# County of Santa Clara

Department of Planning and Development Planning Office

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STAFF REPORT Planning Commission May 24, 2012 Item #1

File: 2250-13-66-10P(M1)-10EIR

# **Lehigh Southwest Cement Company Permanente Quarry (California Mine ID #91-43-0004)**

Reclamation Plan Amendment

Staff Recommendation: Approval

Applicant:

Lehigh Southwest Cement Company

Location:

Westerly terminus of Stevens Creek Boulevard, Cupertino

Address:

24001 Stevens Creek Boulevard, Cupertino

Assessor Parcel Nos.:

351-09-011, -013, -020, -021, -022; 351-10-005, -033, -037, -038;

351-11-001, -005, -006, -007, and -012.

Gen. Plan Designation:

Hillsides

Current Zoning:

HS-d1

Property Size:

3,500 acres of which 1,238 acres comprise the Reclamation Plan

Amendment (RPA) boundary

Present Land Use:

Surface Mining

Supervisorial District:

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Williamson Act:

No

Staff report prepared:

May 17, 2012

Prepared by:

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Reviewed by:

Gary Rudholm, Senior Planner,

Rob Eastwood, Principal Planner

Approved by:

Nash Gonzalez, Director, Department of Planning and Development



#### EXECUTIVE SUMMARY

The matter before the Planning Commission is consideration of an Amendment to the 1985 Permanente Quarry Reclamation Plan. The quarry is located in the foothills of the Santa Cruz Mountains, west of the City of Cupertino, and has been an active quarry since about 1903.

There are two main actions before the Commission in considering the Reclamation Plan Amendment:

- 1. Certification of the Final Environmental Impact Report (FEIR)
- 2. Approval of the Reclamation Plan Amendment (RPA)

The RPA before the Planning Commission is a modification to an existing Reclamation Plan. Per the Surface Mining and Reclamation Act of 1975 (SMARA), all active surface mine quarries must have an approved Reclamation Plan in compliance with SMARA standards that demonstrates how the quarry site will be reclaimed (in other words, restored) following the conclusion of mining. This requirement is mandatory. The proposed RPA will update the 1985 Permanente Quarry Reclamation Plan, and will encompass the additional areas of mining activity located outside the 1985 Reclamation Plan boundary as identified in two SMARA violations issued by the County to the quarry operator. In considering the RPA, the Planning Commission must evaluate if the proposed RPA complies with the SMARA standards.

Per the California Environmental Quality Act (CEQA), an FEIR has been prepared to evaluate and disclose the potential environmental impacts that would result from implementation of the RPA. The FEIR includes the Draft EIR that evaluates and discloses the potential significant environmental impacts that would result from reclamation, and also all public comments received on the Draft EIR and responses by County staff and our consultants. Prior to taking an action on the RPA, the Planning Commission must decide whether to certify the FEIR considering if it complies with CEQA, has adequately disclosed all potential significant impacts that could result from the proposed RPA, and identified feasible mitigation measures that can reduce significant impacts.

This staff report provides a brief summary of the pertinent issues within the context of the standards and findings necessary to certify the FEIR and approve the RPA. The Background section of the staff report provides additional information regarding the RPA history, specific components of the RPA, standards and project consistency, and a summary of issues raised by members of the public regarding the Permanente Quarry site.

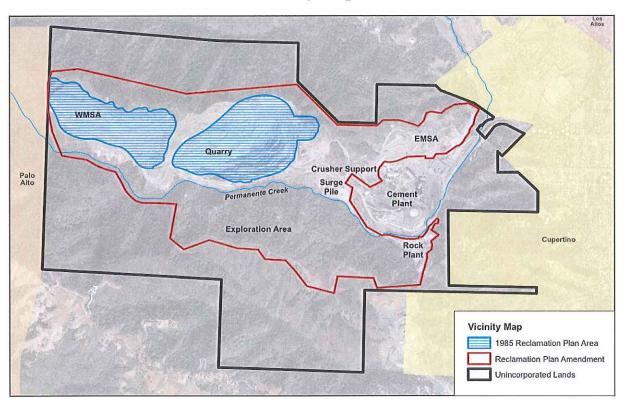
It is recommended that the Planning Commission take the following actions:

- 1. Certify the Final Environmental Impact Report, as set forth in the attached Resolution (Attachment A);
- 2. Make required findings per the California Environmental Quality Act (CEQA) including adoption of a Statement of Overriding Considerations, Attachment A;
- 3. Adopt the proposed Mitigation Monitoring and Reporting Program (MMRP), as set forth in the attached Exhibit 3 to the Resolution (Attachment A); and
- 4. Approve the Reclamation Plan Amendment subject to compliance with the Conditions of Approval, as set forth in the attached Exhibit 1 to the Resolution (Attachment A).

# **Background and History**

The Permanente Quarry is a limestone and aggregate mining operation, located in unincorporated Santa Clara County within the foothills of the Santa Cruz mountain range, west of the City of Cupertino. The current mine operator, Lehigh Southwest Cement Company and parent company, Heidelberg Cement Incorporated, acquired the land and mining operations in 2005. The mine contains a single large pit where limestone and aggregate are quarried. West of the Quarry Pit (Pit) is a stockpile area where overburden has historically been placed, identified as the West Materials Storage Area (WMSA). Mining overburden is currently being placed in a permanent location east of the Pit identified as the East Materials Storage Area (EMSA). The Crusher and Support area, Surge Pile, and Rock Plant are located southeast of the Pit. A cement plant is located on the property, but outside the RPA area boundary.

# Vicinity Map



The Quarry currently operates under a Reclamation Plan that was approved in 1985. In 2006, the County issued a Notice of Violation (NOV) and Order to Comply to the mine operator due to the identification of areas disturbed by mining located outside the boundary of the 1985 Reclamation Plan. In 2008, the County issued a second NOV to the mine operator for placing additional overburden materials outside the Reclamation Plan boundary in the EMSA. Amending the 1985 Reclamation Plan to encompass all the disturbed areas will correct these violations.

The Mine Operator submitted four RPA applications since 2007, including two that proposed a new pit mine south of Permanente Creek. These submittals were in 2007, 2008, 2010, and the current application in 2011. The previous applications are superseded by the 2011 RPA proposal before the Planning Commission. The 2011 RPA (Attachment D) encompasses all areas disturbed by mining activities and does not include a new pit mine.

In addition, on February 8, 2011, the County of Santa Clara Board of Supervisors made a determination following a public hearing that that mining operations at the Permanente Quarry are a legal nonconforming use (i.e., a vested right) in the RPA Area that is subject to the proposed RPA. As such, continued surface mining within the RPA Area does not require a Use Permit. However, SMARA requires that all surface mines have an approved Reclamation Plan.

#### **Reclamation Plan Amendment**

The Applicant<sup>1</sup> proposes to amend the 1985 Permanente Quarry Reclamation Plan for a 20-year period to satisfy the reclamation requirements of SMARA, as amended, and its implementing regulations,<sup>2</sup> and the County's Surface Mining Ordinance and Surface Mining and Land Reclamation Standards. The RPA will reclaim the mined lands of the Permanente Quarry in a manner suitable for future open space uses. The mined lands comprise approximately 1,238 acres (RPA Area) within the Applicant's overall 3,510-acre ownership.

Under SMARA, every person or entity that operates a surface mining operation must receive approval of a reclamation plan. The objective of the reclamation plan must be to "[restore the] mined land...to a useable condition which is readily adaptable for alternative land uses," to "minimize adverse effects on the environment," and to "protect the public health and safety." As SMARA provides, a plan must be based on "the character of the surrounding area and such characteristics of the property as type of overburden, soil stability, topography, geology, climate, stream characteristics, and principal mineral commodities...."

The Planning Commission must determine whether the proposed RPA "substantially meet[s]" all SMARA requirements or regulations and any additional requirements under the County's surface mining ordinance. If the RPA substantially meets all SMARA and County requirements, the Planning Commission must approve the plan. Unlike a conditional use permit or similar entitlements, which the County has discretion to approve or deny, the County's power to deny a

The Permanente Quarry (California Mine ID No. 91-43-0004) is owned by Hanson Permanente Cement, Inc. and operated by Lehigh Southwest Cement Company. Lehigh and Hanson both are part of the Heidelberg Cement Group, a worldwide producer of construction materials (Lehigh Cement Company, 2011; Hanson, 2011).

<sup>&</sup>lt;sup>2</sup> SMARA is set forth in Public Resources Code Section 2710 *et seq.*; Its implementing regulations are found in Title 14 of the California Code of Regulations Section 3500 *et seq.* 

reclamation plan is limited. A Reclamation Plan cannot be denied on grounds unrelated to the reclamation standards under SMARA and the County's Surface Mining Ordinance.

The RPA Area includes the Quarry Pit, two overburden piles referred to as the EMSA and WMSA, Crusher/Quarry Offices, Surge Pile, Rock Plant, a mining exploration area south of Permanente Creek, and an area adjacent to and within Permanente Creek corridor. The RPA does not include the Lehigh cement plant, which is authorized and operates under a separate Use Permit.

The reclamation activities include stabilization of mined slopes, re-vegetation, installation of storm water detention, and removal of mining material from the Permanente Creek corridor. The reclamation activities will be implemented in three (3) phases over a 20-year period. Phase I is approximately ten (10) years, and involves reclamation activities in the Exploration Area south of Permanente Creek, EMSA, and continuation of existing mining activities in the WMSA and Quarry Pit. Reclamation work is complete in the EMSA by the end of Phase I. Phase II is approximately five (5) years, and includes reclamation activities within the WMSA and Pit. During Phase II, the WMSA overburden stockpile will be moved via a conveyor system to use as backfill of the Pit. Phase III is approximately five (5) years, and involves removing the structures including equipment, buildings and unnecessary roads from the RPA area. Reclamation within the Permanente Creek Corridor will occur throughout all three phases, including restoration of portions of the creek in Phase III. Further description of the specific components of the RPA and phases is included in the Background section.

# **RPA Timing**

Phase	Duration	WMSA / Pit	EMSA
1	10 years	Mining / Operations	Reclamation
2	5 years	Reclamation Starting	Reclaimed
3	5 years	Reclamation Finishing	Reclaimed

# Final Environmental Impact Report (FEIR)

In accordance with the California Environmental Quality Act (CEQA), an Environmental Impact Report (EIR) was prepared by the County to identify potentially significant impacts that would result from implementation of the RPA, and feasible mitigation measures that would reduce the extent of the impacts to a less than significant level.

The Draft EIR identifies several areas where the RPA would cause significant environmental impacts, but identifies mitigation measures to reduce these impacts, such as, Air Quality, Noise, and Biological Resources. In seven (7) areas, the Draft EIR disclosed that the RPA would result in significant environmental impacts where there are no feasible mitigation measures to reduce the impact to a less than significant level. These identified significant and unavoidable environmental impacts are Aesthetics, Biological Resources, Historical Resources, and Hydrology and Water Quality. Substantial opportunity for public participation in the EIR process to review and comment on the EIR documents was provided, which meets and exceeds the requirements of CEQA. The FEIR provides adequate information and analysis to make an informed decision on the environmental effects and take action on the RPA.

To approve the RPA, the Planning Commission must act to certify the FEIR, finding that the FEIR had been completed in compliance with CEQA and its Guidelines<sup>3</sup>, reflects the County's independent judgment and analysis, and the Commission has reviewed and considered the information in the FEIR prior to approving the RPA.

The Planning Commission must also make findings regarding the disposition of each significant environmental impact identified in the FEIR. For areas where feasible mitigation measures are identified to reduce significant impacts to a less than significant level, the Planning Commission must adopt a Mitigation Monitoring and Reporting Program (MMRP), which specifies how the mitigation will be implemented and monitored for compliance.

For areas where the EIR identifies a significant impact for which there is no feasible mitigation measure to reduce the impact to less than significant, the Planning Commission must make a finding that the impact is significant and unavoidable. In this instance, the Planning Commission must adopt a Statement of Overriding Considerations describing how the benefits of the RPA outweigh the unavoidable adverse environmental impacts resulting from the project. The Resolution (Attachment A) includes the CEQA findings, statement of overriding considerations, and MMRP.

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<sup>&</sup>lt;sup>3</sup> CEQA is set forth in Public Resources Code Section 21000 et seq.; its implementing regulations (the "CEQA Guidelines") are found in Title 14 of the California Code of Regulations Section 15000 *et seq*.

#### RECOMMENDED ACTIONS

# A. Actions Concerning Environmental Determinations and Findings

It is recommended that the Planning Commission:

- 1. Certify the Final Environmental Impact Report (FEIR),
- 2. Make required findings per the California Environmental Quality Act (CEQA) and adopt a statement of overriding considerations for those environmental impacts identified as significant and unavoidable; and
- 3. Adopt the proposed Mitigation Monitoring and Reporting Program.

# B. Actions Concerning RPA Proposal

It is recommended the Planning Commission:

4. Approve the Reclamation Plan subject to compliance with the conditions of approval contained in the attached Exhibit 1 of Attachment A.

A single resolution encompasses all four actions (Attachment A).

#### REASONS FOR RECOMMENDATION

#### A. Reasons for Recommended Actions Concerning Environmental Determination

In accordance with CEQA, an EIR was prepared because the initial evaluation of the RPA determined that it could result in potentially significant environmental impacts. The Draft EIR for the RPA was published on December 23, 2011 for a 60-day public review period, and members of the public were invited to submit public comments regarding the significant environmental effects of the RPA and the adequacy of the Draft EIR by February 21, 2012.

The Draft EIR discloses that the RPA may have potentially significant environmental impacts with respect to Aesthetics/Visual Quality, Air Quality, Biological Resources, Cultural Resources (existing historic features on the site), Geologic Resources, Greenhouse Gas Emissions, Hydrology and Water Quality and Noise, and cumulative considerable impacts on downstream flooding.

#### Significant and unavoidable impacts identified in the Draft EIR include:

- Aesthetics/Visual Quality (interim impacts to scenic vistas and views from scenic highways during reclamation).
- Biological Resources (interim impacts from selenium-burdened runoff on aquatic organisms).
- Cultural Resources (loss of known historic resources).
- Water Quality (interim impacts from selenium-burdened runoff into Permanente Creek during reclamation activities).
- Flooding (downstream flooding impacts and cumulative flooding impacts)

A full description of the significant and unavoidable impacts is included in the Background Section. During the Draft EIR public comment period, staff received 35 comment letters and 11 oral comments at the Planning Commission public meeting on the Draft EIR on February 3, 2012. The County has responded to each comment submitted in the Final EIR, which was released on May 11, 2012. In response to the comments submitted, revisions to the text of the Draft EIR have been made and additional mitigation measures have been identified addressing two environmental impact areas: flooding and hydrology/water quality (selenium).

The revisions to the RPA and text changes to the Draft EIR regarding flooding and selenium impacts do not constitute significant new information as defined by CEQA and do not substantially change the analysis and findings within the Draft EIR. The proposed 100 year flood basin will implement a mitigation measure initially identified in the Draft EIR and, as discussed in the Final EIR, will not by itself cause any new significant environmental impacts. The new selenium mitigation measures will act to ensure that feasibility studies for selenium treatment continue during reclamation, and be installed if later determined feasible. However, given the uncertainty regarding future treatment and ability to reduce selenium concentration in runoff during reclamation, this impact remains significant and unavoidable.

Flooding and hydrology/water quality (selenium) are discussed in more detail below.

### Flooding

Under existing conditions, the Pit captures drainage from 361 acres of the Permanente Creek watershed. The RPA would backfill the Pit with materials currently stored at the WMSA to raise the base elevation of the pit from 440 feet above mean sea level (amsl) to 990 feet amsl. The Draft EIR concluded that the RPA could result in increased stormwater runoff and cause offsite flooding in downstream communities. This potential impact of the RPA was determined to be significant and unavoidable, unless an onsite detention facility could be constructed that would manage increased runoff caused by Pit backfilling. It has been determined that such a detention facility is feasible.

Subsequent to the publication of the Draft EIR, the Applicant coordinated with the Santa Clara Valley Water District (SCVWD) and designed a detention basin to be located on the reclaimed Pit floor. The SCVWD has reviewed the proposal and verified that it will mitigate the flooding impacts to a less than significant level.

#### Hydrology/Water Quality (selenium)

Permanente Creek surface water is currently impaired by concentrations of selenium that exceed water quality objectives identified in the San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan), which has a standard of 5  $\mu$ g/L (micrograms per liter) for aquatic life protection. Selenium levels in Permanente Creek are elevated above the Basin Plan due to surface runoff that contacts limestone and that are exposed to oxygen and water. Water sampling and testing taken during the 2011 and 2012 wet seasons reflect selenium levels in the range of 24-26  $\mu$ g/L for runoff originating from the WMSA and EMSA, and 82  $\mu$ g/L for runoff water from the Quarry Pit, which is ultimately pumped and discharged into Permanente Creek. Selenium is a bioaccumulative

pollutant. Aquatic life and birds are exposed to selenium primarily through their diet, the risks stem from eating food contaminated with selenium rather than from direct exposure to it in the water. The effects on the aquatic life are on the growth and survival of juvenile and effects on larval offspring of adults exposed to excessive selenium.

During the 20-year reclamation period, the Draft EIR acknowledged that reclamation activities could increase selenium levels to varying degrees. The RPA provides for Best Management Practices (BMPs) implemented in accordance with the drainage plan and Storm Water Pollution Prevention Plan (SWPPP). The performance of the BMPs will be monitored with a Surface Water Monitoring Program. Because the BMPs are specific to the site conditions and rainfall and have not been installed yet, there is insufficient empirical data supporting a conclusion that the BMPs alone will mitigate the interim impact.

Long term, the Draft EIR concludes that overall water quality with respect to selenium will be improved to comply with applicable standards following reclamation of the site. At the EMSA and WMSA, the reclamation includes separating out limestone bearing materials from surface exposure and oxidation (the process that generates selenium in the runoff). Non-limestone rock will be used to provide a one-foot thick cap, over which six inches of blended topsoil and organic materials will be placed and serve as a growth medium to support the installed vegetation. Reclamation of the Pit includes mixing in approximately 63,000 tons of organic material for the upper 25 to 50 feet of overburden backfill. The proposed cover strategy for the EMSA, WMSA, and Pit has two main functions: 1) to prevent direct stormwater contact with the selenium bearing limestone, and 2) promote lateral flow with some lesser degree of infiltration. This results in eliminating the oxygen exposure and creating an anaerobic environment that reduces the concentration of selenium in water.

Public comments questioned the Draft EIR's conclusion regarding the infeasibility of treating the selenium resulting from reclamation activities identified in the RPA proposal. As part of the Final EIR, the County contracted with CH2MHill to evaluate the feasibility and costs to install a selenium treatment plant at the Quarry. CH2MHill determined that, from an engineering perspective, a treatment plant could be installed onsite to treat discharge from the Quarry Pit and WMSA, contingent upon the completion of subsequent studies evaluating water management and other factors needed to specifically design a treatment plan (Exhibit 4 to Attachment A). Specific parameters on the cost of the treatment plant would be disclosed as part of further engineering study. Based on the information available in the CH2MHill report, and all other information available at this time, the County cannot conclude that the treatment facility is feasible. Accordingly, the County has determined that further evaluation is required to determine the feasibility of the treatment facility at the EMSA, WMSA, and Quarry pit.

In order to ensure that selenium treatment continues to be evaluated, new mitigation measures were developed (4.10-2c, 4.10-2d, and 4.10-2e; FEIR, pg. 4.10-48) that require the Applicant to commence study, design, and pilot testing of a selenium treatment facility to address discharge to Permanente Creek. The design process also includes a review and determination by the Planning Commission whether the treatment facility is feasible. If the Applicant fails to satisfy the applicable water quality standards for two

consecutive years through the use of BMPs, then installation of the treatment facility will result, if the Planning Commission has determined the treatment facility is feasible.

# B. Reasons for Recommended Actions Concerning Proposal

- On February 9, 2011, the Santa Clara County Board of Supervisors determined that
  the property encompassed by the boundary of the Reclamation Plan Amendment is
  land where a vested right to mine exists. A Use Permit to operate the mine is
  therefore not required. The action by the Planning Commission will concern the
  Reclamation Plan only.
- 2. The Reclamation Plan Amendment conforms to the standards stipulated under the County of Santa Clara Zoning Ordinance and the County of Santa Clara Surface Mining and Land Reclamation Standards.
- 3. The Reclamation Plan Amendment conforms to the standards stipulated under the Surface Mining and Reclamation Act of 1975 as noted below.

# a) Financial Assurances (§3702)

Under SMARA, all surface mining operations are required to have an annually updated financial assurance cost estimate approved by the lead agency that reflects the cost of reclaiming the site pursuant to an approved reclamation plan. On February 13, 2012, the County approved, and the Applicant posted, a Financial Assurance in the amount of \$47,727,786.00, which addresses all disturbed lands of the Quarry if the mine operator is not able to perform the reclamation. The County will require an updated Financial Assurance Cost Estimate (FACE) following approval of the RPA, and will review a revised FACE annually.

# b) Wildlife Habitat (§3703)

The RPA provides for protection and avoidance of threatened and endangered species. The Applicant will reclaim existing areas disturbed by mining that do not contain important wildlife habitat. The RPA includes measures to avoid direct impacts to wildlife species when they could be impacted by reclamation activities. Reclamation will result in wildlife habitat establishment in a condition that is equal or superior to habitat that existed prior to mining. Reclamation will use native vegetation representative of oak woodland, riparian, chaparral and grassland communities similar to naturally occurring conditions in proximity to the RPA area.

# c) Backfilling, Regrading, Slope Stability, and Recontouring (§3704)

Reclaimed lands will comply with the SMARA standards for backfilling, slope stability, and recontouring. Final overall reclaimed slopes will be stable under static and seismic loading conditions and are suitable for the proposed end use. All final reclaimed slopes will have a minimum factor of safety appropriate to the planned end use, as described in the geotechnical analysis of the RPA (Attachment C of the RPA).

#### d) Re-vegetation (§3705)

The goal for re-vegetation efforts is restoration of self-sustaining native vegetation communities, and visual integration of reclaimed lands with surrounding open space. The Re-vegetation Plan within the RPA incorporates plant materials capable of self-

generation without continued dependence on irrigation, soil amendments, or fertilizer in accordance with SMARA standards. The Applicant will continue to use test plots, as described in the RPA, to determine the appropriate mix of plant materials to use on the site as reclamation progresses.

# e) Drainage, Diversion Structures, Waterways, and Erosion Control (§3706)

The reclamation is designed to control surface runoff to protect surrounding land and water resources in accordance with the California Porter-Cologne Water Quality Control Act, the Federal Clean Water Act, and other applicable local, state, and federal requirements. These goals are achieved through a series of Best Management Practices (BMPs), Storm Water Pollution Prevention Plan (SWPPP), Mitigation Monitoring and Reporting Program (MMRP), and Reclamation Plan Amendment Conditions of Approval, including mitigating impacts related to selenium.

# f) Building, Structure, and Equipment Removal (§3709)

All equipment and structures will be removed from the RPA Area during final reclamation.

# g) Stream Protection, Including Surface and Groundwater (§3710)

SMARA requires that surface and ground water must be protected from siltation and pollutants that may diminish water quality, in compliance with the state Porter-Cologne Water Quality Control Act and the federal Clean Water Act as well as local requirements for siltation control and mitigation.

Upon final reclamation, the RPA area would not create an impact to water quality. The RPA includes design methods intended to reduce selenium concentrations in stormwater runoff. Upon final reclamation, the concentration of selenium would be below the applicable Regional Water Quality Board Basin Standards (currently that standard is 5 ppb). Selenium concentrations in stormwater runoff may temporarily increase during reclamation activities. Therefore, a Condition of Approval for the RPA is the use of BMPs during reclamation to prevent contact between limestone and stormwater, and continued evaluation of the feasibility of installing a treatment facility, or alternative method, to treat selenium. If further study determines that selenium treatment is feasible and water quality during reclamation exceeds applicable standards, then a treatment facility or alternative method will be installed.

Reclamation activities will not result in the contamination of groundwater resources used for drinking water or other beneficial uses. Existing testing provides no indication that surface mining activities are causing an adverse impact upon groundwater quality. Further, reclamation activities, which will ultimately provide a permanent vegetative cap over the overburden and limestone exposed areas, would further reduce the potential for selenium to enter into surface water and further minimize any possibility of groundwater impacts.

# h) Topsoil Salvage, Maintenance, and Redistribution (§3711)

The available topsoil will be harvested and moved directly to an area of active revegetation. Stockpiles of topsoil or other growth medium intended for use in revegetation efforts will be protected from erosion and weed establishment through the

use of hydroseeding mixed with a native erosion control mix comprised of tackifiers, mulches, erosion control blankets, wattles, silt fences, or other soil protection measures.

# i) Tailing and Mine Waste Management (§3712)

Overburden management will entail permanently stockpiling the overburden in the EMSA area, capping the top layer with blended soil, and re-vegetation. Additional stockpiling from continued mining within the Quarry Pit will be placed within the southwest end of the Quarry Pit. The WMSA overburden waste will be used to backfill the pit. Mine waste or overburden that remains on the site will be reclaimed consistent with State Water Resources Control Board standards to Title 27.

# j) Closure of Surface Openings (§3713)

The operator will maintain the security gate at the main entrance to the Quarry property, and continue to protect the public entry from all portals, shafts, tunnels, and other surface openings. This would include tunnels on the Permanente Quarry site where conveyors move harvested minerals. In addition, all drill holes, water wells, and monitoring wells must be abandoned, sealed, and reclaimed. The Exploration Area reclamation includes backfilling the drilling holes and re-vegetation of the area.

#### **BACKGROUND**

This Background Section provides the following additional supportive information regarding the Proposed RPA in the following areas.

- 1. RPA Application History
- 2. Components of the Reclamation Plan
- 3. Reclamation Plan Standards and Project Consistency
- 4. Significant and Unavoidable Impacts
- Issues raised in Public Comments to the DEIR Relating to Overall Quarry Operations and not the proposed RPA
  - a. Vested Rights
  - b. Cement Plant
  - c. New Quarry Pit
  - d. Scenic Easement

# 1. RPA Application History

The following information summarizes the history of RPA-related changes and prior applications to amend the 1985 Reclamation Plan.

- In October 2006, the County of Santa Clara issued a Notice of Violation and Order to Comply requiring that the 1985 Reclamation Plan be amended to encompass all disturbed areas related to mining operations outside the 1985 Reclamation Plan boundary. The RPA, as currently being considered by the Planning Commission, encompasses all disturbed areas relating to mining operations outside the 1985 Reclamation Plan boundary.
- On January 9, 2007, the Applicant applied for an Amendment to the 1985 Reclamation Plan (the "2007 Proposed RPA"). The 2007 Proposed RPA would have modified the 330-acre area covered by the 1985 Reclamation Plan to include 917 acres, a new mining pit south of Permanente Creek, and would have extended the termination date of the plan by 25 years. The County held a Notice of Preparation meeting in 2008. The County subsequently determined that necessary additional geotechnical review would be required before the application could be considered complete, and this version of the application did not move forward due to concerns expressed by the community regarding the location of the proposed new mining area.
- On June 17, 2009, the Applicant applied again for an amendment to the 1985 Reclamation Plan (the "EMSA RPA"). The EMSA RPA was intended to abate the Notice of Violation, issued by the County on June 20, 2008 to the mine operator, for illegally stockpiling materials in the EMSA outside the approved 1985 Reclamation Plan boundary. Components of the proposed EMSA RPA have been carried forward into the current RPA. On April 28, 2010, the County issued an NOP related to the "EMSA RPA."
- On May 28, 2010, the Applicant submitted the third proposed amendment to the 1985 Reclamation Plan to encompass all mined areas, including the EMSA, and included a new

quarry pit south of Permanente Creek. On March 10, 2011, the County issued an NOP for the "Comprehensive RPA." This application would have abated the October 2006 combined Notice of Violation/Order to Comply. In addition to encompassing all mining disturbed areas, this application included a new, approximately 207-acre surface mining area south of Permanente Creek and an approximately new 52-acre overburden disposal area between the Pit and EMSA. Neither of these components has been carried forward into the current RPA.

- On February 8, 2011, the County Board of Supervisors made a determination following a public hearing that the quarrying was a vested right on several of the Quarry owned parcels. The "vested" parcels include the parcels containing the Pit, WMSA, EMSA, Rock Plant, and portions of the Quarry lands south of Permanente Creek.
- June 3, 2011, the Applicant notified the County (Attachment B) that it no longer was proposing a new quarry area and submitted a revised application in July 2011 to amend the 1985 Reclamation Plan. On August 18, 2011, the County issued an NOP for the RPA now under consideration by the Planning Commission. The NOP clarified that the new RPA application superseded prior applications. The comment period for the RPA NOP ended on September 26, 2011. The Draft EIR for the RPA was published on December 23, 2011, and an informational public workshop on the Draft EIR was held on January 26, 2012 in the City of Cupertino and a public meeting to receive oral comments on the adequacy of the Draft EIR was held on February 2, 2012 by the Planning Commission.

# 2. Components of the Reclamation Plan Amendment

East Materials Storage Area (EMSA)

The EMSA is an existing, approximately 75-acre overburden and rock storage area, located in the easterly portion of the RPA boundary. It is designed to accept total overburden placement of approximately 6.5 million tons or 4.8 million cubic yards. The EMSA slopes are at a 2H:1V (Horizontal: Vertical) angle interrupted by 25-foot benches every 40 feet (2.5H:1V to 2.6H:1V overall). The RPA proposes reclamation of this area in approximately 10 years. The reclamation activities include installing a cap, comprised of hard materials of 12 inches in thickness, a layer of native and amended (blending soil with mulch and nutrients) soils, and new vegetation comprised of tree seedlings, shrubs and native grasses. The re-vegetation plan is intended to replicate surrounding native habitats, based on solar exposure, for the north-facing and south-facing slopes.

# Quarry Pit (Pit)

The Pit has been the point of mineral extraction at the Quarry for more than 100 years, and is expected to encompass approximately 265 acres at buildout. Today, the Pit encompasses approximately 241 acres. The current elevation ranges from approximately 750 feet above mean sea level (amsl) to 1,750 feet amsl. The existing slope angles are 1.0H:1V overall. Four areas of the Pit that have been subject to landslides, or appear to be unstable: the Main Slide on the northwest wall; the Scenic Easement Slide in the upper portion of the northeast wall; the Midpeninsula Slide in the upper benches of eastern wall; and an area of potential instability recognized within the Quarry Pit's west wall. The RPA proposes backfilling the Pit with approximately 60 million tons of overburden rock generated by WMSA reclamation activities and ongoing mining activities. The materials would backfill the lower 500 feet of the Pit, and

then used to create a large buttress, hundreds of feet thick, against the west and north walls of the Pit to increase the factor of safety for the west and north walls. The Scenic Easement Slide and Mid-Peninsula Slide will be stabilized by re-grading the upper slopes of the Pit.

The RPA will also blend in approximately 63 thousand tons of organic material to the upper 25 to 50 feet of overburden backfill within the Pit. This blending is intended to create an anaerobic environment that reduces the concentration of selenium in water within the Pit. Construction of Basin 40A and blended with organic material would take place during Phase III of the RPA.

The RPA will also install a detention facility, approximately 700 feet by 1000 feet in dimension and 10 feet deep and referred to as Basin 40A, that is designed to function as a desiltation and detention basin and will occupy about half of the proposed reclaimed Pit surface. Basin 40A is designed to temporarily store water runoff and release it in a controlled rate over a period of hours or days through an outflow structure. Basin 40A's discharge pipe would be approximately 400 feet long and release water into a discharge area composed of an 18x24 foot rip-rap pad into Permanente Creek. The Basin 40A will not have large bodies of water sitting for long periods of time. The limited time of standing water will not impede the treatment of the backfill material to reduce the selenium as intended.

#### West Materials Storage Area (WMSA)

The WMSA is an existing 140-acre overburden stockpile located west of the Quarry Pit with elevations ranging from 1,500 to 1,975 amsl. Implementation of the RPA will result in final WMSA elevation and contours returning to historical elevation levels based on USGS maps for the site prior to the quarrying activities. This will be accomplished by transporting the overburden to the Pit via a portable conveyor system. It is expected that any usable limestone will be segregated and removed for processing. Some fill would be left at the WMSA to provide stability, to use in recontouring this area, and to assist with drainage control. The final reclamation activities include installing a cap, comprised of hard materials of 12 inches in thickness, a layer of native and blended (or amended) soils, and new vegetation comprised of tree seedlings, shrubs and native grasses.

### Crusher/Quarry Office Area

The Crusher and Quarry Office area is an existing 60-acre area located east of the Quarry pit. It contains crushing equipment stations, two portable trailers used for offices and maintenance, and serves as a general support area for ongoing quarry operations. During Phase I of the RPA the Crusher and Quarry Office will be relocated further to the east to allow for continued mining of the Quarry pit. The RPA calls for removal of the structures and equipment, and grading and adding growth medium, and planting activities.

#### Surge Pile and Rock Plant

The Surge Pile is an existing 9-acre stockpile of crushed aggregate located southeast of the Quarry pit. It holds mined materials pending transport via a conveyor belt to the Rock Plant for further processing. The Rock Plant is a rock processing facility processing 2 million tons of aggregate annually. It is located on 19 acres southeast of the Surge Pile. Several structures comprise the Rock Plant including conveyors, water tanks, crushers, etc. Reclamation for these areas would occur during Phase 3, and involves removing all structures, stockpiled materials and restoration of the area to approximate the natural topography. Final reclamation would add growth medium and planting activities.

#### Permanente Creek Reclamation Area

The Permanente Creek Reclamation Area includes approximately 23.1 acres along Permanente Creek and the adjacent hillsides that have been affected by mining activities, erosion events, and activities to control erosion in that area. Activities to reclaim Permanente Creek and the affected upslope areas include stabilization of slopes, re-vegetation and hydroseeding, removal of limestone rocks and boulders, and removal of fills and restoration of creek channels affected by past mining. Reclamation activities are designed to be consistent with a long term Permanente Creek Restoration Plan as approved by the San Francisco Bay Regional Water Quality Control Board.

#### Mining Exploration Area

The 2010 Reclamation Plan Amendment application, which has been superseded by the current RPA application, included a proposal to expand quarrying activities to a new area south of Permanente Creek. This RPA does not contain a new quarrying pit. The exploratory activities consisted of an exploratory drilling program in several locations that affected approximately 284 acres to study the feasibility and geologic context for the proposed South Quarry. Because this exploratory work constitutes "surface mining operations" under SMARA, the RPA provides for reclamation of the area affected by those activities. The drilling holes will be backfilled and the area re-vegetated to the reclamation standards contained in the RPA re-vegetation plan.

# 3. SMARA Reclamation Plan Standards and Project Consistency

#### **General discussion**

Under SMARA, a mine operation must have an approved reclamation plan. The reclamation plan must achieve the legislative policies embodied within SMARA. To ensure reclamation plans achieve compliance with those policies and mandates, the State Mining and Geology Board has developed various performance standards for reclamation. These standards, and satisfaction with them for the proposed Permanente Quarry Reclamation Plan Amendment, are discussed in more detail below.

In accordance with Section 2774(c) of SMARA, the Planning Office submitted a copy of the RPA to the State Office of Mine Reclamation (OMR) for review. All pertinent requirements stipulated by OMR are contained in the recommended conditions of approval (Exhibit 1 to Attachment A).

#### Financial Assurances (CCR §3702)

Under SMARA, all surface mining operations are required to have an annually updated Financial Assurance approved by the lead agency that reflects the cost of reclaiming the site pursuant to an approved reclamation plan. The Financial Assurance is similar to an insurance policy, with the County as the beneficiary. The Financial Assurance provides financial resources to the County in the event the Applicant is incapable of performing reclamation in accordance with its approved reclamation plan or has abandoned its surface mining operation without commencing or completing reclamation.

On February 13, 2012, the County approved, and the Mine Operator posted, a Financial Assurance in the amount of \$47,727,786, which addresses all disturbed lands at the Quarry if the

mine operator is not able to perform the reclamation. The prior Financial Assurance posted by the Applicant, February 14, 2011, was for the 1985 Reclamation Plan in the amount of \$11,439,992.

The County, as required under SMARA, will require an updated Financial Assurance Cost Estimate (FACE) following the approved RPA. The County will review a revised FACE on an annual basis as part of the yearly SMARA inspection and reporting program. The County will require adjustments to the Financial Assurance, based on the annual FACE when necessary.

# Wildlife Habitat (CCR §3703)

The habitat performance standards for wildlife contained in SMARA provide for the protection of wildlife and wildlife habitat by requiring (a) conservation and avoidance of rare, threatened, and endangered species and their habitat or provision of mitigation for impacts per state and federal wildlife standards (b) establishment of wildlife habitat on reclaimed lands equal in value to habitat that existed prior to mining, and (c) avoidance of wetland impacts or mitigation for impacts at a minimum ratio of one to one. Protection for sensitive plants and animal species are further provided through the authority of the CEQA. The RPA provides for protection and avoidance of threatened and endangered species. The Applicant will reclaim existing areas disturbed by mining that do not contain important wildlife habitat. The RPA includes measures to avoid direct impacts to wildlife species when they could be impacted by reclamation activities. Reclamation will result in wildlife habitat establishment in a condition that is equal or superior to habitat that existed prior to mining. Reclamation will use native vegetation representative of oak woodland, riparian, chaparral and grassland communities similar to naturally occurring conditions in proximity to the RPA area. For a more detailed discussion of these biological communities, refer to Section 2.9 of the RPA.

# Backfilling, Regrading, Slope Stability, and Recontouring (CCR §3704)

Reclaimed lands will comply with the SMARA standards for backfilling, regrading, slope stability, and recontouring. Final overall reclaimed slopes will be stable under static and seismic loading conditions and are suitable for the proposed end use. Final overall slope angles in the WMSA will not exceed a ratio of 2.5 (Horizontal): 1.0 (Vertical). Fill slopes in the EMSA will be reclaimed at a maximum overall slope inclination of 2.6H:1V. The Quarry Pit will be reclaimed to maximum slope angles of 2.5H:1.0V overall. Limited areas of steep high wall will remain in the upper Quarry with interbench slopes up to 70 degrees, which have been determined to be stable in the geotechnical analysis conducted for the RPA. All final reclaimed slopes will have a minimum factor of safety appropriate to the planned end use.

### Re-vegetation (CCR §3705)

The planned end use for the RPA is open space and, consequently, the ultimate goal for revegetation efforts is restoration of self-sustaining native vegetation communities, and visual integration of reclaimed lands with surrounding open space. The RPA accomplishes this objective. The Re-vegetation Plan within the RPA incorporates plant materials capable of self-generation without continued dependence on irrigation, blended soil with added mulch and nutrients, or fertilizer in accordance with SMARA standards. Hydroseeding of the finished slopes with a mixture of native grasses, herbaceous plants, and shrubs will provide surface cover and erosion control for the new slopes. Tree and shrub planting areas will be located on contoured benches and riparian drainages to encourage the long-term development of an oak

savannah or forest on north-facing slopes, native shrub on south-facing slopes, and a suitable riparian canopy in drainages, replicating the pattern of existing natural habitat in areas surrounding the Pit. The Quarry will continue to use test plots, as described in the RPA, to determine the appropriate mix of plan materials to use on the site as reclamation progresses. A complete discussion of re-vegetation activities is contained in the Re-vegetation Plan (Attachment B of the RPA).

# Drainage, Diversion Structures, Waterways, and Erosion Control (CCR §3706)

Reclamation described in the RPA are designed to control surface runoff to protect surrounding land and water resources in accordance with the California Porter-Cologne Water Quality Control Act, the Federal Clean Water Act, and other applicable local, state and federal requirements. These goals are achieved through a series of Best Management Practices (BMPs) pursuant to the Drainage Report included in the RPA, and a Storm Water Pollution Prevention Plan (SWPPP). Drainage and erosion controls are designed to exceed the 20-year storm event. Sediment basins will provide stormwater detention and sediment control over the property. Basins will be maintained according to the site's SWPPP and applicable National Pollution Discharge Elimination System (NPDES) permits.

#### Final Reclamation and Selenium

The Draft EIR found that mining of limestone at the Quarry has resulted in increased selenium concentrations in surface water runoff. The increased selenium concentrations are a result of limestone being exposed to the natural elements during surface mining, which creates a situation whereby selenium can mobilize and leach into surface water that comes into contact with the limestone. This naturally occurring situation results in increased selenium concentrations in stormwater runoff from surface mining areas. Past water quality testing has shown that the concentration of selenium in stormwater runoff in samples taken from the Quarry areas and in Permanente Creek downstream of the Quarry is elevated above adopted Regional Water Quality Control Board (RWQCB) Basin standards. The Basin Standard for Selenium is 5 micrograms per liter ( $\mu$ g/L). Concentrations of selenium in Permanente Creek below the surface mining areas at the Quarry site have been sampled at between 13 to 87  $\mu$ g/L.

The RPA includes design methods intended to reduce selenium concentrations in stormwater runoff following reclamation. This design approach includes placing a permanent vegetative cap over the EMSA overburden area and areas in the WMSA where limestone may be exposed following reclamation. The cap will include at least a one-foot cover consisting of non-limestone material and an overlying vegetative cover, which will prevent the exposure of any limestone that may exist in these areas from contact with stormwater to prevent the mobilization of selenium.

Upon final reclamation, the Pit is proposed to be backfilled with overburden material currently stockpiled in the WMSA. Similar to the EMSA, this backfilled overburden would cover exposed limestone and prevent contact with stormwater entering the pit. In addition to the overburden backfill, the RPA includes the proposed placement of approximately 63,000 tons of organic matter into the upper 25 to 50 feet of the overburden backfill. As discussed in the FEIR, this approach, which has been used in other pit mines that have similar water quality factors, will reduce the concentration of selenium below the Regional Water Quality Board Basin Standards.

#### Interim Reclamation and Selenium

Although the Draft EIR for the RPA concludes that selenium concentrations in stormwater runoff will be reduced below adopted Basin Standards following final reclamation, it also discloses that selenium concentrations in stormwater runoff may temporarily increase during reclamation activities. Reclamation activities include the placement and contouring of overburden piles to create final slopes in the EMSA and the movement of overburden from the WMSA into the Quarry Pit to be used as backfill. These activities could expose limestone contained within the overburden and thus lead to the contribution of additional selenium in stormwater runoff.

The Draft EIR lists enhanced best management practices (BMPs) to be used during reclamation to prevent contact between limestone and stormwater. It is uncertain, however, if these methods will be completely effective in avoiding selenium entering into stormwater runoff and Permanente Creek during reclamation. As an additional mitigation method, the County noted in the Draft EIR the potential for the installation of a treatment plant to capture all stormwater and remove or reduce selenium to accepted water quality levels before discharge into Permanente Creek. The estimated cost identified in the Draft EIR for the selenium treatment plant was \$86 million.

As part of the Final EIR, the County contracted with CH2MHill to evaluate the feasibility and costs to install a selenium treatment plant at the Quarry. CH2MHill determined that, from an engineering perspective, a treatment plant could be installed onsite to treat discharge from the Quarry Pit and WMSA, contingent upon the completion of subsequent studies evaluating water management and other factors needed to specifically design a treatment plan (Exhibit 4 to Attachment A). The estimated costs to construct a treatment plant would be between \$31.8 and \$127 million, with operating costs of \$6.5 million per year. Specific parameters on the cost of the treatment plant would be disclosed as part of further engineering study. Based on the information available in the CH2MHill report, and all other information available at this time, the County cannot conclude that the treatment facility is feasible. Accordingly, the County has determined that further evaluation is required to determine the feasibility of the treatment facility at the EMSA, WMSA, and Quarry pit. Mitigation measure 4.10-2e has been added to the FEIR to require the necessary further evaluation.

### Groundwater and Selenium

Reclamation activities will not result in the contamination of groundwater resources used for drinking water or other beneficial uses. The Permanente Quarry is located within the foothills of the Santa Cruz Mountains, and is underlain by a bedrock groundwater aquifer. Bedrock groundwater aquifers are characterized by the presence of groundwater within the joints, cracks and fissures within the bedrock. This contrasts with alluvium aquifers where groundwater exists as a sponge within coarse sand, soil and loam. The Santa Clara Valley, located east of the RPA, has a large alluvium aquifer that is used for multiple groundwater purposes, namely drinking wells. Due to the lack of high selenium levels in drinking water wells and the known presence of higher levels of selenium in surface water runoff from the Quarry and within Permanente Creek, it appears that surface mining activities are not causing an adverse impact upon groundwater quality. Thus, reclamation activities, which will ultimately provide a permanent vegetative cap over the overburden and limestone exposed areas, would further reduce the potential for

selenium to enter into surface water and further minimize any possibility of groundwater impacts.

# Building, Structure, and Equipment Removal (CCR §3709)

All equipment and structures will be removed from the RPA Area during final reclamation. This includes all rolling stock (loaders, dozers, excavators, haul trucks, storage vans, and water trucks), all buildings (trailers, maintenance buildings, storage sheds), and other types of structures (conveyors, crushers). It also includes all unnecessary roads. All surplus equipment and supplies will be transported off-site. Any "junk" equipment will be discarded as salvage. The removal of the buildings, structures, and equipment are consistent with SMARA requirements.

# Stream Protection, Including Surface and Groundwater (CCR §3710)

SMARA requires that surface and ground water must be protected from siltation and pollutants that may diminish water quality, in compliance with the state Porter-Cologne Water Quality Control Act and the federal Clean Water Act as well as local requirements for siltation control and mitigation. Further standards are established for in-stream mining operations that extract sand and gravel minerals from streams or rivers. Although the Permanente Quarry does not involve any in-stream mining, this standard applies to the Permanente Quarry RPA because the reclamation plan boundary is adjacent to the Permanente Creek. Upon final reclamation, the RPA area would not create an impact to water quality.

As noted above under the Drainage, Diversion Structures, Waterways, and Erosion Control discussion, measures described in the RPA are designed to control surface runoff to protect surrounding land and water resources. These measures include a series of Best Management Practices (BMPs) described in the Drainage Report, which is included in the RPA as Attachment F, and the SWPPP. Drainage and erosion controls are designed to exceed the 20-year storm event. Sediment basins (identified as "ponds" in the SWPPP) provide stormwater detention and sediment control over the property. Basins must be maintained according to the site's SWPPP and applicable NPDES permits.

The Permanente Creek Reclamation Area (PCRA) includes approximately 42 acres of mining-related disturbance. The RPA proposes to restore the PCRA. Restoration will include the removal of overburden fills from the creek channel, channel widening, and the restoration of a more natural creek alignment. These activities would take place in Phase 1 of the RPA.

As indicated earlier in this report, Permanente Creek surface water is currently impaired by concentrations of selenium that exceed the Basin Plan due to surface runoff that contacts limestone and exposed to oxygen. The RPA Area, once reclaimed, would not create an impact to water quality resulting from selenium. The Draft EIR concluded that interim impacts to water quality due to potential spikes in selenium levels could result from active reclamation activities. Mitigation measures were added to address the interim selenium impact (Impact 4.10-2; Mitigation Measures 4.10-2a, 4.10-2b and 4.19-2c) to require additional stormwater quality monitoring and review, and to concurrently commence design of a selenium treatment facility to address discharge to Permanente Creek. The selenium mitigation measures will act to ensure that feasibility studies for selenium treatment continue during reclamation, and be installed if later determined feasible. However, given the uncertainty regarding future treatment and ability

to reduce selenium concentration in runoff during reclamation, this impact remains significant and unavoidable.

#### Topsoil Salvage, Maintenance, and Redistribution (CCR §3711)

The available topsoil will be harvested and moved directly to an area of active re-vegetation whenever possible. If the harvested soils must be stored for some time prior to use in re-vegetation, those soils will be stockpiled and clearly labeled in the field. Stockpiles of topsoil or other growth medium intended for use in re-vegetation efforts will be protected from erosion and weed establishment through the use of hydroseeding with a native erosion control mix and tackifiers, mulches, erosion control blankets, wattles, silt fences, or other soil protection measures.

# Tailing and Mine Waste Management (CCR §3712)

Overburden management will entail permanently stockpiling the overburden in the EMSA area, where it will be capped with soil used for re-vegetation. Additional stockpiling from continued mining within the Quarry Pit will take place within the north end of the existing pit. The Quarry Pit will then be filled using material currently in the WMSA. The fill material will be blended with organic material to provide a cap approximately 50-feet deep that will cover the fill material. The cap will be re-vegetated as described in the RPA.

Mine waste or overburden that remains on the site must be reclaimed consistent with State Water Resources Control Board standards to ensure the overburden or waste material do not pose a threat to water quality. Mine waste disposal in an excavated quarry is consistent with Title 27, which allows containment using suitable topographic and nature features and natural geologic materials.

# Closure of Surface Openings (CCR §3713)

Prior to closure of a mine, an operator must gate or otherwise protect from public entry all portals, shafts, tunnels, and other surface openings. This would include tunnels on the Permanente Quarry site where conveyors move harvested minerals. In addition, all drill holes, water wells, and monitoring wells must be abandoned, sealed, and reclaimed.

Exploratory drill holes were dug in an area south of the Permanente Quarry Pit. In addition to the holes, the mine operator created temporary access roads to reach each of the drill hole locations. Construction of a pad was also required at each location. In addition to the drill holes, which must be closed, the operator disturbed more than one-acre of land, which requires reclamation. Both reclamation of the drill holes themselves and the land disturbed during drilling operations, identified as the "Exploration Areas," are included in the RPA and will be reclaimed in accordance with the RPA.

# 4. Significant and Unavoidable Impacts of the RPA

The EIR identifies certain significant environmental impacts that cannot be fully mitigated. In some cases, no feasible mitigation measures are available to reduce the significance of impacts; in other cases, mitigation measures may be available, but do not reduce an impact to a level that is less-than-significant. In each such case, the impacts are considered to be significant and unavoidable. The EIR identifies seven (7) significant unavoidable impacts associated with the

RPA and one significant cumulative impact. Each significant and unavoidable impact is summarized below:

# Aesthetics, Visual Quality, Light and Glare

- 1. Impact 4.1-1—scenic vista impacts: The RPA will impact the visual appearance of the RPA area to visitors of the Anza Knoll scenic area because visitors would face the RPA area and the large size of the area in relation to the scenic vista impacts the visual aesthetics from the Anza Knoll. It is impossible to screen the RPA area and the impacts would be significant and unavoidable, and there are no feasible mitigation measures or RPA alternatives to reduce the impact.
- 2. Impact 4.2-3—views from scenic highways: For motorists on I-280, the recontoured hillsides during construction would result in a moderate visual contrast to the RPA because the line of sight would be attracted to the RPA area. Given the scale of the RPA, the impact is significant and unavoidable, and there are no feasible mitigation measures or RPA alternatives to reduce the impact.
- 3. Impact 4.1-5—degradation of existing visual character: Viewpoints from the Hammond-Snyder Loop trail, adjacent to Cristo Rey Drive, in the Rancho San Antonio Preserve/Park is one of the most visually sensitive locations within the Park. The increased extent of disturbed areas under the RPA, and the creation of a new distinctly unnatural landform would be particularly noticeable immediately following the completion of construction, but before the vegetation has time to establish and mature, a period of up to 10 years. Other viewsheds within the Park would also be impacted by RPA construction. The overall visual change to hikers on the PG&E trail would be moderate to high. This would result in a significant impact. Given the size of the RPA, no feasible mitigation measures have been identified to reduce the significance of the impact.

# **Biological Resources**

4. Impact 4.4-5—impacts from selenium burdened runoff into Permanente Creek: During reclamation activities, as described further under Impact 4.10-2 (Hydrology and Water Quality), runoff containing selenium would have a significant impact upon aquatic habitat and on aquatic organisms in the Creek, such as, juvenile fish and the larval offspring of adult fish. This impact is significant and unavoidable.

#### Cultural and Historic Resources

5. Impact 4.5-1—loss of known historic resources: The RPA is located within the boundaries of a potential Kaiser Permanente Quarry Mining District. Because the potential District is eligible for listing in the California Register, it is considered an historical resource pursuant to CEQA Section 15064.5. The RPA proposes to demolish the following contributing features of the potential District; the existing Permanente Quarry Conveyor System and related tunnel, powerhouse, and structures including the remains of the early 1940s crusher. The loss of these structures would cause a substantial adverse change to a historic resource because it would demolish in an adverse manner those physical characteristics that convey the District's historical significance and that justify its eligibility for inclusion in the California Register. Mitigation measures 4.5-1a through c would reduce the extent of this impact, but would not mitigate the impact of demolition to a less-than-significant level.

There is no feasible way to move or avoid these features and implement the RPA. This would be significant and unavoidable.

# Hydrology and Water Quality

6. Impact 4.10-2—interim selenium impacts during reclamation activities: The EIR identifies potential environmental impacts relating to RPA activities contributing to concentrations of selenium, Total Dissolved Solids (TDS), and sediment in Permanente Creek (Impact 4.10-2; FEIR pg. 4.10-43—50). Although the time period for when these impacts could occur is limited to an estimated 20 years until final reclamation is complete, and the EIR concludes that final RPA reclamation activities will ultimately result in a decrease in selenium concentrations discharged to Permanente Creek compared with existing conditions, interim reclamation activities during a 20-year period could result in significant impacts related to selenium burdened runoff entering Permanente Creek. The discussion regarding selenium on pg. 7-10 of this Staff Report provides background information on the impact, the proposed mitigation measures, and why the impact remains significant and unavoidable.

# Cumulative Visual Quality

7. Impact 6-1: The RPA would have a significant and unavoidable impact to views from the Anza Knoll and trails within the Rancho San Antonio Preserve/Park, including the PG&E and Hammond-Snyder Loop trails. Construction of the Permanente Creek Flood Protection RPA would occur concurrent with construction of Phase 1 of the RPA, and would result in temporary visual disruption related to grading for the flood basin, and would create views of construction debris, construction staging and material storage areas, soil stockpiles, and construction vehicles and equipment. The RPA would cumulatively contribute to the impacts caused by the Permanente Creek Flood Protection Project, resulting in a significant cumulative impact to visual resources. No mitigation measures or RPA alternatives have been identified to reduce the cumulative impact to a less-than-significant level and, thus, it remains significant and unavoidable.

Under CEQA, when one or more significant environmental impacts are identified which cannot be mitigated to a less than significant level with mitigation measures or RPA alternatives, the Planning Commission must adopt what is called a statement of overriding considerations, which reflects the ultimate balancing of competing public objectives (including environmental, legal, technical, social, and economic factors) that outweigh the impacts associated with the proposed project. There are several benefits, which will accrue to the general public resulting from approval of the RPA, and these include:

- The RPA fulfills a state law mandate and County Ordinance requirement that a surface mine operation receives approval of a reclamation plan.
- The existing 1985 Reclamation Plan is inadequate and does not include sufficient mechanisms to protect the public health, safety, and welfare. The RPA is superior to the 1985 Reclamation Plan because it covers 1,238 acres, as opposed to 330-acres, in accordance with SMARA reclamation plan standards.
- The RPA will stabilize the site, improve long-term water quality in Permanente Creek, and facilitate the restoration of Permanente Creek.

• The RPA would ensure that a sufficient Financial Assurance is posted to adequately cover reclamation of the site if it is abandoned.

# 5. Issues Raised in Public Comments Not Related to the DEIR and Proposed Reclamation Plan Amendment

The Permanente Quarry and the proposed RPA have generated substantial interest from members of the public, including City of Cupertino residents. Thirty-five letters were submitted on the DEIR. The letters included comments on the proposed RPA, its potential environmental impacts, and proposed mitigation measures. The letters also addressed issues that were outside of the scope of the proposed RPA and DEIR, including vested rights, cement plan permitting, and new Quarry pit excavation. These issues are identified and discussed in more detail below.

#### Vested Rights

A vested right is the legal right to use property without the need to obtain new land use permits. A vested right is often referred to as a "grandfathered" or legal nonconforming use. The California Supreme Court has defined a nonconforming use as a use "that existed lawfully before a zoning restriction became effective and that is not in conformity with the ordinance when it continues thereafter" *Hansen Brothers Enterprises, Inc. v. Board of Supervisors* (1996) 12 Cal.4th 533, 541. On February 8, 2011, the County Board of Supervisors, following a public hearing, determined that the mining operations are a legal nonconforming use (i.e., a vested right) in the RPA area. Consequently, the surface mining operations within the RPA do not need a separate County land use approval.<sup>4</sup>

### Cement Plant

The Cement Plant is located near the entrance to the site of the property, east of the Quarry Pit. The Cement Plant operates under a separate Use Permit that was issued consistent with local zoning requirements in May 1939. No surface mining activities take place in the Cement Plant and, thus, it is not subject to the RPA and SMARA. Letters submitted indicated that the Cement Plant should be part of the RPA and, consequently, evaluated in the DEIR.

The County and the Department of Conservation's Office of Mine Reclamation (OMR) have determined that the Cement Plant is not subject to SMARA or the Reclamation Plan requirements. In a letter dated August 23, 2007, from OMR (Attachment C) to the Director of the County Department of Planning and Development, OMR determined that "the cement manufacturing operation is a distinct operation" and provided three reasons for its decision that "the cement manufacturing operation does not meet the definition of 'mined lands'" as defined in SMARA. The reasons stated were:

1. The site is and has been used exclusively for the manufacture of cement on a site where no excavation for mining production purposes has ever occurred.

<sup>&</sup>lt;sup>4</sup> Documents and materials related to this determination, including the Department of Planning and Development's Staff Report to the Board of Supervisors and related evaluations, ordinances, and other state and local documentation, is available on the County's website at www.sccgov.org.

- 2. The cement manufacturing plant was established 36 years after mining operations commenced at the adjacent limestone quarry.
- 3. The cement manufacturing plant has operated under a separate Use Permit that was consistent with local zoning requirements at the time of its issuance in May 1939.

It should be noted that the DEIR for the RPA evaluated environmental impacts from operation of the Cement Plant within the context of a cumulative impacts analysis that evaluates environmental impacts from the RPA in combination with environmental impacts from other nearby projects.

In addition to the County Use Permit, the Cement Plant operates under Title V permits issued by the Bay Area Air Quality Management District (BAAQMD).

# New Quarry Pit

Public comments submitted requested that the County evaluate the environmental impacts from a future quarry pit as part of the Draft IER prepared for the RPA. The RPA does not propose a new quarry pit. Although earlier reclamation plan amendment proposals submitted to the County did identify a new quarry pit, the Applicant withdrew its request for a new quarry pit in a letter dated June 3, 2011 (Attachment B). The proposed RPA does not provide any entitlement or approval to conduct mining operations beyond the areas identified in the RPA. Therefore, because no new quarry pit is proposed in the RPA before the Planning Commission, related environmental impacts associated with operation of a new quarry pit are not evaluated in the DEIR.

Any future mining activities proposed by the Applicant that are outside the areas identified in the proposed RPA will require an amendment to the RPA. In addition, a Use Permit may also be required if the proposed mining activities occur in areas that are not determined to be "vested." Any future application would be subject to CEQA and require the preparation of appropriate CEQA documents. In advance of any surface mining activity, the reclamation plan and financial assurances would have to be amended and approved by the County.

#### Scenic Easement

Public comments have also inquired about the status of the Scenic easement held by the County for the ridgeline above the surface mining areas. Comments received on the DEIR suggest that the environmental effects of returning existing environmental conditions to a state of compliance with the scenic easement be evaluated.

In 1972, Kaiser Cement & Gypsum Corporation (the Quarry owner at that time) recorded an easement that was intended to protect and maintain the ridge commonly known as "Permanente Ridge", which provided a scenic backdrop to the residents in the northern portion of the county and a natural screen to a portion of the cement plant operations. The easement provided that the Quarry owner would not lower the ridgeline below certain elevation points. Among other things, the Quarry owner agreed not to lower the ridgeline below the specified level "for mining, quarrying or other purposes," and to not "mine, quarry or otherwise excavate for minerals or mineral materials in the area shown as the 'northeast slope' . . . ."

Subsequently, the quarry operator excavated the northern high wall of the quarry pit so that its top rim matched the elevation established in the easement.

In 1987, a large landslide occurred in the western portion of the easement area. There was significant study of the situation by a geological consultant (William Cotton and Associates) and the County issued an emergency grading authorization to stabilize the slope. The corrective work resulted in a lowering of the ridgeline by at least 320 feet down to an elevation of 1500', which was below the elevation set forth in the easement. Although the available records mention the need for revising the easement, there is no evidence that this ever occurred. In 2001, another landslide (roughly 150 feet wide by 40 feet deep) occurred near the middle of the easement that caused another portion of the quarry pit rim to fail "inward" (toward the south), causing some of the ground within the scenic easement to drop downward and opening a gap through which an observer could see across the pit. As a result, this portion of the ridgeline fell below the level set forth in the easement.

At the request of Supervisor Liz Kniss, the County Board of Supervisors requested and received quarterly reports from staff August 2001 through approximately April 2006, regarding the status of the scenic easement slide and how it could be addressed. The County and the quarry operator each retained consulting geologists to evaluate possible remedial actions that might restore or mitigate the disruption of the scenic easement profile. Both Cotton-Shires (the County's consultant) and Call & Nichols (the Quarry's consultant) concluded that restoration of the ridgeline would be extremely difficult, and that any effort to restore the elevation of the ground surface where the landslide had occurred within the scenic easement would have serious visual impacts on the north-facing natural slope located north of the quarry pit.

The RPA that has been submitted for County approval includes a provision for filling in a portion of the quarry pit such that the large landslides on the northwestern portion of the pit will be buried and stabilized. However, the proposed fill buttress will not reach the smaller landslide that disturbed the scenic easement in 2001. The RPA does not propose to restore the ridgecrest to the elevation defined in the 1972 Scenic Easement. In a letter dated April 9, 2012, Golder Associates clarified why and provided a conceptual cross-section to illustrate the geometric constraints associated with any attempt to restore the prescribed elevation within the easement by constructing a 30-foot high berm. In addition, Golder's letter explained that:

- 1. The area within the scenic easement where the landslide lowered the elevation of the ground surface is underlain and very weathered by weak greenstone (altered volcanic rock). Building a berm would add a significant load on this weak material and could potentially result in further slope failures.
- 2. The existing ridgecrest (that was lowered by the 2001 landslide) is steep and narrow. If a berm was constructed at that location, it would have to have slopes steeper than 2:1 that would not be stable over the long-term.
- 3. The northern face of such a berm would have to extend at least 150 feet downhill toward the north onto the natural slope that is visible from the valley floor. A dormant landslide has been mapped on that slope and would not provide a suitable foundation for such a berm, and could be destabilized by the load.
- 4. The width of such a berm would necessitate the clearing of a large amount of vegetation from the highly visible north-facing natural slope, which would have a greater visual impact than leaving the ridgecrest and the 2001 landslide undisturbed.

#### NO ACTION TAKEN

The RPA is intended to fulfill the legal requirement that the Quarry has an approved Reclamation Plan consistent with SMARA, which will abate the two Notices of Violations issued by the County in 2006 and 2008 related to deviations from the 1985 Reclamation Plan.

No action regarding the proposed RPA would leave the 1985 Reclamation Plan as the only plan on file for the Permanente Quarry. Therefore, no action taken would (1) leave no provision to reclaim the areas of disturbance outside the boundary of this plan, (2) leave no provision to address historic, mining-related impacts to the Permanente Creek Restoration Area, and (3) leave no provision for reclamation of the Exploration Area south of the Quarry Pit. Additionally, if no action is taken, Permanente Quarry could be removed from the State's AB 3098 list<sup>5</sup>, which may impact the Applicant's financial capacity to reclaim the mine.

Ultimately, in order to address the existing NOVs, a SMARA-compliant reclamation plan would have to be approved, following its evaluation under CEQA, and implemented by the Applicant. It is expected that such a reclamation plan would be substantially similar in scope and level of activity to that proposed as the Project, including reclamation of the EMSA to address the existing overburden material at that location.

Under the "No Action" scenario, the principal difference compared to the Project (RPA) is not whether reclamation <u>would</u> begin, but rather <u>when</u> it would begin.

<sup>&</sup>lt;sup>5</sup> The State Office of Mine Reclamation periodically publishes a list of mines regulated under SMARA that meet state law requirements for surface mines. Generally referred to as the "AB 3098 List," in reference to the 1992 legislation that established it. Mining operations that are <u>not</u> on the AB 3098 List are prohibited from selling sand, gravel, aggregates or other mined materials to state or local agencies.

### LIST OF ATTACHMENTS

# Attachment A: Resolution Certifying Environmental Impact Report

- Exhibit 1 to Resolution: Conditions of Approval
- Exhibit 2 to Resolution: Table of Impacts
- Exhibit 3 to Resolution: Mitigation Monitoring and Reporting Program
- Exhibit 4 to Resolution: Feasibility Assessment (CH2MHill Report, April 2012)
- Attachment B: Correspondence, Kari Saragusa, President, Lehigh Southwest Cement Group, June 3, 2011
- Attachment C: Correspondence, Department of Conservation, Douglas Craig, Assistant Director, August 23, 2007
- Attachment D: Reclamation Plan Amendment for Permanente Quarry (December 13, 2011), distributed to the Planning Commission on May 18, 2012. RPA in its entirety is available on the County's website: <a href="www.sccplanning.org">www.sccplanning.org</a> (see links to Permanente Quarry/ Lehigh-Hanson).

# **ATTACHMENT A**

# **Resolution Certifying Environmental Impact Report**

Attachment A will be completed and submitted to the Planning Commission next week.

# ATTACHMENT B

HEIDELBERGCEMENT Group

Lehigh Southwest Cement Company

12667 Alcosta Blvd., Suite #400 San Ramon, California 94583 Phone (925) 244-6501 Fax (925) 244-6565 www.heidelbergcement.com

June 3, 2011

Jody Hall Esser, Director Department of Planning and Development County of Santa Clara County Government Center, East Wing 70 West Hedding Street, 7th Floor San Jose, CA 95110

Dear Jody:

As we have recently discussed, Lehigh has been, and remains committed to expeditiously processing reclamation plan amendments for the Permanent Quarry. Lehigh has met all deadlines required of it as directed by the County. It has become clear to us, however, that the time required for environmental review and public comment on the reclamation plan amendments may be greater than anticipated. This issue, of course, is not under the control of Lehigh and not entirely under the control of the County. It is a dynamic process involving substantial give and take with the public if it is to be done correctly.

Lehigh intends to significantly reduce the scope of the current reclamation plan amendment in order to assist the County in the streamlining of the process. In essence, areas of the Permanente Mine not yet under active use would be removed from the reclamation plan amendment at this point. While this has been a very difficult decision for Lehigh and is not the most efficient way to proceed from an overall perspective, Lehigh is willing to take this step in good faith and in continuing cooperation with the County.

We would anticipate having final design information on this streamlined approach in the next 4 to 8 weeks. In general terms, however, we are proposing the same backfill approach to the north pit using material from the existing WMSA, rather than overburden material that was intended to be generated by the new, contemplated extraction area. As we understand it, all of the analysis that has been done to date on the reclamation plan amendments would be applicable to the amended approach, with the exception that all issues and impacts for the new extraction area would be removed.

As you know, the Permanente Quarry is, and will remain, one of the most important suppliers of construction materials in the County and the region. The company is also committed to environmental compliance, public outreach and participation. It is in this spirit that Lehigh is taking this step.

We are certain that the streamlined approach will be well-received by all interested parties. We know that you, like Lehigh, are committed to the efficient processing of the reclamation plan amendment for this site in a way that fully includes the public and complies will all applicable legal requirements, including full and adequate environmental review. I thank you and your staff for your ongoing cooperation, courtesy and hard work.

Very truly yours,

Kari D. Saragusa President Region West



# DEPARTMENT OF CONSERVATION

#### OFFICE OF MINE RECLAMATION

801 K STREET • MS 09-06 • SACRAMENTO, CALIFORNIA 95814

PHONE 916 / 323-9198 • FAX 916 / 445-6066 • TDD 916 / 324-2555 • WEB SITE conservation.ca.gov

August 23, 2007

RECEIVED AUG 2 7 2007

Mr. Val Alexeef, Director Department of Planning and Development County of Santa Clara 70 West Hedding Street East Wing, 7th Floor San Jose, CA 05110

Dear Mr. Alexeef:

HANSON PERMANENTE QUARRY AND CEMENT PLANT, CALIFORNIA MINE ID #91-43-0004

In a letter dated September 22, 2006, the Office of Mine Reclamation (OMR) notified Santa Clara County (County) of certain violations of the Surface Mining and Reclamation Act of 1975 (SMARA) at the Hanson Permanente Quarry and Cement Plant. Among other things, the letter advised the County that the cement manufacturing plant located adjacent to this surface mining operation met the definition of "mined lands" as that term is defined in Public Resources Code (PRC) Section 2729. Accordingly, OMR directed the County to include the area occupied by the cement plant in a required amendment to the reclamation plan for this surface mining operation.

Based on a review of information provided by the operator of this site, Hanson Permanente Cement, Inc. (Hanson), it appears that the cement manufacturing operation is a distinct operation in several important respects. First, the site is and has been used exclusively for the manufacture of cement on a site where no excavation for mining production purposes has ever occurred. Second, the cement manufacturing plant was established 36 years after mining operations commenced at the adjacent limestone quarry. Third, the cement manufacturing plant has operated under a separate use permit that was consistent with local zoning requirements at the time of its issuance in May 1939.

In a recent conversation with the Department, County staff indicated concurrence with the history and intent of County actions as described in a July 2, 2007, letter from Hanson to the Department (copy enclosed). Based on this information, and recognizing the County's authority with regard to local land use decision-making, the Department now believes that the cement manufacturing operation does not meet the definition of

Mr. Val Alexeeff August 23, 2007 Page 2

"mined lands" as that term is defined in PRC Section 2729. As a result, the County is not required to include the cement manufacturing operation in the reclamation plan amendment for this site. All other requirements contained in the Department's September 22, 2006 SMARA enforcement 15-day notice, as well as all other comments provided in the Department's May 18, 2007, and June 7, 2007, letters to the County, remain as stated.

If you have any questions, please contact me at (916) 323-9198.

Sincerely,

Douglas W. Craig

Assistant Director

Enclosure

cc: Stephen M. Testa, Executive Officer, State Mining and Geology Board Mike Gantenbein, Designated Agent, Hanson Permanente Cement, Inc.

# ATTACHMENT D

# Reclamation Plan Amendment for Permanente Quarry (December 13, 2011)

The Attachment D in its entirety is available on the County's website: www.sccplanning.org (see links to Permanente Quarry / Lehigh-Hanson).