CHAPTER 1

Introduction

1.1 Purpose of This Document

This Environmental Impact Report (EIR) is an informational document intended to disclose to the public and decision-makers the potential environmental impacts of the Lehigh Permanente Quarry Reclamation Plan Amendment (RPA, or the Project) proposed by Lehigh Southwest Cement Company (Lehigh, or Applicant) for the Permanente Quarry (Mine ID No. 91-43-0004). This document assesses the direct, indirect, and cumulative environmental impacts that could occur as a result of the slope stability, revegetation, drainage and erosion control, structure dismantling and removal, monitoring, and other reclamation activities proposed in the Reclamation Plan Amendment submitted by Lehigh to Santa Clara County (County) on December 1, 2011 (EnviroMINE, Inc., 2011).

In 1985, the County approved the original reclamation plan (the 1985 Reclamation Plan) for the Permanente Quarry pursuant to the Surface Mining and Reclamation Act of 1975 and its implementing regulations (SMARA). The terms of that plan anticipated that an amendment would be filed in approximately 25 years' time. The first in the series of reclamation plan amendment proposals was submitted for the County's consideration in 2007, the second in 2009, the third in 2010, and the fourth in July 2011. The July 2011 proposal was updated in December 2011. The December 2011 reclamation plan amendment proposal for the Permanente Quarry is the Project that is the subject of this EIR. The December 2011 application supersedes all prior applications for amendment of the 1985 Reclamation Plan. The analysis in this EIR is based on information submitted to the County as part of the Applicant's request for reclamation plan amendment approval, as well as information contained in materials submitted with the Applicant's prior reclamation-related applications for the Permanente Quarry and from independent studies and research conducted by the County and EIR preparers.

This EIR examines the potential impacts of the Project and alternatives to the Project. All of the resource areas in the California Environmental Quality Act (CEQA)² Guidelines Appendix G checklist as well as the County of Santa Clara's checklist are analyzed.

The Permanente Quarry 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).

CEQA is set forth in Public Resources Code Section 21000 and following; its implementing regulations (the "CEQA Guidelines") are found in Title 14 of the California Code of Regulations Section 15000 and following.

1.2 Project Overview

The Permanente Quarry is a limestone and aggregate mining operation located in the Santa Clara County (County) foothills west of the City of Cupertino. The Applicant proposes to amend the existing, approved 1985 Reclamation Plan for a 20-year period dating from Project approval. The Project Area includes an approximately 1,238.7-acre area in an unincorporated area of the County (the Project Area) within the Applicant's overall 3,510-acre ownership. The 1,238.7-acre area consists of the existing Quarry pit, two overburden disposal areas referred to as the West Materials Storage Area (WMSA) and the East Materials Storage Area (EMSA), the crusher/Quarry office support area, surge pile, Rock Plant, approximately 284-acres located south of Permanente Creek that have been disturbed by prior exploratory activities (Exploration Area), approximately 25.9-acres adjacent to Permanente Creek (Permanente Creek Restoration Area or PCRA), and open space areas that serve to physically separate operations at the site from other uses in the surrounding environs.

The Project is designed to make the reclaimed lands suitable for future open space uses. Toward this end, the RPA includes site-specific activities to satisfy the reclamation requirements of SMARA and SMARA's implementing regulations,³ as well as the County's surface mining ordinance (County Code §4.10.370) and Surface Mining and Land Reclamation Standards (County of Santa Clara, 2000).

The Project also is intended to ensure that Permanente Quarry is in compliance with state and local law. The Applicant has a vested right to conduct surface mining (resource extraction) activities and no permit to mine is required from the County. Although the right to mine is vested, Lehigh is subject to SMARA's and the County's requirement that it have a lead agency-approved reclamation plan for its surface mining operations (Pub. Res. Code §2770; County Code §4.10.370(C)). As demonstrated by Notices of Violation issued by the County in 2006 and 2008 for mining outside of the approved 1985 Reclamation Plan boundary, the Applicant currently is out of compliance with SMARA and the County's requirements (see County of Santa Clara, 2006, 2008, and 2009). The Project, if approved, would abate these violations.

1.3 Use of this Document by Agencies

CEQA Guidelines Section 15124(d) requires that an EIR contain a statement briefly describing the intended uses of the EIR. The CEQA Guidelines indicate that the EIR should identify the ways in which the Lead Agency and any responsible agencies would use this document in their approval or permitting processes. The following discussion summarizes the roles of the agencies and the intended uses of the EIR.

The County has primary discretionary authority over the Project as the Lead Agency responsible under SMARA for reviewing the RPA and the Lead Agency responsible under CEQA for

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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.

reviewing the Project's potential environmental effects. The County will use this EIR in conjunction with other information developed in the administrative record when considering whether to approve the Project.

The California Department of Conservation's State Mining and Geology Board and Office of Mine Reclamation (collectively, DOC) administer SMARA at the state level by promulgating regulations, providing technical assistance for lead agencies, maintaining a statewide database of mine-related information, and being responsible for compliance-related matters (DOC, 2011c). DOC has held numerous hearings where the Permanente Quarry and its compliance status were discussed (see, e.g., DOC, 2006, 2007b, 2011a, 2011b).

Other agencies may rely on information in this EIR to inform their decisions regarding the issuance of specific permits or authorizations related to Project implementation. **Table 1-1** identifies the permits, approvals, and agency consultations expected to be required for approval of the Project.

TABLE 1-1
EXPECTED PERMITS, APPROVALS AND CONSULTATIONS

Agency	Permit/Approval Required
Agency	T of mic Approval Required
Federal	
U.S. Army Corps of Engineers (USACE)	Clean Water Act, Section 404 Nationwide Permit if jurisdictional waters of the U.S. could be affected by reclamation activities proposed by the Project. Endangered Species Act compliance (ESA Section 7 consultation) would be conducted as part of the Clean Water Act Section 404 process. National Historic Preservation Act compliance (NHPA Section 106 consultation) also would be conducted as part of the Clean Water Act Section 404 process.
State	
State Water Resources Control Board (SWRCB)	Construction Stormwater General Permit; Notice of Intent to Comply with Section 402 of the Clean Water Act, SWPPP and SPCC Plan; Industrial Stormwater General Permit; Approval of O&M SWPPP and SPCC Plan. Section 401 Certification if USACE determines jurisdictional waters of the U.S. would require a Clean Water Act Section 404 permit.
San Francisco Bay Regional Water Quality Control Board (RWQCB)	The RWQCB would implement the Section 401 Certification on the SWRCB's behalf.
California Department of Fish and Game (CDFG)	Streambed Alteration Agreement.
Local	
Santa Clara County, Department of Conservation & Development	Reclamation Plan Amendment, Demolition Permit
Santa Clara County Department of Environmental Health, Hazardous Materials Division, CUPA	Hazardous Materials Business Plan and Permit for handling hazardous materials above threshold quantities (includes hazardous waste management).

1.4 Public Review and Comment

1.4.1 Scoping

Four Notices of Preparation (NOPs) have been published and distributed to advise interested local, regional, and state agencies, as well as members of the public, that an EIR would be prepared to analyze impacts that could be caused by Lehigh's proposed reclamation of the Quarry. In total, more than 200 people have provided more than 350 comment letters on the four separate proposals to reclaim the Quarry.

On June 29, 2007, the County issued an NOP related to the first proposed amendment to the 1985 Reclamation Plan (the "2007 Proposed RPA") (County of Santa Clara, 2007). Issuance of this NOP initiated a 30-day period during which the public and agencies could provide input on the scope of issues and alternatives to be analyzed in the EIR. The County hosted a community scoping meeting to discuss the proposal on July 26, 2007. If it had been approved, the 2007 Proposed RPA would have modified the 330-acre area covered by the 1985 Reclamation Plan to include 917 acres and would have extended the termination date of the plan by 25 years. The 2007 Proposed RPA would have addressed five main areas: the Quarry pit, WMSA, EMSA, an approximately 30-acre new mining area in the southeast portion of the site, and buffer areas. However, the 2007 Proposed RPA was not formally considered for approval. Instead, the County determined that the application was not complete, and additional geotechnical studies were required before the application could be considered complete.

On April 28, 2010, the County issued an NOP related to the second proposed amendment to the 1985 Reclamation Plan (the "EMSA RPA"). The EMSA RPA, if approved, would have abated the Notice of Violation (NOV) issued to the Permanente Quarry operator by the County on June 20, 2008, 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 Project.

On March 10, 2011, the County issued an NOP related to the third proposed amendment to the 1985 Reclamation Plan (the "Comprehensive RPA") (County of Santa Clara, 2010, 2011a). The Comprehensive RPA, if approved, would have abated the October 2006 combined NOV / Order to Comply as well as included in the reclamation plan boundary a new, approximately 207-acre surface mining area south of Permanente Creek and an approximately 52-acre overburden disposal area located east of the Quarry pit and just west of and overlapping the EMSA. Neither of these components has been carried forward into the current Project.

On August 18, 2011, the County issued an NOP for the July 2011 application, which was updated in December 2011 to include subsequent developments and refinements and which is the Project now under consideration (County of Santa Clara, 2011b). The NOP made clear that the application for the Project supersedes prior applications. The comment period for the Project NOP ended on September 26, 2011.

A Scoping Report has been prepared for the Project (see Appendix A). It includes copies of each of the NOPs described above, as well as copies of all of the written comments and summaries of all of the oral comments that the County received in response to the respective requests for input. As described in more detail in the Scoping Report, the overarching themes of the comments as they relate to elements carried forward in the proposed Project that fall within the purview of the CEQA process relate to the following main topics:

- The Project Description, including the Project's relationship with the 2007 Proposed RPA, EMSA RPA, Comprehensive RPA; specifics of the WMSA, EMSA, and Quarry pit; the reclamation timeframe; and the volume of material to be used to backfill the Quarry pit. These comments are addressed in this Introduction, as well as in Chapter 2, *Project Description*.
- Alternatives, including CEQA's requirement that a No Project Alterative be evaluated. The No Project Alternative is described in Chapter 3, *Description of Alternatives*, and related impacts are analyzed in Chapter 4, *Environmental Analysis*.
- Aesthetics and Visual Resources, including impacts to ridgeline views, the scenic easement, the visibility of Permanente Quarry terraces and benches, protections provided by the County Zoning Code and Design Review overlay, nighttime lighting effects, and a preference for vegetative buffer areas. These and related comments are addressed in Section 4.1, Aesthetics, Visual Quality, and Light and Glare.
- Air Quality, including odor and health-related emissions of diesel, nitrous oxide, sulfur dioxide, dust, arsenic, mercury, and asbestos; a need for an updated health risk assessment; and National Emission Standards for Hazardous Air Pollutants (NESHAP). These and related concerns are addressed in Section 4.3, *Air Quality*.
- Biological Resources, including Permanente Creek and other aquatic and riparian habitat; wetlands; impacts to fish, amphibians, avians, plants, and other species; oak woodland; and the test plots for revegetation efforts. These and related comments are addressed in Section 4.4, *Biological Resources*.
- Cultural Resources, including cultural and historic resources; human remains; and coordination with local tribal governments regarding traditional, cultural, and religious heritage values. These and related comments are addressed in Section 4.5, *Cultural and Paleontological Resources*.
- Geology and Soils, including slope stability, seismicity, and prior grading authorizations. These and related comments are addressed in Section 4.7, *Geology, Soils and Seismicity*.
- Greenhouse Gas Emissions, including the use of low-carbon fuels. See Section 4.8, *Greenhouse Gas Emissions*.
- Hazards and Hazardous Materials, including asbestos, selenium, mercury, petroleum coke, radioactive material, toxic materials, and risks associated with rocks falling from trucks. These and related comments are addressed in Section 4.9, *Hazards and Hazardous Materials*.
- Hydrology and Water Quality, including toxic releases into County watersheds; runoff
 containing selenium, arsenic, and/or mercury; the potential for surface and groundwater
 contamination; stormwater and sediment control; streamflows; seeps and springs; beneficial

uses of area waters; data concerns; and the status of existing water quality violations. These and related comments are addressed in Section 4.10, *Hydrology and Water Quality*.

- Land Use and Planning, including future use of the site and Project consistency with County land use guidelines and standards. These and related comments are addressed in Section 4.11, *Land Use and Planning*.
- Noise and Vibration, including the effects of blasting, trucks, and earthmoving on recreational users of trails and open space lands in the vicinity of the Project as well as along surface streets. These and related comments are addressed in Section 4.13, *Noise*.
- Recreation, including area trails and Midpeninsula Regional Open Space District lands. See Section 4.16, *Recreation*.
- Transportation and Traffic, including necessary permits; the State Highway System; trip generation, distribution, assignment, Average Daily Traffic, morning and evening peak hour volumes, and cumulative traffic volumes; and damage caused to roads located on adjacent property. These and related comments are addressed in Section 4.17, *Transportation/Traffic*.
- Utilities and Service Systems, including waste disposal, recycling, the storm drainage system, and water demand. See Chapter 2, *Project Description*, and Section 4.18, *Utilities and Service Systems*.
- Cumulative Effects, including with respect to the cement plant and the Permanente Creek Flood Protection Project. Cumulative Effects are analyzed in Section 6, *Cumulative Effects*.

1.4.2 Public Comment on the Draft EIR

This Draft EIR is being circulated to local and state agencies and to interested individuals who may wish to review and comment on the report. Written comments may be submitted to the County during the 60-day public review period. Written comments on this Draft EIR will be accepted via regular mail, fax, and e-mail, as well as at a public meeting that will be noticed under separate cover. All comments received will be addressed in a Response to Comments document, which, together with this Draft EIR, will constitute the Final EIR for the Project.

This Draft EIR identifies the environmental impacts of the Project, indicates how those impacts would be mitigated or avoided, and identifies and evaluates alternatives to the Project. This document is intended to provide the County with the information required to exercise its discretionary authority with respect to the Project, which would be considered at a separately-noticed public meeting of the County Planning Commission.

CEQA states that the lead agency (here, the County) shall not approve a project as proposed unless the significant environmental effects of that project have been reduced to a less-than-significant level, essentially "eliminating, avoiding, or substantially lessening" its expected impacts. If the lead agency approves the project despite residual significant adverse impacts that cannot be mitigated to less-than-significant levels despite the implementation of all feasible mitigation measures and alternatives, the agency must state in writing the reasons for its action.

Findings and a Statement of Overriding Considerations must be included in the record of project approval and mentioned in the Notice of Determination (NOD).

1.5 Organization of this EIR

This EIR is organized as follows:

Executive Summary. Provides a summary description of the Project, the alternatives, and the Environmentally Superior Alternative. Also provides a tabulation of the impacts and mitigation measures for the proposed Project and alternatives.

Chapter 1, *Introduction.* Provides a brief description the Project, outlines the public agency use of the EIR, describes the scoping process, and describes how a Final EIR will be prepared.

Chapter 2, *Project Description*. Describes the Purpose and Need for the Project, identifies the Project Objectives, and provides a detailed description of the Project.

Chapter 3, *Description of Alternatives.* Provides a description of the alternatives screening and evaluation process, a description of alternatives considered but eliminated from further analysis and the rationale for doing so, and a description of the alternatives analyzed in Chapters 4 and 5.

Chapter 4, Environmental Analysis. Analyzes each environmental resource area, including: a) the setting, which describes environmental conditions and regulatory information; b) the baseline against which potential environmental effects are evaluated; c) standards for determining the level of potential environmental impacts for each issue; d) potential impacts, which indicate the environmental effects that are anticipated from the Project; and e) mitigation measures for impacts that are identified as potentially significant.

Chapter 5, *Comparison of Alternatives.* Provides a discussion of the relative advantages and disadvantages of the Project and the alternatives that were evaluated, and identifies the CEQA Environmentally Superior Alternative.

Chapter 6, *Cumulative Impacts*. Identifies the projects considered in the cumulative analysis, and describes the cumulative impacts of the Project when considered together with other past, present, and reasonably foreseeable future projects.

Chapter 7, *Other CEQA Considerations*. Provides a discussion of growth-inducing impacts, significant environmental effects that could not be avoided, and irreversible environmental changes.

Chapter 8, Report Preparers. Identifies the authors and reviewers of this Draft EIR.

Chapter 9, *Glossary and Acronyms.* Presents definitions of terms and a list of acronyms used throughout the EIR.

Appendices. Provide technical or procedural materials that are pertinent to the analysis contained in the EIR. See the Table of Contents for the full list of appendices.

References – Introduction

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