

Date Inspection Conducted:	CA Mine ID Number: 91-
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SURFACE MINING INSPECTION REPORT

I. Mine Name:

II. Mine Operator:		
Mailing Address:		
City:	State:	ZIP Code:
Name of Onsite Contact Person:	Email Address:	Telephone:

III. SMARA Lead Agency Name:		
Inspector's Name:		
Name of Entity or Organization:		
Inspector's Mailing Address:		
City:	State:	ZIP Code:
E-mail Address:	Telephone:	

IV. Approved Documents	
Permit Number: <input type="checkbox"/> Not Applicable	Expiration Date, if Applicable:
Vested Right: <input type="checkbox"/> Not Applicable	Date of Lead Agency Determination:
Reclamation Plan Number:	Date Approved:
Interim Management Plan: <input type="checkbox"/> Not Applicable <input type="checkbox"/> Initial <input type="checkbox"/> 1 st Renewal <input type="checkbox"/> 2 nd Renewal	Date Approved:

V. Is this operation located partly or solely on Federal land?	Check One: <input type="checkbox"/> Yes <input type="checkbox"/> No
Are there any Federal authorizations associated with this operation? If yes, explain:	Check One: <input type="checkbox"/> Yes <input type="checkbox"/> No
Inspecting Agency Code(s):	Reason for Inspection:
Land Use Designation/Zoning for Surface Mine Operation:	

Date Inspection Conducted:	CA Mine ID Number: 91-
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SURFACE MINING INSPECTION REPORT

VI. Financial Assurances	
A. Information on Financial Assurance Cost Estimate	
Date and Amount of Most Recently Approved Financial Assurance Cost Estimate	
Date:	Amount: \$
<input type="checkbox"/> Other Information?	Explanation:

B. Information on Financial Assurance Mechanism(s)				
Type of Financial Assurance Mechanism(s):	Financial Assurance Mechanism Number(s):	Amount of Mechanism:	Date of Expiration:	Date of Approval by the Lead Agency:
Total Amount of Mechanism(s):				
Has there been a change of operator since the last inspection? If yes, provide the date of notice.			<input type="checkbox"/> Yes	<input type="checkbox"/> No
Date of Change:				

VII. Non-SMARA facility operations conditions solely of local concern (e.g. hours of operation) do not need to be noted here. See Instructions for Block VII.		
[Use separate sheet(s) where necessary. Refer to item numbers below]		
Potential Reclamation Plan Requirements	List Reclamation Plan Requirements (Recommended to be filled out prior to field inspection)	Note current site observations. Describe site conditions and aspects of the operation that are or may be inconsistent with the reclamation plan or SMARA. (Note additional comments on Section VIII as necessary)
A) General Information		
1) Approved mineral type(s)		
2) Approved production amount (Annual/Gross)		
3) Termination date of operations		
4) Permit end date		

SURFACE MINING INSPECTION REPORT

VII. Non-SMARA facility operations conditions solely of local concern (e.g. hours of operation) do not need to be noted here. See Instructions for Block VII. [Use separate sheet(s) where necessary. Refer to item numbers below]		
Potential Reclamation Plan Requirements	List Reclamation Plan Requirements (Recommended to be filled out prior to field inspection)	Note current site observations. Describe site conditions and aspects of the operation that are or may be inconsistent with the reclamation plan or SMARA. (Note additional comments on Section VIII as necessary)
5) Anticipated/approved use of mined lands after reclamation		
6) Description of pre-SMARA disturbances, if any		
B) Boundaries		
1) Property boundary		
2) Permit boundary		
3) Reclamation plan boundary (RPB)		
4) Setbacks		
C) Slopes – Grading		
1) Fill Slopes –		
i. Slopes – Active (max/current)		
ii. Slopes – Reclaimed		
iii. Compaction		
2) Cut Slopes –		
i. Slopes – Active (max/current)		
ii. Slopes – Reclaimed		
D) Erosion Control		
1) Best management practices (BMPs)		
2) Grading		
3) Vegetation		
E) Ponds		
1) Design – Function		
2) Capacity (area/depth/volume)		
3) Maintenance		
F) Stream & Wetland Protection		
1) Buffers (distance to channel)		
2) Berms (distance/length/height)		
3) BMPs		
4) Drainage		

SURFACE MINING INSPECTION REPORT

VII. Non-SMARA facility operations conditions solely of local concern (e.g. hours of operation) do not need to be noted here. See Instructions for Block VII. [Use separate sheet(s) where necessary. Refer to item numbers below]		
Potential Reclamation Plan Requirements	List Reclamation Plan Requirements (Recommended to be filled out prior to field inspection)	Note current site observations. Describe site conditions and aspects of the operation that are or may be inconsistent with the reclamation plan or SMARA. (Note additional comments on Section VIII as necessary)
5) Grading and slopes		
6) Stockpiles		
7) Stream diversions		
G) Sensitive Wildlife & Plant Protection		
1) List species		
2) Protection measures		
H) Soil/Overburden Stockpile Management		
1) Topsoil		
i. Location		
ii. Slope stability		
iii. BMPs		
2) Overburden		
i. Location		
ii. Slope stability		
iii. BMPs		
3) Topsoil Application		
i. Amendments		
ii. Depth		
iii. Moisture		
iv. Application methods		
I) Revegetation		
1) Test plots		
2) Species mix		
3) Density		
4) Percent cover		
5) Species richness		
6) Protection		
7) Success monitoring		
8) Invasive species control		
J) Structures		
K) Equipment		

Date Inspection Conducted:	CA Mine ID Number: 91-
----------------------------	---------------------------

SURFACE MINING INSPECTION REPORT

F. Describe the fee category reported in the most recent Annual Report and its consistency with the conditions observed during the inspection.	
G. Describe any limitations encountered during the inspection:	
H. Describe conditions or aspects of the operation that are or may be inconsistent with the approved reclamation plan or SMARA:	
I. Do any of those conditions or aspects require further evaluation? <input type="checkbox"/> No <input type="checkbox"/> Yes, describe (For example, further evaluation or analysis may be required by a state-licensed professional or specialist):	
J. Was a Notice of Violation issued for any of the above? <input type="checkbox"/> No, describe: <input type="checkbox"/> Yes, describe:	
K. Describe remedial activities for any pre-existing or existing enforcement actions:	
L. Duration of Inspection: Start Time: Finish Time:	
M. Weather Code(s):	N. Status of Mine Code(s):
O. Inspection Attendees and Affiliations	

IX. Inspector's "Certificate of Completion of Inspection Workshop" Number:	Inspectors Signature:	If the inspector is a State-licensed person or a contractor for the lead agency, provide license type and number:
Certification Expiration Date:	Date Signed:	

**STATE OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF MINE RECLAMATION**

SURFACE MINING INSPECTION REPORT, FORM MRRC-1, INSTRUCTIONS

GENERAL INFORMATION

This report form is intended to comply with the requirements of California's Surface Mining and Reclamation Act of 1975 (SMARA – Public Resources Code §§ 2710 et seq., and the associated California Code of Regulations found in Title 14, Division 2, commencing with § 3500, hereinafter respectively "PRC" or "CCR") and specifically PRC § 2774(b) and CCR § 3504.5 for surface mining operations (operation).

DISTRIBUTION INSTRUCTIONS

The Lead Agency shall forward to the Operator a copy of the Notice of Completion of Inspection (form NOCI-1), the completed Inspection Report (form MRRC-1), and any other supporting documentation (PRC § 2774(b)(2)).

The Lead Agency shall retain the original copy of the Inspection Report and submit one copy of this Inspection Report, along with the Notice of Completion of Inspection (PRC § 2774(b)(1)), within 90-days of conducting the inspection, to:

Department of Conservation
Division of Mine Reclamation
801 K Street, MS 09-06
Sacramento, CA 95814-3529

If any part of the operation or mined lands inspected is on Federal land, one copy of this Inspection Report and Notice of Completion of Inspection shall be forwarded to the appropriate Federal entity, i.e. the BLM or USFS regional office.

**INSTRUCTIONS FOR COMPLETING THE SURFACE MINING INSPECTION REPORT
FORM MRRC-1**

PLEASE TYPE OR PRINT ALL INFORMATION REQUESTED

**NOTE: YOU MUST WRITE THE DATE INSPECTION CONDUCTED AND THE CALIFORNIA MINE ID
NUMBER AND AT THE TOP OF PAGE 1**

1. **BLOCK I:** Enter the name of the mine as indicated on the Annual Report.
2. **BLOCK II:** Enter the name and mailing address of the Mine Operator (Operator), the name of the person serving as the onsite contact, their email address and phone number.
3. **BLOCK III:** For "Lead Agency," enter the name of the SMARA Lead Agency that is conducting this inspection, the name of the inspector and contact information. For "Entity or Organization," enter the name of the entity or organization that employs the inspector.
4. **BLOCK IV:** Enter information with respect to the currently approved reclamation plan, permit and/or vested right and Interim Management Plan. Check Not Applicable as appropriate. In cases where a Reclamation Plan Number has not been assigned by the lead agency, enter any unique lead agency assigned identifier for the approved reclamation plan.
5. **BLOCK V:** Indicate if the operation is located on Federal land. Please identify any government entities or agencies, other than the Lead Agency noted above, that accompanied the inspection.

Inspecting Agency Codes: (can choose multiple)

None	=	None	DFW	=	Department of Fish and Wildlife
BLM	=	Bureau of Land Management	NPS	=	National Park Service
USFS	=	U.S. Forest Service	DOC	=	Department of Conservation
RB	=	Regional Water Quality Control Board	O	=	Other (list Agency)

Reason for Inspection: (can choose multiple)

AI	=	Annual Inspection	RE	=	Re-inspection
PC	=	Public Concern	O	=	Other Reason
OA	=	Other Agency Request	AR	=	Acknowledgement of Reclamation

Provide the land use designation or the zoning information for the parcels on which the mined lands are located.

6. **BLOCK VI:** "Financial Assurances" consist of a current approved Financial Assurance Cost Estimate and a Financial Assurance Mechanism that is at least equal to the current approved Financial Assurance Cost Estimate (PRC § 2736).

The Financial Assurance amount must be reviewed and approved once each calendar year to account for new lands disturbed by surface mining operations and lands to be disturbed in coming year, inflation, and reclamation of lands accomplished in accordance with the approved Reclamation Plan (PRC § 2773.1(a)(3) and the State Mining and Geology Board (SMGB) Financial Assurance Guidelines). In order to determine what adjustments, if any, are appropriate to the Financial Assurance Mechanism amount, each mine operator must submit once each calendar year a revision of the written Financial Assurance Cost Estimate to the Lead Agency (CCR § 3804(c)). An Operator shall provide an updated annual Financial Assurance Cost Estimate to the Lead Agency for review within 30-days of conducting of the annual inspection (PRC § 2773.4(d)(1)(A)). Provide the date and amount of the currently approved Financial Assurance Cost Estimate.

Use the Financial Assurance “Other” and “Explanation” blocks to provide any other pertinent information regarding the status of Financial Assurance(s). If the operation does not have a current Financial Assurance Cost Estimate and/or Financial Assurance Mechanism, explain in detail. A Financial Assurance Cost Estimate is considered current if it has been approved in accordance with applicable requirements of PRC § 2773.4 within the current or previous calendar year.

Type of Financial Assurance Mechanism(s): Fill in the type of mechanism(s) that are on file. CCR § 3803 and the SMGB Financial Assurance Guidelines describe Surety Bonds, Trust Funds, or Irrevocable Letters of Credit as acceptable financial assurance mechanisms for non-governmental entity operators. For surface mining operations owned and operated by state and local government entities, Surety Bonds, Trust Funds, Irrevocable Letters of Credit, Pledges of Revenue, and a Budget Set Aside are acceptable financial assurance mechanisms.

State the Financial Assurance Mechanism(s) document number(s). State the dollar amount of each Financial Assurance Mechanism currently on file. State the date of expiration of the Financial Assurance Mechanism(s) currently on file. State the date of approval for the most recent lead agency approved Financial Assurance Mechanism on file. State the total dollar amount of the mechanism(s) held for reclamation of mined lands.

7. BLOCK VII:

INSTRUCTIONS FOR EACH DATA COLUMN:

Potential Reclamation Plan Requirements (Column 1): Under PRC § 2772 and CCR §§ 3501, 3502, and as described in the Guidance Document for Surface Mine Inspectors in CCR § 3504.6 inspections may include the following: the operation’s horizontal and vertical dimensions, volumes of materials stored on the site; slope angles of stock piles, waste piles and quarry walls; effects of sidecasting and potential geological hazards; equipment and other facilities; samples of materials; photographic or other electronic images of the operation; any measurements or observations deemed necessary by the inspector or the lead agency to ensure the operation is in compliance with SMARA, and specifically the approved reclamation plan. Column 1 provides a list of items that may be included in the approved reclamation plan, either expressly or by reference as described in PRC §§ 2772 and 2772.1, which may include conditions of approval, other permit requirements and supplementary documents, including environmental documents, prepared for the project pursuant to the California Environmental Quality Act (CEQA) (Division 13 (commencing with Section 21000)).

It is not expected that all reclamation plans will include each item of Section VII or be limited to the items listed. Items in Column 1 that are not in the reclamation plan may not need to be addressed in the inspection. In instances where the reclamation plan lacks specific details for the reclamation of mined lands, the inspector may need to consider if additional reclamation requirements or specifics are needed to achieve the proposed use after reclamation. Reclamation plan requirements not listed in Items A through L may be listed in Item M, under “Other Reclamation Plan Requirements.”

Reclamation Plan Requirements (Column 2): Prior to conducting the field inspection, the inspector must review the approved reclamation plan, any amendments, and other reclamation requirements as part of a permit application for the operation that were used to satisfy the requirements of PRC §§ 2772(c), 2773 and 2773.3 and Article 1 (commencing with § 3500) and Article 9 (commencing with § 3700) of Subchapter 1 of Chapter 8 of Division 2 of Title 14 of the California Code of Regulations and any approved modifications contained in permit conditions of approval (COA) or binding mitigation measures adopted pursuant to the CEQA included by reference in the approved reclamation plan pursuant to PRC §§ 2772(d) and 2772.1(b). The most recently approved Financial Assurance Cost Estimate and any pending or ongoing enforcement actions should also be reviewed. Conditions of Approval (COA) that relate to facility

operations solely of local concern, such as hours of operation, noise, and dust control are not subject to the inspection.

Column 2 is intended to provide the inspector a place to match any items noted in Column 1 with those items included in the approved reclamation plan either expressly or by reference, as described above, in PRC §§ 2772 and 2772.1. Also note any Interim Management Plan (IMP) requirements where the mine is subject to an IMP pursuant to PRC § 2770(h).

Indicate the source document for the reclamation plan requirements at the end of the entry in parenthesis; i.e. (COA) Plan of Operations (POO), Environmental Impact Report (EIR), Waste Discharge Report (WDR), Stormwater Pollution Prevention Program (SWPPP), etc. If items listed in Column 1 of Section VII of the form are not included in the reclamation plan or other documents included by reference, write not applicable or "NA" in Column 2.

Specific reclamation requirements may not apply to an operation at the time of inspection, but they are important to ensure current activity at the site will not prohibit reclamation in accordance with the approved reclamation plan.

Site Observations and Compliance Issues (Column 3): Use this space to note current site observations and to describe site conditions and aspects of the operation that are or may be inconsistent with the approved reclamation plan or SMARA, if any, noted for both operating and reclaimed surfaces that pertain to the reclaimed condition of mined lands.

Site conditions that are or may be inconsistent with SMARA include unanticipated but actual conditions encountered as the mining operation progresses, for which mitigation measures were not fully addressed in the reclamation plan and which affect any aspect of reclamation or calculation of the FACE, as described in the approved reclamation plan.

8. BLOCK VIII: The inspector responds to the statements or questions in the space provided for (A) through (O). Additional instructions are provided below for (A), (F), (G), (I), (J), (L), (M), (N), and (O).

(A) If additional space is required to record observations, photographs, etc., please check the corresponding box in (A) and attach documentation to the MRRRC-1.

(F) Requires the inspector to describe the fee category reported in the most recent Annual Report and its consistency with the conditions observed during the inspection.

(G) Requires the inspector to describe limitations encountered during the inspection. These limitations may include, but are not limited to: inaccessibility to certain areas due to weather, blasting, excavating, etc.

(I) Requires checking a "Yes" or "No" box. Conditions or aspects identified in (H) requiring further evaluation should be described further.

(J) Requires checking a "Yes" or "No" box. A description of why or why not a Notice of Violation was issued for conditions or aspects identified in (H) should be provided.

(L) For "Duration of Inspection," indicate the start and end times of the inspection (do not include travel time).

(M) Weather Codes

CR = Clear
CL = Cloudy
SN = Snow
RN = Rain
WD = Windy

(N) SMARA Status of Mine Codes (based on annual report and reported production under CCR §3695, indicate the appropriate status code):

NP = Newly Permitted (surface mining operation not begun)
Active = Operation Not Idle (per PRC § 2727.1)
I = Idle (per PRC § 2727.1)
AB = Abandoned (per PRC §2700(h)(6))

(O) Attendees: Provide the names and affiliations of parties in attendance at the inspection.

9. **BLOCK IX:** Provide the Inspector’s “Certificate of Completion of Inspection Workshop” Number and expiration date. Sign and date the Inspection Report. If applicable, include the inspector’s certification (Professional Engineer (PE), Professional Geologist (PG), Licensed Landscape Architect, Registered Professional Forester, Professional Land Surveyor (PLS), etc.) and license number. The lead agency shall cause an inspection to be conducted by a state-licensed geologist, state-licensed civil engineer, state-licensed landscape architect, or state-licensed forester, or a qualified lead agency employee pursuant to PRC § 2774(b)(1).

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Notes from 2022 Annual SMARA Inspection Conducted on 9-20-2022

by

Robert Salisbury, Senior Planner

James Baker, CEG#1021, County Geologist

David Seymour, CEG#1574, County Geologist

Steve Beams, Senior Construction Inspector

BACKGROUND

Lehigh Quarry is a vested hard rock quarry which has been in operation since approximately 1903. The operation primarily harvests limestone for the production of cement but has also produced greenstone aggregate in the past. Over time the quarrying operation has expanded, and now encompasses 546 acres of disturbed area. The site also includes a cement plant operating under a Use Permit and located outside of the Reclamation Plan area. The current Reclamation Plan was approved in 2012 as an amendment to the 1985 Reclamation Plan.



The numbers on the map above correspond with the following twelve areas within the mining boundary of the 2012 approved Reclamation Plan Amendment:

- | | |
|---------------------------------------|--|
| 1. North Quarry (main pit) | 7. Water Treatment Facility |
| 2. West Materials Storage Area (WMSA) | 8. South Quarry Exploration Area |
| 3. East Materials Storage Area (EMSA) | 9. Permanente Creek Restoration Area (PCRA) |
| 4. Crusher/conveyor | 10. Buffer Areas around active mining areas. |
| 5. Surge Pile | 11. Drainage Facilities |
| 6. Rock Plant | 12. Haul Road Violation |

CURRENT SITE CONDITIONS

The 2022 annual SMARA inspection of Lehigh Quarry was conducted for 6 hours on September 20, 2022. In attendance were the following persons (affiliation indicated):

Robert Salisbury (Santa Clara County Planning)
David Seymour (County Land Development Engineering)
James Baker (County Land Development Engineering)
Steve Beams (County Land Development Engineering)
Carolina Addison (Lehigh)
Antonio Del Rio (Lehigh)
Sanjeet Sen (Lehigh)

Limestone extraction was not occurring during the 2022 inspection. Water trucks were spraying water on roads; other than that, there was minimal activity occurring on-site. The following paragraphs describe County inspectors' observations in each of the areas with **PHOTO numbers**. [See Attachment B for the corresponding photos.]

1. North Quarry (Main Pit)

The highwalls on the north, east, and south were previously excavated and benched, however multiple slides occurred over the years leading to failure of parts of the benches. The proposed RPA currently under review by the County proposes changes in slope geometry intended to address the main pit slope failures. No extraction of limestone was occurring in this area during the annual inspection. [See **PHOTO #1** and **PHOTO #2**.]

2. WMSA

The northeast-facing slopes of the WMSA have well-established vegetation (grasses and some shrubs). [See **PHOTO #3** and **PHOTO #4**.] Topsoil and organics are stored and covered in the central portion of the WMSA. County staff observed deterioration of previously installed jute netting and minimal growth on the hydroseeded stockpile slopes. [See **PHOTOS #5A** and **#5B**.] Although no evidence of erosion was observed, the operator should monitor the stockpiles and replace erosion control measures as needed to prevent loss of stockpile material through erosion. The south slope of the WMSA was viewed by County inspectors, and although growth of hydroseeded grasses and shrubs on the south slope of WMSA was minimal, no evidence of erosion was observed. The operator should monitor this area and install erosion control BMPs as needed. [See **PHOTO #6**.] The approved Reclamation Plan calls for much of the material stored in the WMSA to be moved and placed as backfill into the main quarry pit.

3. EMSA

BMPs were previously placed on the slopes (wattles) and along the benches (rock check dams and silt fences). [See **PHOTO 7** for a view of the southern slopes of the EMSA.] Previously established vegetation on the EMSA slopes appears healthy and relatively free of invasive weeds. [See **PHOTO #8**.] Surface drainage from EMSA is directed into Pond 30 which is rock-lined with non-limestone rock. [See **PHOTO #9B**.] Water from Pond 30 is then directed to a vault and pumped to the upper treatment system. [See **PHOTO #9A**.]

4. Crusher/Conveyor

Drainage from around the crusher built in 2013 is directed into a sump that overflowed due to a power failure in 2014. As a result, an erosion gully formed on the steep slope west of the crusher. The operator has had the gully lined with jute netting and several silt fences and installed a soil-nail wall in the head of the erosion gully located downhill of the sump. [See **PHOTOS #10A and #10B.**] Eroded material accumulated at the toe of the slope and extended into the eastern side of Pond 13. Due to lack of rain, Pond 13 was completely dry during the 2021 inspection. [See **PHOTO #11.**] A half-pipe exists downstream of Pond 13 for the continuance of Permanente Creek. [See **PHOTO #12.**] The Permanente Creek Restoration Project (County File No. 2250-17G), submitted by Lehigh and currently under review by the County, proposes removal of the half-pipe.

5. Surge Pile

Additional material was added to the surge pile during the last year. [See **PHOTO #13.**] Sediment that erodes from the surge pile is detained in ponds. Next to the surge pile are slopes above Pond 13. [See **PHOTO #14.**]

6. Rock Plant

In the Rock Plant area Lehigh has setup portable equipment to process aggregate. [See **PHOTO #15.**] Runoff from the rock plant area was previously being directed into Pond 17. [See **PHOTO #16.**] Pond 17 has been decommissioned and the runoff which was previously routed to Pond 17 now flows into a new basin in Permanente Creek installed at the direction of the San Francisco Bay Regional Water Quality Control Board, which is located outside of the Reclamation Plan boundary.

7. Water Treatment Facilities

Adjacent to former Pond 4A is water treatment and filtration equipment used to remove selenium from quarry water prior to discharge into Permanente Creek. [See **PHOTOS #17 and #18.**] Associated tanks are located adjacent to Pond 1250. [See **PHOTO #19.**]

8. South Quarry Exploration Area

Located southwest of Permanente Creek, the area was disturbed by excavation of drilling pad and associated roads in order to evaluate the mineral resources in that area. Inspectors previously observed additional localized ground disturbances resulting from exploratory drilling. However, the growth of grasses and brush over the last several years appears to have mitigated the previous ground disturbances. Once reclamation in this area has been completed, a ground survey will be needed to confirm the adequacy of the revegetation to meet the performance standard in the RPA.

9. Permanente Creek Restoration Area (PCRA)

An application for restoration of the Permanente Creek adjacent to the mine have been submitted, and the application has been deemed complete, and the Department is initiating environmental review. Once the plans have been approved, the FACE will need to be revised to reflect the costs of implementing the “construction” described in the plan.

10. Buffer Areas

The undisturbed areas around the active mine are intended to protect the quarry from encroachments by other land uses and to protect nearby land uses from adverse effects of the mining. At the time of our inspection, the Buffer Areas appeared undisturbed except in the case of the un-permitted haul road by the rock plant. [See Section 12 below.]

11. Drainage Facilities

Runoff and drainage are controlled on-site by various methods including check dams installed on internal access roads. [See **Photo #20** for example check dam.] Check dams are required to be made of non-limestone rock in order to prevent selenium contamination. Erosion control measures are typically installed before the rainy season and are inspected during winterization inspections. As noted above, the County of Santa Clara issued a Notice of Violation related to inadequate erosion control measures which resulted in a discharge of sediment into Permanente Creek. Since then, the operator made numerous improvements to erosion control BMPs, and created a lined sediment basin to prevent any more sediment or loose rock from entering the Permanente Creek channel. See the Violations Section below for additional information.

12. Haul Road Violation

During the 2018 annual SMARA inspection inspectors observed that a new road linking Lehigh Quarry and Stevens Creek Quarry had been constructed without approval. The County issued a Notice of Violation on August 17, 2018 and noted the violation in the 2018 Lehigh Annual Inspection Report, dated August 8, 2018. Subsequently, Lehigh applied for a Reclamation Plan Amendment which, if approved, will expand the Reclamation Plan Boundary to include the haul road area. This reclamation plan amendment application is currently being processed. This haul road remains in place but is not being used. Inspectors noticed localized erosion which needs to be managed by installation of erosion control BMPs. [See **Photos #21A, and 21B.**] Installation and maintenance of erosion control BMPs will be verified during winterization inspection.

VIOLATIONS

No new SMARA violations were noted during the annual inspection. As previously reported, on June 13, 2019 the County issued a Notice of Violation (Attachment C) for sediment discharge into Permanente Creek in the vicinity of the Yeager Yard [See **Photo 25**]. As required by the June 13, 2019 NOV, the operator created a lined sediment basin to prevent any more sediment or loose rock from entering the Permanente Creek channel [See **Photo 26**], replaced old silt fences upslope of the discharge area [See **Photo 22**], placed straw bales which have since been removed above the lined sediment basin [See **Photo 27**]. On April 27, 2020, the County informed Lehigh that they had abated the violation

County inspectors continued to observe surface conditions in the area of the Yeager Yard Landslide. The upper portion of the slide that was previously excavated to remove up to 80 vertical feet of waste rock. [See **Photo 23.**] The hill on the left is the remnants of the former buried bedrock ridge. The lower portion of the Yeager Yard Landslide where debris flowed downhill into Permanente Creek. [See **Photo 24.**]

OTHER OBSERVATIONS

During the annual inspection in 2021, County inspectors observed an area in which recent grading had created a level pad adjacent to the modified utility road south of the Rock Plant. The fill slopes were covered with jute netting which have since been hydroseeded. [See **Photos 28A and 28B.**] In addition, at that time, County inspectors saw a localized area of shallow slumping of slopes on the northern side of fill placed in 2017 on top of the EMSA. Subsequent grading can be seen in Google Earth air-photos taken in 2020 and 2021. [See **Photos 29 A, B and C.**] Although County inspectors did not visit this area in 2022, a Google Earth air-photo taken this year (unspecified date) shows that vegetation has re-established in that area. [See **Photo 29 D.**]

During this year's inspection, County inspectors observed (extensional) ground cracks that have formed in two areas; one is on the eastern side of the Yeager Yard Landslide [see **Photo 30 A**] and the other is on the road to the main pit observation deck [see **Photo 31A.**] Monitoring sticks have been placed by the quarry operator. [See **Photos 30B, 30C and Photo 31B.**] County inspectors will observe these cracks during upcoming monthly inspections.

ACTION ITEMS

- 1) County inspectors suggested that the operator monitor the topsoil stockpiles and replace erosion control measures as needed to prevent loss of material through erosion. (See Map Location 2.)
- 2) Area of recent grading needs to be hydroseeded in order to minimize the potential for erosion during approaching rainy season. (See area between Map Locations 6 and 12.)
- 3) Recently formed ground cracks need to be monitored by the quarry operator to detect any increases in openings and evaluate the significance of any such changes. (See areas east of the Yeager Yard Landslide and the road to the main pit observation deck.)

Photos from 2022 Annual SMARA Inspection Conducted on 9-20-2022

by
Robert Salisbury, Senior Planner
James Baker, CEG#1021, County Geologist
David Seymour, CEG#1574, County Geologist
Steve Beams, Senior Construction Inspector



The numbers on the map above correspond with the following twelve areas within the mining boundary of the 2012 approved Reclamation Plan Amendment. Photos that follow correspond to those locations.

- | | |
|---------------------------------------|--|
| 1. North Quarry (main pit) | 7. Water Treatment Facility |
| 2. West Materials Storage Area (WMSA) | 8. South Quarry Exploration Area |
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| 5. Surge Pile | 11. Drainage Facilities |
| 6. Rock Plant | 12. Haul Road Violation |

PHOTO #1 – North Quarry Main Pit (looking southwest)



Map Location 1: North Quarry (Main Pit)

The highwalls on the north, east, and south are essentially complete (excavated benches); while the southern side of the pit is still being actively mined (blasting and loading). No extraction of limestone was occurring during the inspection. New material was being placed on the southern portion of the WMSA [See also **PHOTO #2.**]

PHOTO #2 – North Quarry Main Pit (looking northeast)



PHOTO #3 – WMSA (looking northward)



hed vegetation (grasses and shrubs). [See also **Photo 4**]

PHOTO #4 – WMSA (looking northward)



PHOTO #5A – Topsoil Stockpiles



PHOTO #5B – Topsoil Stockpile Sign



Topsoil and organics are stored and covered in the central portion of the WMSA. County staff observed deterioration of previously installed jute netting and minimal growth on the hydroseeded stockpile slopes. Although no evidence of erosion was observed, County inspectors suggested that the operator monitor the stockpiles and replace erosion control measures as needed to prevent loss of stockpile material through erosion.

PHOTO #6 – WMSA South Slope (looking southeast)



The south slope of the WMSA was viewed by County inspectors, and although growth of hydroseeded grasses and shrubs on the south slope of WMSA was minimal, no evidence of erosion was observed. The operator should monitor this area and install erosion control BMPs as needed. The approved Reclamation Plan calls for much of the material stored in the WMSA to be moved and placed as backfill into the main quarry pit.

PHOTO #7 – Southern slopes of EMSA (looking northeast)



Map Location 3: East Materials Storage Area (EMSA)

BMPs were previously placed on the slopes (wattles) and along the benches (rock check dams and silt fences).

PHOTO #8 – Eastern slopes of EMSA, north of Pond 30 (looking northwest)



County inspectors observed substantial vegetation growth on the EMSA slopes.

Surface drainage from EMSA is directed into Pond 30 which is rock-lined with non-limestone rock. Water from Pond 30 is then directed to a vault and pumped to the upper treatment system.

PHOTO #9A– Vault and pump at Pond 30



PHOTO #9B – Pond 30 (looking southwest)



Map Location 4: Crusher/Conveyor

The crusher was constructed in 2013 against a 70-foot high retaining wall. Drainage from around the crusher is directed into a sump which overflowed due to a power failure in 2014. As a result, an erosion gully formed on the steep slope west of the crusher. The operator has had the gully lined with jute netting and several silt fences and installed a soil-nail wall in the head of the erosion gully located downhill of the sump.

PHOTO #10A – Overflow scar below crusher sump



PHOTO #10B – Debris flow track below crusher



PHOTO #11 – Pond 13 (dry)



Eroded material accumulated at the toe of the slope and extended into the eastern side of Pond 13.

PHOTO #12 – Half-pipe for outflow of Pond 13



A half-pipe exists downstream of Pond 13 for the continuance of Permanente Creek. The Permanente Creek Restoration Project (County File No. 2250-17G), submitted by Lehigh and currently under review by the County, proposes removal of the half-pipe.

PHOTO #13 – Surge Pile looking southeast



Map Location 5: Surge Pile
Material was removed from the surge pile during the last year.

PHOTO #14 – Slopes above Pond 13



Sediment that erodes from the surge pile is detained in ponds. Next to the surge pile are slopes above Pond 13.

PHOTO #15 – New aggregate processing equipment.



Map Location 6: Rock Plant

The rock plant did not appear to be operating during the inspection; however, it was active during portions of 2022. Runoff from the rock plant was previously being directed into Pond 17.

PHOTO #16 – Pond 17 with liner and sediment.



Pond 17 has been decommissioned and the runoff which was previously routed to Pond 17 now flows into a new basin in Permanente Creek installed at the direction of the San Francisco Bay Regional Water Quality Control Board.

PHOTO #17 Blending tank above former Pond 4A



Map Location 7: Water Treatment Facilities

PHOTO #18 – Treatment System near former Pond 4A



Adjacent to former Pond 4A is water treatment and filtration equipment used to remove selenium from quarry water prior to discharge into Permanente Creek.

PHOTO #19 – Treatment tanks near Pond 1250



Associated tanks are located adjacent to Pond 1250.

PHOTO #20 – Check dam on the WMSA road



Photo #21A – Cut slope and drainage ditch on west side of unpermitted haul road



Photo #21B Fill slope below east side of illegally graded haul road



Photo #22 – Toe of Yeager Yard slide above Permanente Creek (out of view to the left)



Photo #23 – Excavation above Yeager Yard



Photo #24 – Toe of Yeager Yard landslide above Permanente Creek (lower left)



Photo #25 – Rock armor added to area where sediment was deposited into Permanente Creek from Yeager Yard slope



Photo #26 – Debris basin



Photo #27 – Debris flow scar (source of sediment deposited in Permanente Creek).



Photo #28A - recent fill pad south of Rock Plant



Photo #28B – recently cut pad south of Rock Plant



Photos #29A, B, C, D – Shallow slumps in fill material that was added to EMSA beginning in September or October of 2017; slumps have been re-graded by the operator. Photo 29 D shows vegetation has started to establish as of 2022.

(Ground photos not taken; aerial photos from Google Earth)

A: 8-25-2020



B: 9-4-2020



C: 9-27-2021



D: 11-?-2022



Map Location 3: Central portion of EMSA

Photos #30A, B and C – Recently formed ground cracks near eastern portion of Yeager Yard slide. (Monitoring sticks placed by Operator.)



Photos #31A and 31B – Recently formed ground cracks along road to main pit observation deck. (Monitoring sticks placed by Operator.)

