

State of California Mine ID No. 91-19-0035

# AZUSA ROCK, Inc.

## Revised Conditional Use Permit & Reclamation Plan

**Prepared for:**



**3200 San Fernando Road  
Los Angeles, CA 90065  
(323) 258-2777**

**Prepared by:**

**RGP Planning & Development Services  
8921 Research Drive  
Irvine, CA 92618  
(949) 450-0171**

**Submitted to:**

**City of Azusa  
Department of Economic and Community Development-Planning Division  
213 E. Foothill Boulevard  
Azusa, CA 91702  
(626) 812-5200**

**March 2009**

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**& Reclamation Plan**

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- Appendix 5** City of Azusa City Council and Planning Commission Historic Site Operation Resolutions
- Appendix 6** Open File Report No. 88-23: Mineral Land Classification of the Fish Canyon Quarry
- Appendix 7** *Jurisdictional Delineation of Fish Creek, Within the Azusa Mine & Reclamation Area, City of Azusa, Los Angeles County*; September 2008; ECORP Consulting, Inc.
- Appendix 8** South Coast Air Quality Management District Permits to Operate
- Appendix 9** CDFG, Streambed Alteration Agreement; Fish Creek Restoration-Reach 1
- Appendix 10** Wildlife Habitat Council; Wildlife At Work / Fish Creek Restoration Re-Certification; October 8, 2008
- Appendix 11** *Revegetation Guidelines*, Martha Blane Associates
- Appendix 12** *Land Use Impact Assessment for Azusa Rock Quarry*, March 2009; RGP Planning & Development Services
- Appendix 13** *Visual Impact Analysis for Azusa Rock Quarry*, September 2008; RGP Planning & Development Services
- Appendix 14** *Noise Impact Analysis-Azusa Rock Revised CUP Application*, August 29 2008; Giroux & Associates
- Appendix 15** *Biological Resource Assessment*, September 2008; ECORP Consulting, Inc. & *Supplemental Data Regarding Coastal California Gnatcatcher & Santa Ana Sucker*, February 9, 2009; ECORP Consulting, Inc.
- Appendix 16** *Water Resources Impact Analysis*, October 16, 2008; ENV America

- Appendix 17** *Air Quality Impact Analysis*, November 11, 2008; West Coast Environmental & Engineering & *Addendum to the Air Quality and Climate Change Impact Assessment*, February 20, 2009; West Coast Environmental & Engineering
- Appendix 18** *Geology and Soils Impact Analysis*, October 16, 2008; ENV America
- Appendix 19** Revised CUP & Reclamation Plan Mitigation Monitoring & Reporting Program
- Appendix 20** Financial Assurance Estimate
- Appendix 21** *Cultural Resources Inventory of Proposed 80-acre Mining Area in Azusa, Los Angeles County, California*, February 2009; ECORP Consulting, Inc
- Appendix 22** Full-Size Plan Set (11 Sheets)

**Drawing Title**

1. Revised Conditional Use Permit & Reclamation Plan – Azusa Rock Title Sheet
2. Existing Conditions
3. West Side Mining & Reclamation Phasing
4. West Side Mining & Reclamation Phasing
5. West Side Mining & Reclamation Phasing
6. West Side Mining & Reclamation Phasing
7. West Side Mining & Reclamation Phasing
8. East Side Reclamation Phasing
9. East Side Final Reclamation
10. Final Reclamation Phasing
11. Revegetation Guidelines





## LIST OF ABBREVIATIONS AND ACRONYMS

--- A ---	
<b>Ac.</b>	..... Acre(s)
--- B ---	
<b>bgs</b>	..... below ground surface
--- C ---	
<b>CBC</b>	..... California Building Code, 2007, Title 24 Volume 2
<b>CCR</b>	..... California Code of Regulations (Title 14)
<b>CDFG</b>	..... California Department of Fish & Game
<b>CEQA</b>	..... California Environmental Quality Act
<b>CGS</b>	..... California Geological Survey
<b>City</b>	..... City of Azusa, California
<b>CUP</b>	..... Conditional Use Permit
--- D ---	
<b>DA</b>	..... Development Agreement
<b>DHS</b>	..... California Department of Health Services
<b>DOC</b>	..... California Department of Conservation
--- F ---	
<b>FEMA</b>	..... Federal Emergency Management Agency
<b>FIRM</b>	..... Flood Insurance Rating Map
--- G ---	
<b>gw</b>	..... Groundwater
--- H ---	
<b>h:v</b>	..... horizontal:vertical
--- M ---	
<b>MRZ</b>	..... Mineral Resource Zone
<b>MSHA</b>	..... Mine Safety and Health Administration
<b>MSL</b>	..... Mean Sea Level
--- N ---	
<b>N/A</b>	..... Not Applicable
<b>NPDES</b>	..... National Pollution Discharge Elimination System
<b>NTS</b>	..... Not to Scale

## --- O ---

<b>OHSA</b>	.....	Occupational Safety and Health Administration
<b>OMR</b>	.....	Office of Mine Reclamation (State)

## --- P ---

<b>P-C</b>	.....	Production-Consumption
<b>PCC</b>	.....	Portland Cement Concrete
<b>PDF</b>	.....	Project Design Features
<b>PRC</b>	.....	Public Resources Code (State)

## --- R ---

<b>RWQCB</b>	.....	Regional Water Quality Control Board
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## --- S ---

<b>SCAQMD</b>	.....	South Coast Air Quality Management District
<b>SIC</b>	.....	Standard Industrial Classification
<b>SFHA</b>	.....	Special Flood Hazard Area
<b>SGBWQA</b>	.....	San Gabriel Basin Water Quality Authority
<b>SMARA</b>	.....	Surface Mining & Reclamation Act of 1975
<b>SMGB</b>	.....	State Mining and Geology Board
<b>SWPPP</b>	.....	Storm Water Pollution Prevention Plan

## --- T ---

<b>tpy</b>	.....	tons-per-year
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## --- U ---

<b>USACOE</b>	.....	United States Army Corps of Engineers
<b>USEPA</b>	.....	United States Environmental Protection Agency
<b>USGS</b>	.....	United States Geological Survey

## --- V ---

<b>VMC</b>	.....	Vulcan Materials Company – Western Division
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## EXECUTIVE SUMMARY

Vulcan Materials Company – Western Division (VMC) proposes revisions to the historic Azusa Rock reclamation plan for its 270-acre<sup>(+/-)</sup> surface mining property in the City of Azusa (City). The property is situated at the northerly terminus of Encanto Parkway and Fish Canyon Road, having a US Postal Service address of 3901 Fish Canyon Road, Duarte, California 91010. Currently, VMC’s existing reclamation plan identifies 190 acres within the total 270 acres of its ownership to be mined and reclaimed. To date, however, actual site disturbance from operations on the property is less than the authorized 190 acres. The proposed Revised Conditional Use Permit (CUP) and Reclamation Plan, upon approval by the City Council and acknowledgement by Office of Mine and Reclamation (OMR), will allow VMC to:

- Modify its operations to now extract mineral resources from the westerly 80 acres of the 270-acre property,
- Preclude further mining on the easterly areas of the site, and,
- Alter the reclamation and revegetation methodology by initiating an aesthetically and environmentally superior design across the entire property, with specific and immediate emphasis on the existing east side benches.

***Should the City of Azusa City Council deny approval of this Revised Conditional Use Permit & Reclamation Plan, Vulcan Materials Company / Azusa Rock, Inc. will continue implementation of the existing permitted mining and reclamation program. Denial of this application will reassert the existing entitlement (1988 Reclamation Plan) and will not result in ending Vulcan Materials Company’s existing mining of the project area. It is noted that this request does not propose more mining tons or mining for a longer mining period. This request is limited in scope to a change in the plan to create a less visible configuration and to provide an improved reclamation design for the impacted slopes. The reclamation of the east slopes would begin immediately upon plan approval.***

The purpose of this application is to modify the existing authorized reclamation plan in favor of an environmentally superior plan. This authorization is wedded to a commitment from VMC to shift mining to less visible portions of the 270-acre site. The modified plan would result in recontouring and revegetation of the existing step-benching reclamation plan in favor of a micro-benching design<sup>1</sup> that results in reclaimed slopes with contours and vertical articulation similar in appearance and function to the natural slopes and vegetation of the immediate setting.

The end-result of the micro-benching design is a reclaimed landform that is more visually harmonious with surrounding, un-mined slopes than does the existing step-benches. The essence of the shift in mining would be to relinquish authority to mine the easterly slopes in favor of a

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<sup>1</sup> The two distinctly different benching methodologies, Step-Benching and Micro-Benching, are depicted graphically in Section 4 – Reclamation Program, herein.

previously un-mined 80-acre westerly portion of the property. The method of operation and transport of materials would remain as exists at this time. The transport of material would continue to be via the existing overland conveyor in-lieu of on-road haul trucks.

## **ES-1 Document Organization**

Organization of this document follows a format commonly accepted by the Department of Conservation (DOC) and OMR for the preparation of reclamation plans. Following is a description of the document organization:

### **Section 1**

*General Background Information* provides a thematic overview of the subject sites, the agency, the operator and the project objectives.

### **Section 2**

*Project Location & Setting* provides information relative to the site-specific ownerships, responsible parties, environmental setting, guiding policies and ordinances.

### **Section 3**

*Mining Operation Plan* provides a description of the mining operations plan, SMARA compliance, and performance standards (aka, Project Design Features) as specified in the City of Azusa's codified CUP process and as offered by the applicant.

### **Section 4**

*Reclamation Program* articulates the intention and procedures proposed to create a discernible end use, restore habitat where appropriate, and secure the site to preclude an attractive nuisance when and where necessary.

### **Section 5**

*Certification* is the applicant's warranty that the stipulated reclamation will result, and that financial assurance instruments of sufficient value will remain in place until the site is deemed reclaimed through an official final affirming inspection and financial assurance release Public Resource Code (PRC) §2773(c) and California Code of Regulations (CCR) §3805.5 (a)(3) & (b)(1)).

The Revised Conditional Use Permit & Reclamation Plan is a "project" as defined in California Environmental Quality Act (CEQA), and as such, is the subject of review in a project-level Environmental Impact Report (EIR). The EIR will be prepared by Lilburn Corporation, a City of Azusa retained independent consultant, and presented as a separately bound volume. Each discretionary action in governance of the surface mine by the City has similarly been evaluated for its potential impacts since the enactment of CEQA in 1971. The currently existing project complies with all previous CEQA actions and mitigation measures. Annual inspections of the site by the City, as required by Surface Mine and Reclamation Act of 1975 (SMARA), have included confirmation of mitigation measure implementation. Inspection reports are on file with both OMR and the City.

## ES-2 Background

Quarry operations have been ongoing at the Azusa Rock site since the 1920s and within the San Gabriel Canyon vicinity since the mid-1800s. The quarry was actively operated during the first half of the century, and in 1960, Kirst Construction Co. / Azusa Rock, Inc. assumed the operator's role and began increased production from the quarry.

In November 1956, following annexation of the Azusa Rock site and surrounding area into the City, the City Council adopted Resolution 3546, which approved a Special Use Permit ("Azusa Rock CUP") for the 270-acre site and vested the right to mine the entire property.

SMARA requires operations with vested rights to mine existing as of January 1, 1976<sup>2</sup> to seek approval of a reclamation plan prior to March 31, 1988. In February 1988, the City approved a Reclamation Plan for the site (Planning Commission Resolution No. 2540), in accordance with the requirements of SMARA (§2770(b)). Prior to that time, the existing use permits assured the right to mine, but the responsibility to assure reclamation became the responsibility of the City and operator in cooperation with the DOC and OMR, upon the legislatures enactment of SMARA (PRC§2710 et seq.). The 1988 City Council approval of the Reclamation Plan established a fifty-year term for the CUP, through 2038.<sup>3</sup>

The existing reclamation plan submitted to and approved by the City in February 1988 specifically excluded the westerly 80-acre area from the reclamation design, as a precise mining design had yet to be determined. The 1988 plan annotates the 80-acre area for "Future Mining Operations." While the current application now seeks permissions to mine and reclaim the west 80-acre parcel, the applicant is not seeking enhanced reserves. The east side reserves would be exchanged for inclusion of the west side acreage in the CUP and Reclamation Plan, all to allow for immediate reclamation of the east side slopes employing the enhanced restoration technique. The application merely shifts the mining footprint to benefit the reclamation plan design.

## ES-3 Surface Mining Policy and Regulatory Context

Implementation of the Revised Conditional Use Permit and Reclamation Plan would be consistent with the following California Legislature-declared policies as adopted by the Azusa City Council:

- The Legislature hereby finds and declares that the extraction of minerals is essential to the continued economic well-being of the state and to the needs of the society, and that the reclamation of mined lands is necessary to prevent or minimize adverse effects on the environment and to protect the public health and safety. (*PRC §2711(a) and Azusa Development Code Chapter 88.44.010*)

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<sup>2</sup> SMARA §2776, paragraph 2

<sup>3</sup> Azusa City Council Resolution No. 8978, Clause B, Condition "I". This resolution additionally recognizes the opportunity to extend the permit life beyond 2038, subject to filing of such a request and approval by the City.

- The Legislature further finds that the reclamation of mined lands as provided in this chapter will permit the continued mining of minerals and will provide for the protection and subsequent beneficial use of the mined and reclaimed land. (*PRC §2711(b) and Azusa Development Code Chapter 88.44.010*)
- The Legislature further finds that surface mining takes place in diverse areas where the geologic, topographic, climatic, biological, and social conditions are significantly different and that reclamation operations and the specifications therefore may vary accordingly. (*PRC §2711(c) and Azusa Development Code Chapter 88.44.010*)

SMARA (§2777) requires an existing reclamation plan to be revised when substantial deviations are proposed that would affect the completion of that plan. As such, this application will revise the 1988 Azusa Rock, Inc. Reclamation Plan by incorporating state-of-the-art reclamation techniques for the entire site, including the 80-acre portion of the Azusa Rock site previously designated for future mining, but for which a reclamation plan must also be approved. When approved, VMC will terminate mineral production on the eastern flank of the property. City approval of this revised mining permit, reclamation plan, and financial assurance is requested in adherence to all current provisions of SMARA and its implementing regulations under CCR §3500, et seq.

#### **ES-4 Objectives and Benefits**

The enclosed Azusa Rock Revised Conditional Use Permit & Reclamation Plan and the Project Development Agreement intend to achieve the following objectives:

- Modify the existing east quarry area mined slopes to create landforms that better blend into the surrounding environment;
- Develop a prototype benching and reclamation technique for hard rock mining that would become an industry standard;
- Obtain replacement reserves within a footprint replicating the area of the currently permitted footprint;
- Initiate concurrent mining and reclamation;
- Revegetate the site using native plant species;
- Establish a self-sustaining ecology;
- Continue to provide a reliable supply of Portland Cement Concrete (PCC)-quality aggregate to meet the existing and future regional market demands identified by the California Department of Conservation for the San Gabriel Production – Consumption (P-C) Region.<sup>4</sup>

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<sup>4</sup> State of California, Department of Conservation, Map Sheet 52 (updated 2006), page 4 defines the San Gabriel Valley P-C Region 50-year Demand as 1,148 million tons, of which only 370 million tons is permitted.

## ES-5 Project Summary

Table ES-1 compares the existing conditions and proposed conditions for the Azusa Rock Quarry. Changes from the 1988 Reclamation Plan are identified along with the corresponding section where the change is discussed in detail.

**Table ES-1: Summary of Proposed Changes**

Feature	1988 Reclamation Plan	Revised Reclamation Plan	Change
<b>Site Acreage</b>	270 acres	273.421 acres	Yes <sup>1</sup>
<b>Mining Acreage</b>	190 acres (approximately)	190 acres (approximately)	No
<b>Total Reserves<sup>2</sup></b>	121,500,000 million tons (est.)	105,581,000 million tons (est.)	No <sup>2</sup>
<b>Total Overburden</b>	Not quantified	32,549,000 tons (est.)	No <sup>2</sup> (Sect. 3.7)
<b>Type of Material Mined</b>	PCC-grade aggregate materials & Base aggregate materials	PCC-grade aggregate materials & Base aggregate materials	No (Sect. 3.2)
<b>Mining Method</b>	Loosening of the rock by dozer unit and / or drilling and blasting	Loosening of the rock by dozer unit and / or drilling and blasting	No (Sect. 3.5 & 3.6)
<b>Mine Phasing</b>	Three sequential mining phases including an expansion parcel	Two sequential mining phases. The East side will consist of two reclamation sub-phases. The West side will be comprised of five mining & reclamation sub-phases.	Yes (Sect. 3.8 & 4.2)
<b>Reclamation Sequence</b>	Following the completion of mining (Year 2038)	Reclamation would begin on east side mined slopes immediately following City approval of the Revised Reclamation Plan, and conduct concurrent reclamation on the balance of the property.	Yes (Sect. 4.2)
<b>Slope Reclamation Type</b>	Step-Benching (traditional benching) Method	Micro-Benching & Sculpting Method	Yes (Sect. 4.5)
<b>Revegetation</b>	Hydroseed mix prescribed in the revegetation plan	Native plant species, precisely implemented following slope sculpturing.	Yes (Sect. 4.5)
<b>Years to Completion</b>	30 years (est.)	30 years (est.)	No (Sect. 3.4)
<b>Backfilling</b>	No backfilling required	No backfilling required	No
<b>Material Processing</b>	Materials are loaded and transported to the processing	Materials are loaded and transported to the processing	No (Sect. 3.5 &



Feature	1988 Reclamation Plan	Revised Reclamation Plan	Change
	area via heavy duty equipment and mining vehicles. The materials are processed by a series of crushers and screens by a conveyor system. Resulting materials are placed in a series of structures for sale and distribution.	area via heavy duty equipment and mining vehicles. The materials are processed by a series of crushers and screens by a conveyor system. Resulting materials are placed in a series of structures for sale and distribution.	3.6)
<b>Material Stockpiling</b>	Materials are currently stockpiled in several locations; subject to change over time as needed.	Materials would be stockpiled in several locations; subject to change over time as needed.	No
<b>Process Water</b>	No material is washed or processed on-site. Water controls air emissions at crushing and transfer points.	No material will be washed or processed on-site. Water will control air emissions at crushing and transfer points.	No
<b>On-Site Material Conveyance</b>	Materials are loaded and transported to the processing area via heavy duty equipment and mining vehicles. The materials are processed by a series of crushers and screens by a conveyor system. Resulting materials are placed in a series of structures for sale and distribution.	Materials are loaded and transported to the processing area via heavy duty equipment and mining vehicles. The materials are processed by a series of crushers and screens by a conveyor system. Resulting materials are placed in a series of structures for sale and distribution.	No (Sect. 3.6)
<b>Off-Site Material Conveyance<sup>2</sup></b>	Vehicular transport on public streets.	Crushed rock is conveyed via the overland conveyor system to the material processing plant located off-site.	Yes – See Footnote <sup>3</sup>
<b>End Use</b>	Open Space & Passive Recreation	Open Space	Yes (Sect. 1.1.1)

**Table Notes:**

1. The change in acreage between the existing permit and the proposed revised conditional use permit application results from the need to make use of a portion of VMC's adjacent property to create a slope configuration with less severe visual effects. Without access to the additional property, the slope would retain its sharply vertical and unnatural characteristics that were rejected as unacceptable by Azusa community. Should the revised conditional use permit not be approved, the acreage will remain unchanged at 270-acres.
2. The 1988 Reclamation Plan provided a single estimate of the amount of reserves for the entire site, and was generated using a hand planimeter and hand-held calculator. Moreover, the industry practice in 1987-88 was to provide rough estimates of the amount of reserves for a given site. The current estimate has been generated using state-of-the-art Computer Aided Drafting (CAD) software to perform the calculations, thus improving the credibility and eliminating the inaccuracy found in earlier estimates.
3. Required Overland Conveyor (City Resolution No. 8553)

## ES-6 Project Design Features

Attendant to initiation of the identified project amendments, VMC has identified the following intended "Project Design Features." Project Design Features (PDFs) have standing in CEQA practice and are recognized through applicable case law. PDFs are self-imposed features of the project description, site design or operations, and project maintenance, included to reduce or eliminate significant impacts that could otherwise result. The following PDFs are intended for incorporation into the environmental review process and to be presented alongside mitigation measures, which may result from the CEQA process. The applicable PDFs are presented in Table ES-2.

**Table ES-2: Project Design Features**

Number	Description
PDF-1	Enlarge and maintain the on-site storm water detention basin, which serves to decant and retard drainage from mined areas from directly entering Waters of the U.S. (Fish Creek and the San Gabriel River), from the existing 9.8 acre feet capacity to 12.0 acre feet or greater.
PDF-2	Maintain the on-site slope and grade in a manner to direct drainage of surface flows to the on-site storm water detention basin.
PDF-3	Apply a micro-benching methodology to reduce the height and width of the step-benches and include native vegetation as measures to eliminate negative aesthetic elements associated with traditional benching method.
PDF-4	Final reclaimed slopes are to be contoured horizontally and vertically to mimic the pre-mining contours, incorporating vertical articulation thereby eliminating negative aesthetic elements.
PDF-5	Continue use of the materials conveyor system to preclude the use of on-haul haul trucks traveling through residential neighborhoods.
PDF-6	Minimize the release of air borne dust and emissions through regular application of water to dampen stockpiles, exposed mine surfaces, and on-site access roads.
PDF-7	Excavation and mining within the periphery of Fish Creek will be under the observation of the consulting biologist to assure no adverse impacts will occur to the drainages and tributaries of the Waters of the United States and Waters of the State, unless such effects have been recognized through appropriate permits, agreements and certifications issued by the respective responsible agencies. The consulting biologist will provide staking and fencing of the drainages to delineate the areas of special concern.