PROPOSED QUARRY EXPANSION
- OVERBURDEN DUMP A
- DUMP G ACTIVE
- PROPERTY BOUNDARY
- PERMIT LIMITS
- COMMON PROPERTY BOUNDARY AND PERMIT LIMITS
- MAJOR CONTOURS 25' INTERVALS
- MINOR CONTOURS 5' INTERVALS
- DRILL LOCATION

N

1" = 400'
200 0 400

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: J. KOTSON
DRAWN BY: W. PARKER
SHEET CHK'D BY: B. ANTONIOLI
CROSS CHK'D BY:
APPROVED BY: B. ANTONIOLI
DATE: SEPTEMBER 2020

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DICAPERL MINERAL CORP.
SOCORRO MINE
SOCORRO, NM

SOCORRO MINE SITE PLAN

PROJECT NO. 106779.TK11
FILE NAME: C-1.DWG
FIGURE NO.
C-1