

SURFACE MINING INSPECTION REPORT

Instructions for completing this form are on the reverse side. Attach notice(s) of violation(s) and order(s) to comply for all observed non-compliance.

I. Mine Name as reported by Operator on Mining Operation Annual Report Permanente Quarry	Inspection Date: August 25, 2011	CA MINE ID#: 91 - 43 - 0004
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II. SMARA Lead Agency Name (City or County <u>only</u>) County of Santa Clara		
Inspector Gary Rudholm et al (refer to signature page and appendix)		Telephone (408) 299-5747
Title Senior Planner	Organization Department of Planning & Development	
Mailing Address 70 W Hedding Street, East Wing, 7 th Floor		
City San Jose	State CA	ZIP Code 95110
E-mail Address (Optional) Gary.Rudholm@pln.sccgov.org		

III. Mine Operator Lehigh Southwest Cement Company		
Contact Person Marvin Howell		Telephone (858) 577-2770
Mailing Address P. O. Box 639069		
City San Diego	State CA	ZIP Code 92163-9069
E-mail Address (Optional)		

IV. Does the operation have:	P	NR	No	Yes
A permit to mine?				vested
An approved Reclamation Plan?				RP File # 2250-13-66-84P
Has the operator filed a Mining Operation Annual Report (form MRRC-2)? Check one: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown				
Is this operation on Federal Land? Check one: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
If "Yes", provide one or both of the Federal Mine Land Identification Numbers below:				
California Mining Claim Number (CAMC#): N/A				
U.S. Forest Service Identification Number (USFS ID#): N/A				

DISTRIBUTION: Original to Operator. Copies to: State (by Lead Agency), Lead Agency, State (by Operator), and BLM or USFS (if required).

INSTRUCTIONS FOR COMPLETING SURFACE MINING INSPECTION REPORT

Form MRRC-1 Page 1

This report documents observations concerning compliance with California's Surface Mining and Reclamation Act (SMARA) and related reporting requirements (Public Resources Code Sections 2207 and 2710 *et seq.*) and, for operations located partly or solely on Bureau of Land Management (BLM) lands, Title 43, parts 3500, 3600, and 3800 of the Code of Federal Regulations and other agency requirements that are designed to prevent or minimize adverse environmental effects of mining.

Lead agencies must file a copy of each inspection report, along with any notices of violation and orders for compliance issued, within 30 days of completion of the inspection. Mine Operators must attach a copy of this report to their next Mining Operation Annual Report (Form MRRC-2).

BLOCK I: Enter the name of the Mining Operation, the date of the inspection, and the California Mine ID # (if ID# is unknown, enter "unknown").

BLOCK II: For "Lead Agency", enter the name of the certified SMARA Lead Agency that is conducting this inspection. Acceptable entries include the name of the city, county, Bay Conservation and Development Commission (BCD), and State Mining and Geology Board (SMGB). For "Organization", enter the name of the agency, firm or other organization that employs the inspector. If the inspector is an independent contractor, enter "independent contractor." The e-mail address is optional.

BLOCK III: Enter the name of the Mine Operator. Also, enter the name, mailing address, and phone number of the person (the operator or a person acting on the operator's behalf) who will serve as a contact for any follow-up correspondence or discussions regarding the inspection or violations noted. The e-mail address is optional.

BLOCK IV: Check the appropriate boxes.

P	=	Pending (on appeal or awaiting approval by Lead Agency)
NR	=	Not Required for this operation at the time this inspection was completed.
No	=	No
Yes	=	Yes, supply information.

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V. Does the Operator currently have a Lead Agency approved Financial Assurance? Check one: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If "Yes", complete section below. If "No", refer to instructions on the reverse of this page and complete Section VI.		Inspection Date: <p style="text-align: center;">August 25, 2011</p>	CA MINE ID#: <p style="text-align: center;">91 – 43 – 0004</p>
Type of Financial Assurance Mechanism(s)	Financial Assurance Mechanism Number(s)	Current Amount on File	Date of Expiration
<input type="checkbox"/> Surety Bond	See below.	\$11,439,992.00	None
<input type="checkbox"/> Certificate of Deposit		\$	
<input type="checkbox"/> Letter of Credit		\$	
<input type="checkbox"/> Trust Fund		\$	
<input type="checkbox"/> Pledge of Revenue		\$	
<input type="checkbox"/> Budget Set Aside		\$	
<input type="checkbox"/>		\$	
The Financial Assurance Amount must be adjusted annually. Attach a copy of the revised Financial Assurance Amount calculation with this report.		Date of Financial Assurance Amount Calculation: August 17, 2010.	
Does the current mechanism(s) on file cover the new annual calculation? <input type="checkbox"/> Yes <input type="checkbox"/> No		If "No", date operator was notified that a new mechanism is required: Pending, see below.	

<p>VI. Financial Assurance comments.</p> <p>Financial assurance posted consists of the following four bonds: Travelers Casualty & Surety Company of America Surety Bond #64S104790142BCM (\$7,570,047.00), Travelers Casualty and Surety Company of America Surety Bond #280331 (\$540,001.00), Liberty Mutual Insurance Company Bond #022033624 (\$1,638,724.00), and Lexon Insurance Company Bond #1066515 (\$1,691,220.00).</p> <p>The operator submitted a revised financial assurance cost estimate (FACE) in April 2011. When the County certifies the revised FACE it will forward the calculations to OMR for review and approval. The County expects to forward the calculations to OMR by November 18, 2011.</p>
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BLOCK V: Check "Yes" or "No" regarding the existence of an approved Financial Assurance Mechanism currently in place.

If "No" is checked, continue to Block VI and provide required information.

If "Yes" is checked, provide specific information required.

Type of Financial Assurance Mechanism(s): place a check mark in the appropriate box identifying the type of mechanism(s) that is on file. Fill in the blank box to supply information for a mechanism not listed. State the Financial Assurance Mechanism(s) document number(s). State the dollar amount of the Financial Assurance Mechanism(s) currently on file. State the date of expiration on the Financial Assurance Mechanism(s) currently on file.

Attach a copy of the current year's Financial Assurance Amount calculation with the Inspection Report. State the date of calculation.

Indicate "Yes" or "No" regarding whether or not the current mechanism(s) on file cover the new annual calculation.

The Financial Assurance Amount must be adjusted annually to account for new lands disturbed by surface mining operations, inflation, and reclamation of lands accomplished in accordance with the approved Reclamation Plan. In order to determine what adjustments, if any, are appropriate to the Financial Assurance Amount, each mine operator must annually submit a revision of the written calculation of the Financial Assurance Amount to the Lead Agency. Attach a copy of the revised Financial Assurance Amount calculation with this report.

BLOCK VI: Use this block to add comments regarding the Operator's Financial Assurance status, or if "No" was checked in Block V. Explain in detail why this operation does not have a Lead Agency approved Financial Assurance, such as: "Pending" with Lead Agency, explanation, date submitted and status, "Appealed" – explanation, date submitted and status, "Financial Assurance Mechanism is in process" – explanation, date submitted and status, "Change of Ownership" – explanation, date of notice and status, or "Other".

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VII. Is the operation in compliance with provisions of the approved Reclamation Plan with respect to:	OK	VN	NI	NA	CA MINE ID # 91 – 43 – 0004
Wildlife Habitat	✓				Inspection Date: August 25, 2011
Revegetation	✓				
Agricultural Land				✓	Weather Code(s): CR
Stream Protection	✓				Duration of Inspection: 3.5 hours
Tailings and Mine Waste Management	✓				
Closure of Surface Openings	✓				Approximate Disturbed Acreage: 523.4 acres
Building, Structure, and Equipment Removal	✓				
Topsoil Salvage, Maintenance, and Redistribution	✓				Status of Operation Code(s): A
Backfilling, Regrading, Slope Stability, and Recontouring		✓			
Drainage, Diversion Structures, Waterways, and Erosion	✓				Status of Reclamation Code(s): R
Other (list or explain below)		✓			

VIII. Comments/Description of Violation(s) and Corrective Measure(s) Required

- Refer to the attached report dated November 7, 2011, from Kit H. Custis, CEG 1219, CHG 254 of Pacific Municipal Consultants (PMC) for additional, detailed information.
- The County is processing a proposed amendment to the approved reclamation plan. The amendment will address all existing areas of disturbance, and an area where exploration took place by the mine operator. This amendment responds to a Notice of Violation/Order to Comply (NOV/OTC) issued by the County on October 10, 2006, and a second NOV issued on On June 20, 2008. CEQA review has commenced; the County estimates the review and approval process will be completed in 2012. Until the reclamation plan amendment process is complete, however, a violation of SMARA must be noted in the inspection report.

IX. Number of Violations: 2	Inspector's Signature: Refer to signature page, attached.	Date Signed: November 7, 2011
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BLOCK VII: Check the appropriate boxes:

OK = Inspected, found in compliance
with reclamation standards (California
Code of Regulations, Title 14, Division 2,
Chapter 8, Subchapter 1, Article 9, Section
3700 *et seq.*)
VN = Inspected, Violations Noted

NI = Not inspected (explain in Block VIII)
NA = Not Applicable for this Operation (use this
notation when an issue is not addressed in the
reclamation plan, or when the reclamation plan
contains no requirements related to the issue listed).

Weather Codes: CR = Clear; CL = Cloudy; RN = Rain; SN = Snow; WD = Windy

Approximate Disturbed Acreage: Indicate all acreage disturbed by the surface mining operation, as defined by PRC Section 2729: "Mined Lands" includes the surface, subsurface, and ground water of an area in which surface mining operations will be, are being, or have been conducted, including private ways and roads appurtenant to any such area, land excavations, workings, mining waste, and areas in which structures, facilities, equipment, machines, tools or other materials or property which result from, or are used in, surface mining operations are located.

For "Duration of Inspection", indicate the number of hours spent at the site (round to the nearest half hour) performing the inspection (do not include travel time in this figure).

Status of Operations Codes:

I = Idle
A = Active during inspection
AD = Active during past year

AB = Abandoned (site deserted by operator)
MC = Mining completed

Status of Reclamation Codes:

R = Reclamation in progress
RN = Reclamation not begun

RC = Reclamation complete
P = Post reclamation monitoring

BLOCK VIII: Inspectors may use this area for comments, to describe violations, correction orders, etc., and to explain any limitations to the inspection conducted. You may attach copies of any notices of violations and orders to comply in lieu of a description on this form; however, copies of such notices and orders must be attached to **each copy** of this Inspection Report.

BLOCK IX: Enter the number (quantity) of violations noted during the inspection. Sign and date the Inspection Report.

DISTRIBUTION INSTRUCTIONS:

The original and one copy of this completed Inspection Report (all pages) shall be given to the Mine Operator.

The Lead Agency must retain one copy of this Inspection Report and submit one copy of this Inspection Report to:

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

If any part of the operation inspected is on BLM or USFS land, one copy of this Inspection Report should be forwarded to the appropriate BLM or USFS office.

The Mine Operator must attach one copy of this Inspection Report to the next required Mining Operation Annual Report (Form MRRC-2) submitted to the State.

PLEASE NOTE: A Memorandum of Understanding between the U.S. Department of Interior, Bureau of Land Management (BLM); U.S. Department of Agriculture, Forest Service (USFS); the State of California, Department of Conservation; and the State Mining and Geology Board, effectively implements California's Surface Mining and Reclamation Act on lands in California under the jurisdiction of BLM and the USFS.

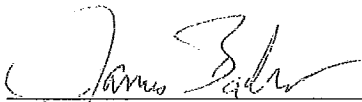
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Form MRRC-1 Signature Page

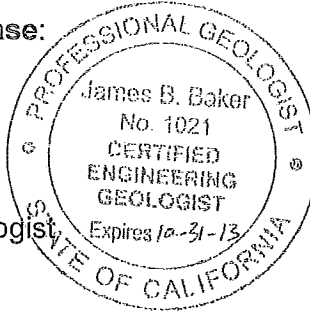
Permanente Quarry, State ID #91-43-0004

November 7, 2011

Report Reviewed and Approved for Release:



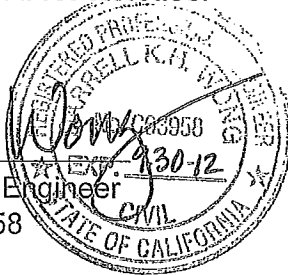
James Baker, CEG 1021, Engineering Geologist
Expires October 31, 2013



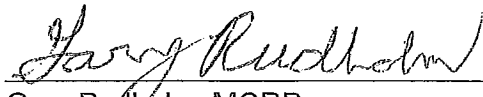
Report Reviewed and Approved for Release:



Darrell Wong, P.E., Senior Civil Engineer
Registered Civil Engineer #63958
Expires September 30, 2012



Report Meets Acceptable Standards:



Gary Rudholm, MCRP
Senior Planner, Santa Clara County





November 7, 2011

Mr. Gary Rudholm
Senior Planner
SANTA CLARA COUNTY
70 West Hedding Street
San Jose, CA 95110

Re: 2011 SMARA Mine Inspection
CPO File 2250-13-66-09PAM (Permanente Road)
Permanente Quarry, 91-43-0004
Cupertino, California

Dear Mr. Rudholm:

This letter report summarizes the findings of PMC's annual SMARA site inspection of the Permanente Quarry in Cupertino, CA Mine ID #91-43-0004 that was conducted on August 25, 2011. PMC was retained by Santa Clara County to assist County staff with the annual SMARA mine inspection and to provide written documentation of our observations, issues of concern and recommendations.

The 2011 annual SMARA inspection was conducted for 3-1/2 hours on the morning and afternoon of August 25, 2011. In attendance, along with myself, were Henrik Wesseling and Mike Gantenbein as representatives of the Lehigh Southwest Cement Company and Gary Rudholm, Senior Planner, Jim Baker, County Geologist, and Ron Chitwood, Senior Construction Inspector for Santa Clara County Planning and Development Department. The disturbed acreage remained the same as observed during the 2010 inspection, approximately 523.4 acres. The mine was active (A) during the inspection. Reclamation (R) has begun in some areas. The weather during the inspection was clear (CR) and warm. The mine's office is located near latitude 37.320141° and longitude -122.101632°.

BACKGROUND

The Permanente Quarry is a limestone and aggregate mining operation located on the north side of Permanente Creek, west of the City of Cupertino. The Permanente Quarry is now operated by Lehigh Southwest Cement Company as subsidiary of HeidelbergCement Group who purchased the operation from the previous owner Hanson Permanente Cement, Inc. (HPC). The quarry is being mined for Franciscan limestone, which is used to make cement as well as aggregate. Mining began in the area around 1903. In 1939, The Permanente Corporation, which was eventually renamed Kaiser Cement Corporation, acquired the Permanente Quarry with a purchase of 1,300 acres. Combined with subsequent acquisitions, the land ownership has grown to approximately 3,600 acres. In 1987, Hanson PLC acquired Kaiser Cement Corporation. The name of the operating company was changed in 1999 from Kaiser Cement Corporation to Hanson Permanente Cement, Inc. HeidelbergCement Group

acquired HPC and its affiliates in 2007, and in 2008 Lehigh Southwest Cement Company assumed operational responsibilities for the Permanente Quarry and the associated cement plant.

The County approved the current Reclamation Plan for the quarry site in 1985. The Reclamation Plan covers the open pit and the West Material Storage Area, an area of approximately 330 acres. The approved Reclamation Plan does not include all areas of past mining disturbance. For example, the 1985 Reclamation Plan does not include a rock plant to the southeast of the mining pit or access roads throughout the site. The Reclamation Plan also does not extend to the nearby cement plant operations. The cement plant was, and continues to be, operated under a Use Permit originally issued on May 8, 1939 by the County that authorizes the "erection, construction and operation of a cement mill and the storage of cement..." The permit was issued consistent with 1937 zoning, under which commercial and manufacturing uses were allowed. The permit has no termination date. The County considers the exclusion of these areas to be consistent with SMARA's requirements as they were interpreted at the time the 1985 Reclamation Plan was approved. An August 23, 2007 letter from the Department of Conservation's Office of Mine Reclamation confirmed that the cement plant is not part of the Permanente mining operation.

In 1972, to mitigate potential visual impacts, the County recorded a "Ridgeline Protection Easement" (RPE) along the ridgeline above the northern pit highwall to maintain a natural slope appearance and to prohibit disturbances to the natural vegetation. The operator at that time, Kaiser Cement, agreed that they "would not lower the ridgeline ... for mining, quarrying or other purposes" and that they would install four fixed monuments on the ridgeline (Attachment A of June 21, 2007 MRRC-1 report). The easement also included a 25-foot wide planting strip.

The northern highwall of the open pit has developed three large rockslides. The "Main Rockslide", the oldest area of slope instability, is located on the northwest pit slope and is approximately 500 to 1,000 feet wide. This rockslide was called the "1987 Rockslide" in the 2006 and 2007 annual SMARA inspection reports. Following a period of increased movement in 1987, this slide was considered a safety hazard for workers and threatened to disturb the RPE. The County allowed corrective grading to remove material at the head of the slide under an emergency grading permit.

A second slide began in January 2001 with the failure of an approximately 350-foot-wide section of the north pit slope east of the Main Rockslide. This slide is known as the "Scenic Easement Rockslide."

A third slide, approximately 400 to 500 feet wide that extends headward into a portion of the adjoining Midpeninsula Regional Open Space District's Rancho San Antonio Preserve, occurred at the end of 2001 in the northeast portion of the pit slope. This slide is known as the "Mid-Pen Rockslide." According to the operator, a land swap has been negotiated allowing the mine to take possession of the impacted land.

In October 2006, the County issued an Order to Comply and Notice of Violation (NOV) to the operator for mining related disturbances outside of the approved Reclamation Plan area (with the exception of the cement plant). The NOV required that the operator apply for and obtain an amended Reclamation Plan that addressed the instability in the pit and that encompassed all mining-related areas including the rock processing facility south of the cement plant.

In January 2007, the operator submitted the required application to the County. A detailed geologic report was required of the mine operator following receipt of the 2007 application. The geology report was completed and a revised application was submitted in July 2011. The 2011 revised application is

being processed. The proposed Reclamation Plan Amendment (RPA) is designed to address mining activity over the next 25 years. The 2011 RPA application does not include the previously applied for expanded quarry operations south of Permanente Creek. Until the CEQA process for the proposed RPA is complete and approved, the SMARA violation for slope stability and disturbances outside of the Reclamation Plan will continue to be noted in the annual report.

As a condition of approval for the 1985 Reclamation Plan (Condition No. 3), at least every two years the operator of the Permanente Quarry is required to submit to the County, a report that describes and evaluates compliance with conditions of the Reclamation Plan. Following that report, the County is required to inspect the site. The Bi-Annual report prepared by Marvin Howell was submitted to the County on August 20, 2009. A more recent Bi-Annual report was not available at the time of this inspection. The required SMARA annual inspection fulfills the second part of this condition.

SITE CONDITIONS

Overburden material from the quarry is being deposited in the western portion of the mine site in what is called the West Material Storage Area (WMSA), identified as Area A in the approved 1985 Reclamation Plan. The WMSA overburden slopes have been undergoing re-grading to flatten their gradient to less than 2H:1V. The northern portions of the WMSA that are visible from the urban area below have been re-graded and re-vegetated (Photos 1 and 2). An area of gulying was observed in the slope above the drainage bench that runs across the western portion of this re-vegetated area. This erosion appears to be the result of past concentrated runoff from the upper bench of the WMSA and may be the result of ponding and a previous breach in slope of the uppermost waste rock pile. This breach has been filled (Photo 3). The operator indicated that three areas of the final lift of waste-rock will be re-contoured and re-vegetated before this winter. These upper lift areas will be graded to drain away from the northern slope and towards the existing southern roadway.

The easternmost portion of the northern slope of the WMSA was re-graded and hydroseeded in 2008, and re-vegetation appears to be succeeding. At the toe of the area worked in 2008, there appears to be a small closed depression that may trap runoff (Photo 4). During the 2010 inspection, a small diversion swale was being constructed across the slope to re-direct sheet flow away from this depression and into the natural drainage to the east. This drainage swale has been completed and re-vegetated for erosion control (Photos 5).

The portion of the WMSA overburden in the designated topsoil storage area continues to be signed to warn drivers not to disturb the area, which corrects a previous violation (Photo 6).

The southern slopes of the WMSA abut a portion of the mine that had been considered pre-SMARA. The operator's geotechnical consultant is evaluating the final slope configuration in this area and has been made aware that the post-SMARA stockpiles should not cause the pre-SMARA slopes to fail or erode. A horizontal setback from the top of the slopes south of the WMSA will likely be needed to ensure stability. The comprehensive RPA that is being processed by the County will need to address the issue of stockpile stability.

Running across the pre-SMARA slopes south of the WMSA is an old unpaved road that is not used in the current operations. A low point in this road causes runoff to discharge over the slope and appears to create a sedimentation problem for Permanente Creek. This condition was noted in the 2008 annual SMARA report and during the 2009 SMARA inspection a number of large rocks were observed to have

been placed in this outfall with the intention of mitigating the potential erosion and instability. This drainage outfall was observed during our inspection and appears to be performing as intended (Photo 15). The drainage outfalls along this roadway should continue to be monitored as part of the site's stormwater management plan. County staff will inspect the site before the end of November to document completion of that work.

Subsequent to the field inspection in August 2011, County staff received a copy of a creek restoration plan for the Permanente Creek, prepared by Lehigh's consultant, and submitted to the San Francisco Regional Water Quality Control Board. The County reviewed the plan and conducted analysis of slopes adjacent to the creek that were not included in the pending RPA. The County determined certain areas should be included and directed Lehigh to submit an amendment to its application and include the areas in the RPA proposal.

In order to address the issue of the lack of topsoil for re-vegetation of the site, the operator established a topsoil storage area within the WMSA and began a series of re-vegetation test plots to evaluate various soil treatments and to determine what soil and seed combinations will be best for successful re-vegetation. One of these test plots is located in a flat area southeast of the WMSA, called the Yeager Site. Test plots of various re-vegetation treatments at the Yeager Site appear to be yielding good results (Photo 7). A second re-vegetation test plot has been established on the north-facing slope in what is being called the East Material Storage Area (EMSA) to evaluate various soil treatments necessary for re-vegetation of slopes of this area. Test plots of different re-vegetation treatments in the EMSA Site also appear to be yielding good results (Photos 8).

As discussed above, the northern highwall of the pit has had three large rockslides. No major new movement on these rockslides was observed during the 2011 inspection. The Mid-Pen Rockslide, extends approximately half-way down the highwall (Photo 9). The Scenic Easement Rockslide has a slope failure that extends down slope approximately as far as the Mid-Pen Rockslide (Photo 10). This rockslide lowered the ridgeline contrary to the 1972 RPE. The largest slide, the Main Rockslide, appears to extend across most of the current height of the northwestern highwall (Photo 11).

A fourth apparent landslide occurs on the western side of the pit. This area of movement was noted by Golder and Associates in their November 2007 Slope Stability Evaluation report and may extend westward below the toe of the eastern slope of the WMSA overburden stockpile (Photo 12). The County's Geologist, Mr. James Baker, referred to this western landslide as the "Haul Road Slide." The north quarry pit backfill being proposed in the Reclamation Plan Amendment will stabilize this slide.

Past practices for handling overburden material included disposal in the EMSA, outside of the 1985 Reclamation Plan boundary. The EMSA lies east of the reclaimed Area C overburden area. The County issued a second NOV for use of the EMSA by the operator, because the area is outside the approved reclamation plan boundary. A 2011 RPA application is being processed by the County, one that is intended to address this NOV. The operator uses the EMSA under an agreement with the County. (If the County finds that the operator does not comply with the provisions of the agreement the County could assess fines.) This agreement required the operator stake the portion of the EMSA that may be used by the operator while the reclamation plan amendment is processed. The inspection noted the stakes are visible in the field.

The County Surveyor surveyed the stockpiled material in the West Materials Storage Area and the East Materials Storage Area to determine whether the mine operator is in compliance with the maximum height conditions. The County Surveyor took field measurements on August 5, 2011, to conduct a

verification survey of the EMSA, and on September 19, 2011, to conduct a verification survey of the WMSA. County staff analysis of the data from the surveys found that the tops of the stockpiles are in compliance with the maximum allowable height conditions for both areas. The County Surveyor will return to the field in November 2011 to again conduct verification surveys of both the EMSA and WMSA. Additional surveys will take place every 30 days from then on, until an action is taken on the proposed RPA.

The operator has created a network of lined and unlined drainage ditches to convey stormwater runoff from the EMSA into existing holding ponds. These ditches appear to be functioning as intended during the 2010 inspection. The lowermost stormwater pond is called Point 30 (Photo 13) and discharges runoff through a culvert into Permanent Creek. During the 2010 inspection the outfall of this pipe was observed to have caused the slope to erode. Since then, rock armoring was done to mitigate this erosion at the outfall, which was observed during the 2011 inspection (Photo 14). County staff will inspect the site by the end of November to monitor the effectiveness of this mitigation.

The operator has created disposal areas for drying and storing wash out fines at various sites within the EMSA. Once dried this material is then incorporated into the waste rock pile. The County approved disposal of wash out fines in this new area because it is necessary for continued operations and this activity is included in the 2011 RPA application, which is being processed.

The operator has installed a number of rock check dams along the inside ditch of the main haul road as an erosion control measure (Photo 16).

The operator has begun exploration activities in the mine area south of Permanente Creek as part of a mine expansion effort. The pending RPA will include a separate phase for reclaiming the areas disturbed by the exploration. County staff observed this area on October 4, 2011.

The San Francisco Bay Regional Water Quality Control Board (Regional Board) issued on March 26, 2010 and on February 18, 2011 Notices of Violation for inadequate erosion and sediment control and required that the operator obtain coverage for non-stormwater discharges under a NPDES permit. The non-stormwater discharges identified by the Regional Board included the water collecting in the bottom of the north quarry. The facility is also under a previous Cleanup and Abatement Order No. 99-018 for discharges of concrete and other wastes into Permanente Creek. The Regional Board also issued a Water Code Section 13267 Investigative Order for alleged unauthorized discharges to Permanente Creek, dated June 14, 2011. This order makes a request for the operator to file a Report of Waste Discharge under Water Code section 13260, and clarifies some outstanding issues identified in the Regional Board's previous letters and order to Lehigh. The operator is working with the Regional Board to correct these violations. The pending RPA will incorporate measures required by the Regional Board and any additional measures that may be imposed by the County in the RPA to correct these water quality and erosion control issues to the extent they relate to the RPA.

VIOLATIONS

The County continues to identify certain site conditions as violations of SMARA. These conditions are slope instability of the pit highwalls and the overburden stockpiles, and disturbances outside of the approved Reclamation Plan boundary. It should be noted that the operator continues to dispute these violations, but has applied to amend the Reclamation Plan to resolve them.

The slope stability violation is partially being corrected through the re-grading of portions of the WMSA slopes to a grade of approximately 3H:1V and re-vegetating. Re-grading of the slopes is ongoing. The operator's geotechnical consultant's study will address the final slope angle and stability of these fill slopes. Disturbances outside of the approved Reclamation Plan areas will be addressed in the amended Reclamation Plan, but until the amended plan is approved, these SMARA violations will continue to be noted.

In prior inspections, the County identified a possible violation in that certain topsoil stockpiles did not appear to be appropriately signed. This has been corrected, and at the time of the 2011 annual inspection, the signage of the topsoil storage piles continues and addresses this prior violation to the County's satisfaction. The operator rocked the outfall of the Point 30 stormwater pond correction a problem noted in the 2010 inspection.

AREAS OF CONCERN AND ISSUES TO MONITOR

1. Continue monitoring the WMSA and EMSA for stability and erosion control. A small cross-slope drainage swale in the eastern portion of the WMSA that re-directs runoff away from the closed depression at the toe of the slope and into a natural drainage channel should continue to be monitored, and modified, as necessary to prevent erosion. Erosion and drainage control measures should be placed in the upper area of the WMSA and direct runoff away from the northern slope and towards the main haul road along the southern portion of the WMSA.
2. Monitor rockslides in pit's northern highwall and notify the County if new landslides occur or the existing rockslides enlarge, particularly further into the RPE. Monitor the potential western-slide area that may underlie the haul road.
3. Monitor re-vegetation test plots should continue and the 2011 report submitted to the County. A re-vegetation test plot report should be submitted to the County prior to the 2012 annual inspection.
4. Rock armor at the outfall of Point 30 stormwater pond should be monitored, and modified, as necessary.
5. Monitor the mitigation measures to control runoff from the roadway running across the southern pre-SMARA area and modify, as necessary.
6. The mine operator provided a geotechnical report that addresses slope stability. This report was part of an application submitted to the County for the 2011 Reclamation Plan Amendment. Implementation of remediation measures may be necessary if new or expanded areas of instability occur. The County should be notified if any slope remediation measures are undertaken.
7. The areas disturbed by exploration activities south of Permanente Creek should be monitored for erosion control and mitigation measures implemented, as necessary.
8. The operator should continue to work with the Regional Board and the County to correct the site conditions that resulted in the water quality violations, and provide to the County copies of documents that demonstrate or provide for compliance with the corrective actions. The

County staff should periodically monitor compliance by the operator with the corrective measures included in the RPA.

FINANCIAL ASSURANCE

The operator submitted a revised financial assurance cost estimate (FACE) on April 2011. PMC will provide written comments to the County in a separate letter.

CONCLUSIONS AND RECOMMENDATIONS

Permanente Quarry is in general compliance with SMARA, except for the stability of the rockslides in the pit and rock storage piles, and disturbance of lands outside of the approved mine boundary. These issues are being addressed in the forthcoming amended Reclamation Plan.

The operator has taken steps to correct the other areas of concern (by beginning to re-grade and re-vegetate the WMSA rock storage, using soils available on site, signing the topsoil stockpile, construct a drainage swale in the eastern slope of the WMSA, and by instituting erosion control measures in EMSA), and is beginning the process to remedy the lack of topsoil by establishing and monitoring re-vegetation test plots. The following tasks should be undertaken to control potential erosion and maintain slope stability on the site:

1. The perimeter slope of the WMSA rock storage pile should continue to be re-graded and re-vegetated.
2. Erosion and drainage control measures should be placed in the WMSA area to prevent concentrated flow over the northern fill slope to stop the gully.
3. The drainage swale running across the eastern portion of the northern WMSA slope should be monitored, and modified, as necessary.
4. The operator's geotechnical consultant should evaluate the long-term stability of the south side of the WMSA rock storage pile giving consideration to the presence of the pre-SMARA waste piles along the toe of the slope.
5. The mitigation measures implemented to control runoff from the road running across the southern pre-SMARA waste piles should be monitored, and modified, as necessary.
6. The progress of the re-vegetation test plots should be reported at least annually to the County.
7. The drainage ditches constructed in EMSA rock storage area should be monitored, cleaned out, and repaired as necessary.
8. The rock armor outfall of the Point 30 stormwater pond should be monitored, and modified, as necessary.

9. If modifications to the slide mass or the WMSA are needed to ensure long-term stability, the geotechnical consultant should report this to the County as soon as possible. Any changes in the stability of the rockslides should be reported immediately to the County.
10. The County staff should inspect the areas south of Permanente Creek that have been disturbed by exploration activities prior to next winter to determine that erosion control measure are adequate.
11. The County should remain in contact with the Regional Board to ensure that Lehigh has corrected the conditions that resulted water quality violations. As appropriate, corrective measures should be incorporated into the pending RPA.

LIMITATIONS

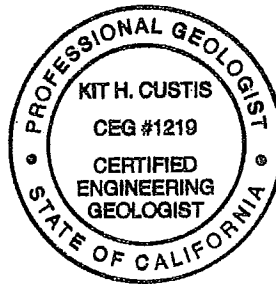
Our services are limited to providing professional opinions and recommendations made in accordance with generally accepted engineering geology principles and practices. No warranty, expressed or implied, of merchantability or fitness, is made or intended in connection with our work, by our proposal for consulting or other services, or by our oral or written reports or findings. Our services have been limited to review of the Reclamation Plan as provided by the County, review of previous available annual SMARA inspection reports, visual field inspections, discussions with the County and operator staff, and the preparation of this letter report.

If you have any questions please feel free to contact me at (530) 750-7076 or e-mail me at kcustis@pmcworld.com.

Sincerely,
PMC



Kit H. Custis
Engineering Geologist – Hydrogeologist
PG 3942, CEG 1219, CHG 254
Expires on 2/29/2012



KHC: KC: BM

Enclosures/Attachments

2011 SMARA Inspection Photos

Cc: Henrik Wesseling, Lehigh Southwest Cement Company

PMC Permanente 2011 SMARA Inspection Report

2011 SMARA Inspection Photos



Photo 1: Re-vegetated north slope of West Material Storage Area (WMSA) at Permanente Quarry, looking northwest. Dated August 25, 2011. Compare to photo 1 in 2008, 2009 and 2010 inspection reports.

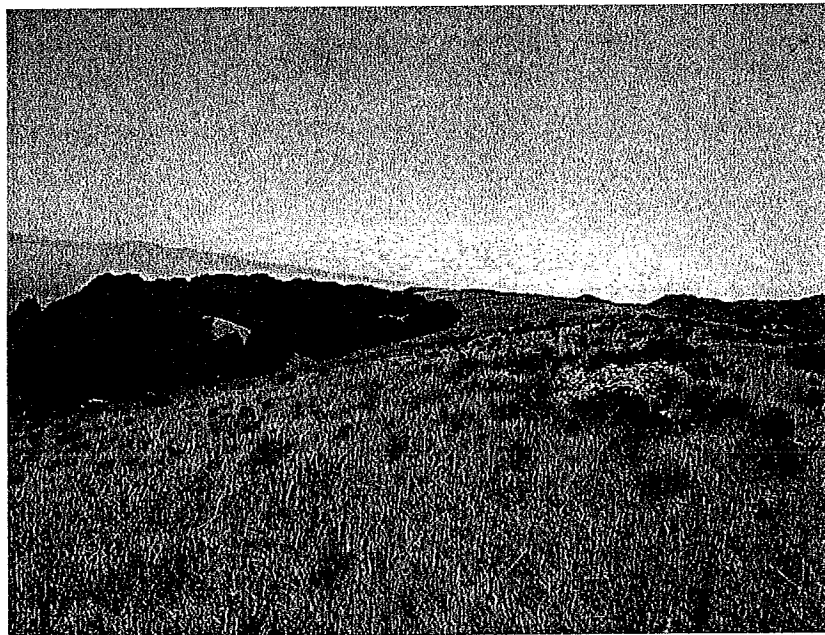


Photo 2: Looking east at re-graded and re-vegetated north slope of the WMSA. Dated August 25, 2011. Compare to photo 2 in 2008, 2009 and 2010 inspection reports.

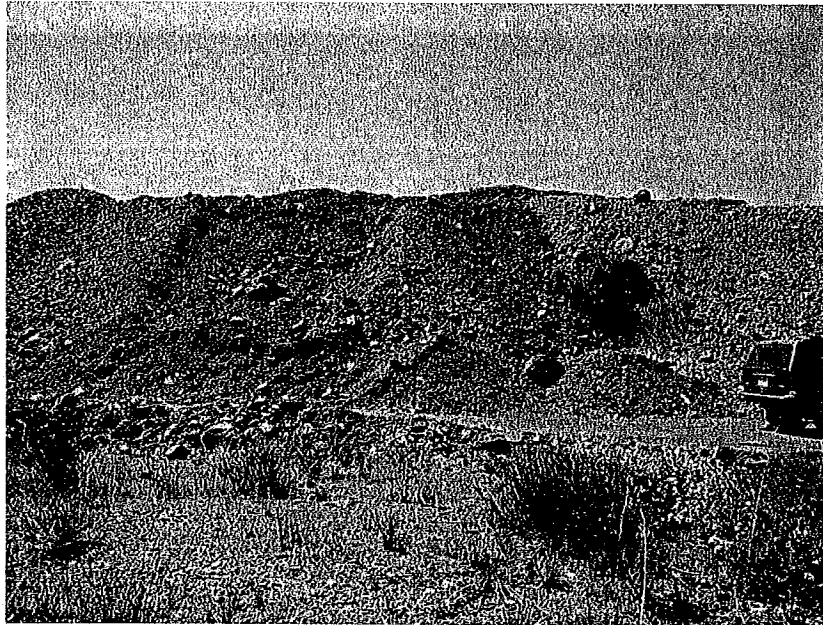


Photo 3: Repair of eroded slope of northern upper waste rock pile. Upper portion of waste rock piles will be re-graded to drain runoff to the haul road along south side of WMSA and re-vegetated for erosion control. Dated August 25, 2011. Compare to photo 5 in 2010 inspection report.

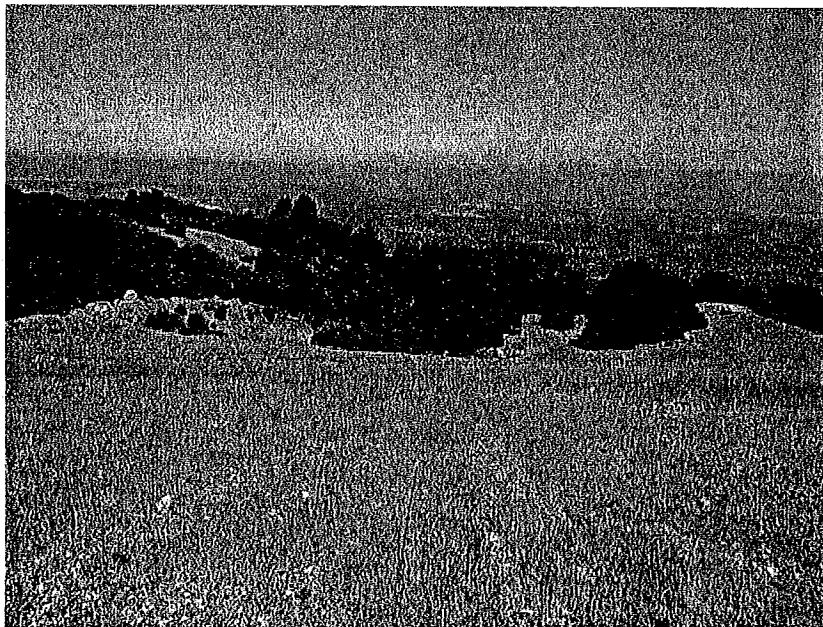


Photo 4: Looking north at eastern portion of north slope of WMSA. Running across center of image is recommended drainage swale recently constructed to direct runoff away from closed depression at toe of slope. Date August 25, 2011. Compare to inspection report photo 5-2008, photo 4-2009 and photo 6-2010.

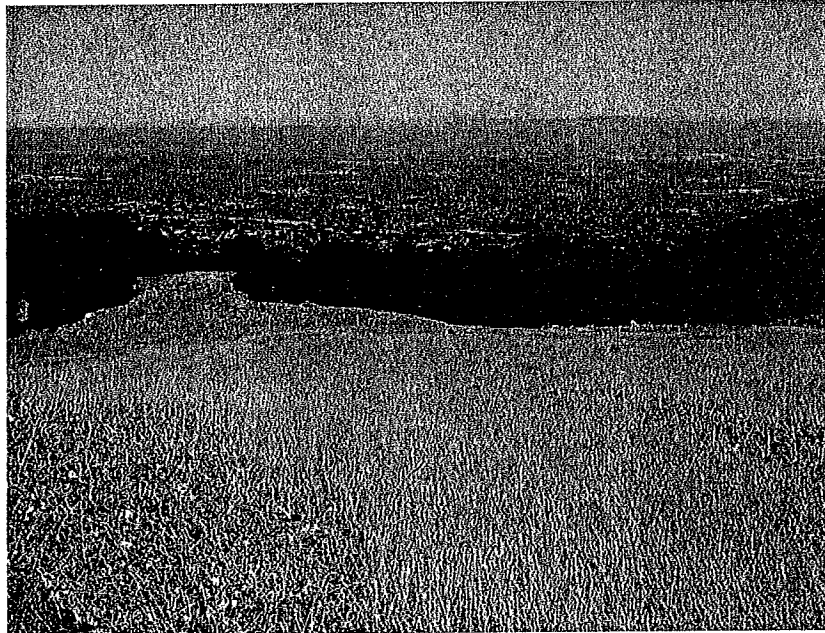


Photo 5: Looking north from eastern end of mid-slope drainage swale where runoff flows into the natural ravine. Date August 25, 2011. Compare to 2010 inspection report photo 5.

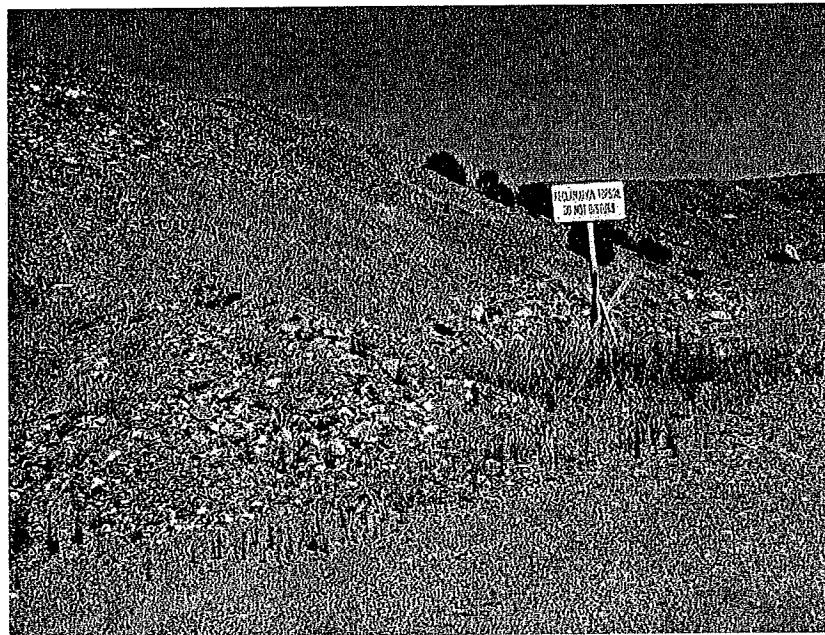


Photo 6: Topsoil storage area in WMSA, looking north; note sign. Dated August 25, 2011.

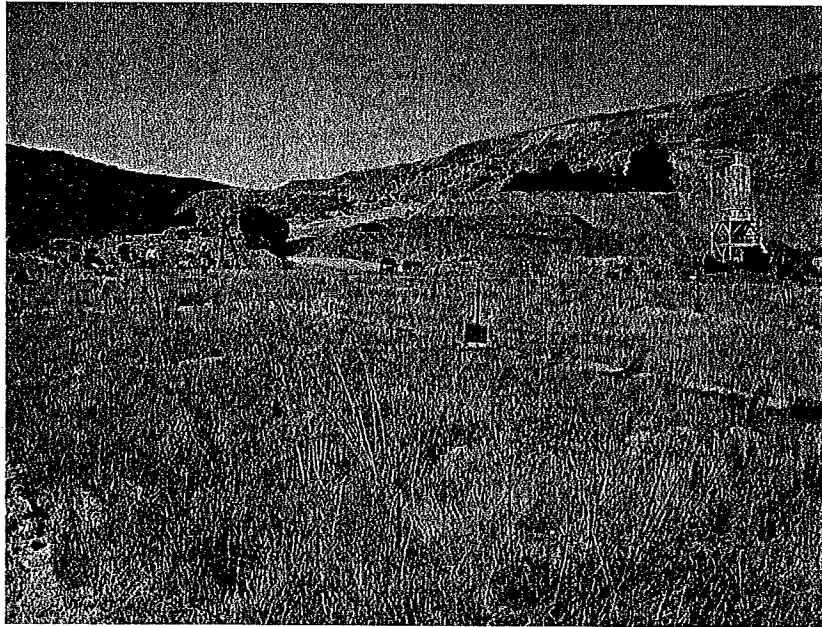


Photo 7: Flat lying test plots at the Yeager Site, southeast of WMSA, looking northwest. Plots planted in 2008. Dated August 25, 2011. Compare to inspection report photo 8-2008, photo 11-2009, 12-2009, and photo 10-1210.

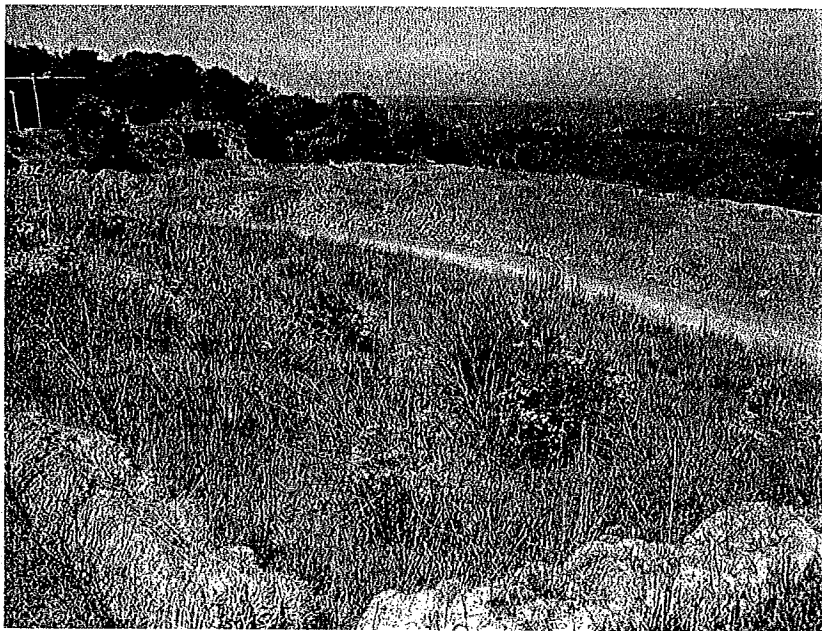


Photo 8: Test plots at the EMSA Site, on north-facing slope, looking northwest. Plots planted in 2008. Dated August 25, 2011. Compare to inspection report photo 16-2008, photo 13-2009, photo 14-2009 and photo 11-2010.

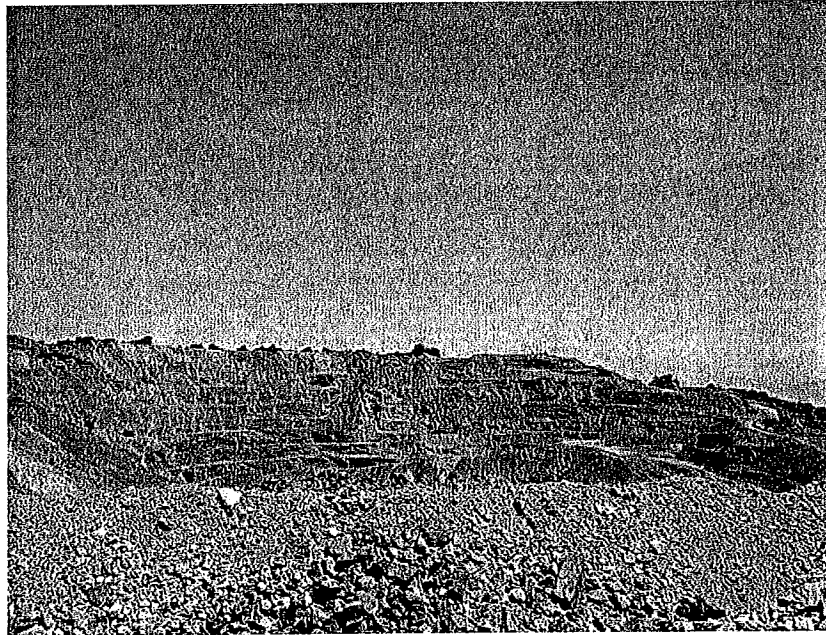


Photo 9: Northeast portion of pit with Mid-Pen Rockslide in center, looking northeast. Dated August 25, 2011. Compare to inspection report photo 11-2008, photo 15-2009, and photo 12-2010.

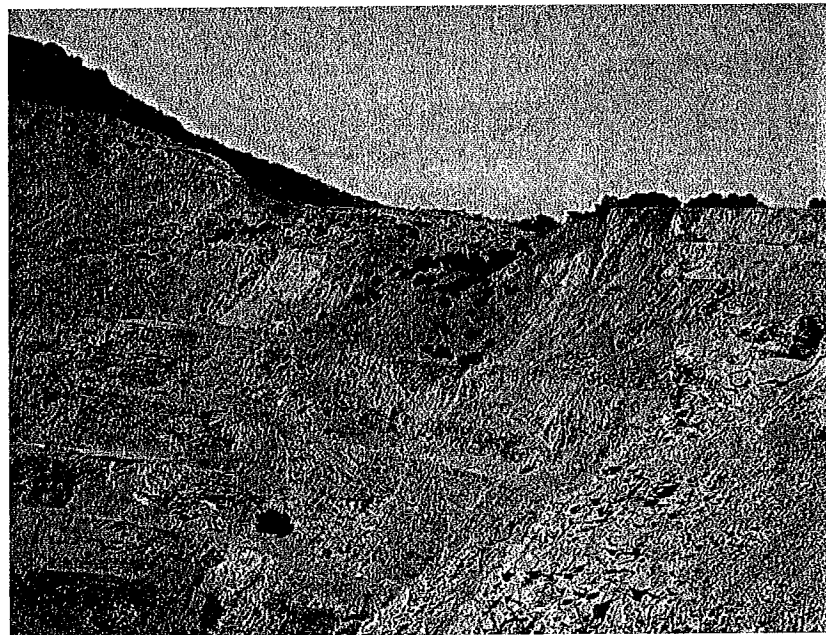


Photo 10: Northern portion of pit with Scenic Easement Rockslide in center, looking northwest. Dated August 25, 2011. Compare to inspection report photo 12-2008, photo 16-2009, and photo 13-2010.

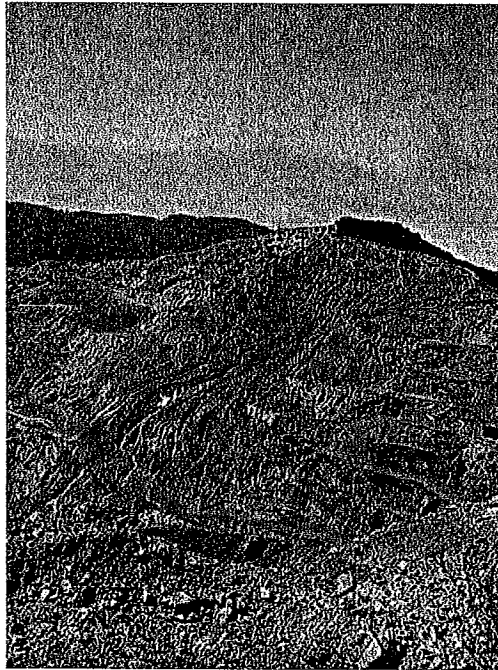


Photo 11: Northwest portion of pit with Main Rockslide in center, looking west. Dated August 25, 2011. Compare to inspection report photo 12-2008, photo 17-2009, and photo 14-2010.

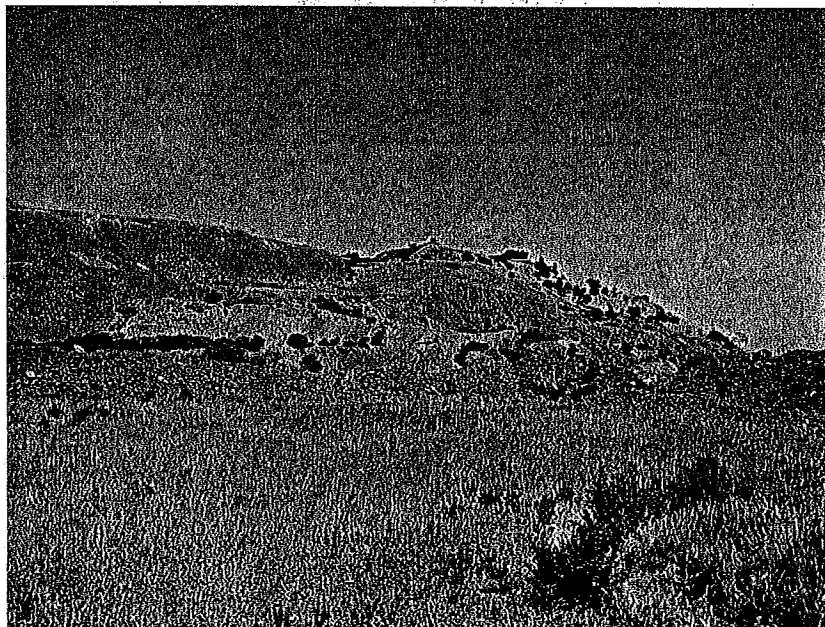


Photo 12: Western portion of pit and eastern portion of WMSA looking at head scarp area of Haul Road Slide, looking north. Dated August 25, 2011. Compare to inspection report photo 18-2009 and photo 15-2010.

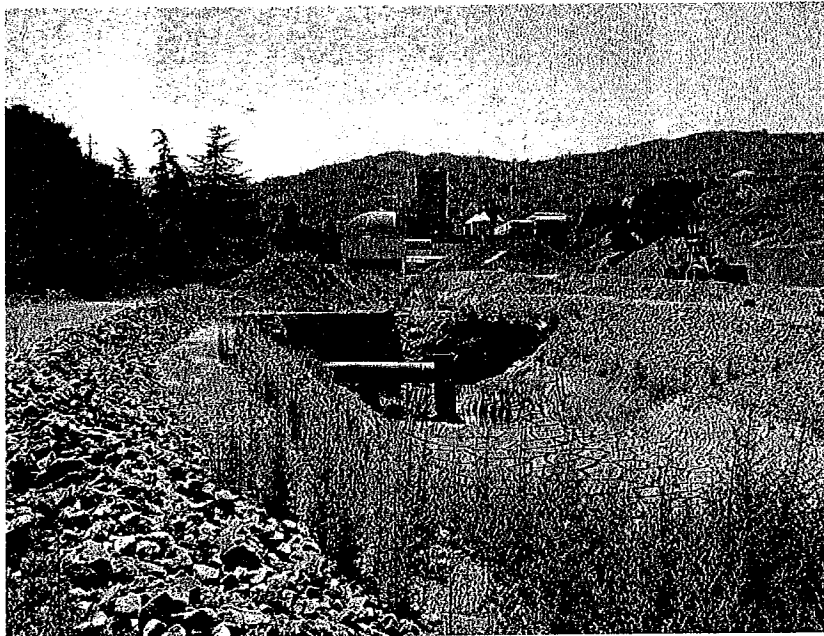


Photo 13: Point 30 stormwater pond, looking south at plant site. Outfall discharges to Permanente Creek. Rock armoring of outfall done to mitigate potential erosion. Dated August 25, 2011. Compare to 2010 inspection photo 16.



Photo 14: Looking west at rocky outfall for discharge to Permanente Creek from point 30 pond. Dated August 25, 2011.



Photo 15: Rock outfall from pre-SMARA road running along southern edge of WMSA, looking south at Permanent Creek. Dated August 25, 2011. Compare to inspection report photo 7-2008 and photo 9-2009.



Photo 16: Rock check dams along main haul road on south side of WMSA to help control erosion, looking east. Dated August 25, 2011. Compare to 2010 inspection report photo 18.

