

## **MITIGATION MONITORING AND REPORTING PROGRAM**

### **INTRODUCTION**

The mitigation monitoring and reporting program (MMRP) has been prepared to implement the mitigation measures identified in the Azusa Rock Revised Conditional Use Permit & Reclamation Plan. CEQA Section 21081.6 requires adoption of a monitoring program when mitigation measures have been identified that would reduce or avoid significant environmental effects.

CEQA requires adoption of a monitoring program for those measures or conditions placed on a project to mitigate or avoid adverse effects on the environment. The law states that the monitoring program shall be designed to ensure compliance during project implementation. When implemented environmental effects associated with the development of the distribution/warehouse facility will be reduced or eliminated.

The MMRP has been prepared, containing the following elements:

1. Measures that act as to mitigate significant impacts on the environment are recorded with the action and the procedure necessary to ensure compliance.
2. A procedure of compliance and verification has been outlined for each action necessary. This procedure designates who will take action, what action will be taken and when, and to whom and when compliance will be reported.
3. The MMRP has been designed to provide focused, yet flexible guidelines. As monitoring progresses, changes to compliance procedures may be necessary based upon recommendations by those responsible for the program.

### **RESPONSIBILITIES AND AUTHORITY**

The City of Azusa will be the primary agency, but not the only agency responsible for implementing the mitigation measures. In some cases, the City or other public agency will implement measures. In other cases, the project applicant will be responsible for implementation of measure and the City's role is exclusively to monitor the implementation of the measures. In this case, the project applicant may choose to require the construction contractor to implement specific mitigation measures prior to and/or during construction.

### **MONITORING PERSONNEL**

The City of Azusa is responsible for ensuring that the mitigation measures in the Final EIR are implemented. The City reserves the right to hire technical experts and professional to help in evaluating compliance. These may include but are not limited to biologists, archaeologists and planning professionals.

For impacts related to construction of the project, the project planner or responsible City department has the authority to stop the work of construction contractors if compliance with any aspects of the MMRP are not occurring after written notification has been issued.

## MITIGATION MONITORING REPORTING PROGRAM

**Project:** Azusa Rock Revised Conditional Use Permit & Reclamation Plan      **Applicant:** Vulcan Materials Company – Western Division

**Lead Agency:** City of Azusa      **Date:** March 2010

Project Design Features					
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 to 12 acre-feet or greater capacity.				
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-road 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, working mine faces, 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.				
Mitigation Measures No. / Implementing Action	Responsible for Monitoring	Monitoring Frequency	Timing of Verification	Method of Verification	Verified Date /Initials
Aesthetics					
Mitigation Measure AES-1: In order to reduce potential impacts associated with the west quarry ridgeline, a 20-foot operating berm shall be maintained in place during the west quarry's Phase II-W mining as outlined in Figure 4.1-38 of the Draft EIR. This will obscure equipment from view and deflect equipment noise during operations (see Section 4.9 Noise mitigation).	City of Azusa Community Development Department	Throughout the west quarry's Phases II-W	Prior to commencing operations	On-site Inspection	

**Project Design Features**

<p><u>Mitigation Measure AES-2:</u> The operator shall comply with the City of Azusa Development Code Chapter 88.31.030 Outdoor Lighting. The operator shall use high-pressure sodium and/or cut-off fixtures instead of mercury-vapor fixtures for any required nighttime lighting of the operations. The lighting shall also be designed to confine illumination to the Project Site, and/or to areas that do not include light-sensitive uses.</p>	<p>City of Azusa Community Development Department</p>	<p>Throughout the life of the project</p>	<p>During inspections</p>	<p>On-site Inspection</p>	
<p><u>Mitigation Measure AES-3:</u> No mining shall be allowed after dusk within 300 feet of the west quarry Project Site boundary..</p>	<p>City of Azusa Community Development Department</p>	<p>Throughout the life of the project</p>	<p>During inspections</p>	<p>On-site Inspection</p>	
<p>Air Quality</p>					
<p><u>Mitigation Measure AQ-1:</u> Daily peak production throughput shall be restricted to not more than 19,000 tons per day and 6,000,000 tons per year.</p>	<p>SCAQMD</p>	<p>Throughout the life of the project</p>	<p>During inspections</p>	<p>On-site Inspection</p>	
<p><u>Mitigation Measure AQ-1a:</u> The limitation of a daily throughput to 19,000 tons per day shall be implemented to reduce the Proposed Project's potential to emit NO<sub>x</sub>, SO<sub>x</sub>, VOC, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions to less than the SCAQMD CEQA significance thresholds.</p>	<p>City of Azusa Community Development Department</p>	<p>Throughout the life of the project</p>	<p>During inspections</p>	<p>On-site Inspection</p>	

**Project Design Features**

<p><u>Mitigation Measure AQ-1b:</u> The SCAQMD CEQA significance thresholds shall be used to curtail the facility's throughput to reduce the project's potential to emit NO<sub>x</sub>, SO<sub>x</sub>, VOC, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions to less than significant. The Emissions Inventory Plan (Appendix c.2.3, sub-appendix II-B) includes the methodology to evaluate each of the three pollutants (i.e. NO<sub>x</sub>, VOC, and CO) that exceed the SCAQMD CEQA significance thresholds in a similar manner to that presented below for NO<sub>x</sub>.</p> <ul style="list-style-type: none"> <li>•The facility-wide NO<sub>x</sub> emissions factor shall be 0.0213 lb/ton processed.</li> <li>•The baseline (i.e., current) peak day NO<sub>x</sub> emissions is 351 lb/day, and</li> <li>•The SCAQMD mass daily threshold is NO<sub>x</sub> 55 lb/day.</li> </ul> <p>In light of the above information, the Facility may emit 405 lb/day of NO<sub>x</sub> and remain less than the SCAQMD NO<sub>x</sub> Mass Daily threshold (405 lbs/day = 351 lbs/day current emissions +54 lbs/day to remain under the NO<sub>x</sub> significance threshold). In order for the Project to result in less than significant impacts for all air quality aspects, it shall be restricted to a throughput restriction of 19,000 tons per day.</p>	<p>City of Azusa Community Development Department</p>	<p>Throughout the life of the project</p>	<p>During inspections</p>	<p>On-site Inspection</p>	
<p><u>Mitigation Measure AQ-1c:</u> Continue use of the materials conveyor system to preclude the use of on-road haul trucks traveling through residential neighborhoods.</p>	<p>City of Azusa Community Development Department</p>	<p>Throughout the life of the project</p>	<p>During inspections</p>	<p>On-site Inspection</p>	
<p><u>Mitigation Measure AQ-2:</u> For on-site stationary sources, VMC shall be in compliance with applicable SCAQMD permitting and operation requirements and emission control measures</p>	<p>SCAQMD</p>	<p>Throughout the life of the project</p>	<p>During inspections</p>	<p>On-site Inspection</p>	

**Project Design Features**

Biological Resources					
<p><u>Mitigation Measure BIO-1:</u>                      a) As part of the mining and reclamation activities, the Applicant shall salvage plants and collect the seeds of the San Gabriel River dudleyas that will be removed as part of Phases I-E, IV-W and V-W (see Figure 3-16 of Draft EIR for phasing). This requirement is only limited by the ability of the biologist to collect seeds or salvage plants safely, without risk of serious injury or death. Dudleyas that can be safely removed from future mining areas shall be salvaged and transplanted and/or the collected seeds shall be spread onto the areas to be reclaimed with a similar slope and aspect. A revegetation plan for the revegetation and monitoring of this species shall be included into the final Revised Reclamation Plan and must be complied with in order to satisfy this Mitigation Measure.</p> <p>b) Prior to each phase of mining, surveys for the San Gabriel River dudleya shall be conducted to determine if the species will be impacted and if so, the number of the plants to be impacted. The plants favorable for transplanting will be salvaged and transplanted and/or collected seeds seeded onto areas to be reclaimed with similar slopes and aspects where they currently occur. A Revegetation Plan specifically addressing this species shall be included in the Final Reclamation Plan and complied with. This Plan shall include the method for salvaging and seed collection, selection of the areas to be revegetated, methods for transplanting and seeding, monitoring, and remediation in order to achieve a success criteria of 50% of the number of plants found in the pre-construction surveys.</p>	<p>City of Azusa                      Community                      Development                      Department/                        Qualified                      Biologist</p>	<p>Prior to each                      mining phase</p>	<p>During on-site                      surveys</p>	<p>On-site inspection</p>	
<p><u>Mitigation Measure BIO-2:</u> To avoid impacts to the Santa Ana speckled dace, Coast range newt, Two-striped garter snake, southwestern willow flycatcher, Copper's hawk, osprey, and suitable habitat for least Bell's vireo, project activities must avoid disturbing Fish Creek habitat, water flow and quality, and maintain a 25-foot buffer on either side from the centerline of Fish Creek including the entire restoration area.</p>	<p>City of Azusa                      Community                      Development                      Department/                        Qualified                      Biologist</p>	<p>Throughout the                      life of the project</p>	<p>During on-site                      inspections</p>	<p>On-site Inspection</p>	

**Project Design Features**

<p><u>Mitigation Measure BIO-3:</u> To avoid impacts to Southern California rufous-crowned sparrow, coastal California gnatcatcher, least Bell's vireo, and other nesting birds protected under the Migratory Bird Treaty Act, mining activities will only remove existing chaparral and coastal sage scrub during the non-nesting season which runs from February 15 to July 15. If clearing of native habitats is going to occur during the breeding season, then a qualified biologist shall conduct a survey for nesting birds within three days of the initiation of clearing. If active bird nests are observed, then a buffer of 100 feet shall be established around the nests and no activities shall occur within the buffer until the young have fledged or the nest has failed. A qualified biologist shall be utilized to conduct the surveys and to determine the status of active or failed nests.</p>	<p>City of Azusa Community Development Department/  Qualified Biologist</p>	<p>Throughout the life of the project</p>	<p>During on-site inspections</p>	<p>On-site inspections</p>	
<p><u>Mitigation Measure BIO-4:</u> To offset streambed and habitat impacts to 2.34 acres of State of California and 0.34 acres of waters of the U.S., the Project Applicant, upon review and agreement with CDFG and ACOE, would be required to comply with one of the following or a combination of one or more of the following:(1) purchase credits at a 2 to 1 ratio or approximately 5 acres/credits at an approved mitigation bank which supports the San Gabriel River, through other regional conservation programs (such as San Gabriel Mountains Regional Conservancy); (2) establish on-site drainages and vegetation within the reclaimed West Side quarry floor at a 2 to 1 ratio; or (3) dedicate or contribute 5 acres of appropriate lands as a permanent conservation easement to a conservation group. Note that the appropriate compensation and compensation ratio is typical and is subject to review and agreement with the CDFG in their 1602 Streambed Alteration Agreement and the ACOE in their 404 permitting.</p>	<p>CDFG/ACOE</p>	<p>Prior to impacts to waters of the U.S</p>	<p>During on-site inspections</p>	<p>On-site inspection</p>	

**Project Design Features**

<p><u>Mitigation Measure BIO-5:</u> Excavation and mining within the periphery of Fish Creek will be under the observation of the consulting biologist at all times 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. In order to prevent adverse impacts to Fish Creek the consulting biologist will provide staking and fencing of the drainages to delineate the areas of special concern, as these areas were identified in the Biological Resource Assessment contained in Draft EIR appendices C.3, C.3.2, and C.3.6. The biologist will monitor activities in the vicinity of these areas to ensure that the staked areas of exclusion are not intruded by either the equipment/operations or indirectly by soil movements.</p>	<p>City of Azusa Community Development Department/  Qualified Biologist</p>	<p>Throughout the life of the project</p>	<p>During on-site inspections</p>	<p>On-site inspections</p>	
<p><u>Mitigation Measure BIO-6:</u> Prior to mining activities on undisturbed portions of habitat located on the West Side of the Project Site, these areas will be surveyed and oak tree species will be recorded and quantified to determine if said trees meet the criteria of a protected oak tree. If oak trees are found on-site that have a diameter breast height of 8 inches or more, the Applicant shall either under the supervision of the City relocate the oak trees or plant new trees (with a 15-gallon minimum box size) along reclaimed drainages at a 3:1 ratio for each tree removed.</p>	<p>City of Azusa Community Development Department</p>	<p>Prior to mining activities on the undisturbed portion of habitat on the west side.</p>	<p>During survey</p>	<p>On-site inspection</p>	

**Project Design Features**

Cultural Resources					
<p><u>Mitigation Measure CR-1:</u> Azusa Rock personnel working on the Project Site shall receive training from a qualified archaeologist to identify cultural resources and to monitor during excavation operations, Trained personnel shall have the authority to stop work if a potential cultural resource is encountered. In the event that buried cultural resources, including historic or archeological resources, are discovered during construction, operations shall cease in the immediate vicinity of the find and a qualified archaeologist shall be consulted to determine whether the resource requires further study. The qualified archeologist shall make recommendations to the Lead Agency on measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. If the resources are determined to be unique historic resources as defined under Section 15064.5 of the CEQA Guidelines, appropriate measures shall be identified by the monitor and recommended to the Lead Agency for implementation.</p> <p>Measures may include but are not limited to: a detailed mapping of the findings; a recordation of the discovery with appropriate agencies; and potential tests (if needed) to evaluate the resources' eligibility for listing in the National Register or California Register of Historic Resources. A technical report would then be prepared to document field methods and results.</p>	<p>Qualified Archeologist</p>	<p>Throughout the life of the project</p>	<p>In the event cultural resources are discovered</p>	<p>On-site inspection</p>	

**Project Design Features**

<p><u>Mitigation Measure CR-2:</u> In accordance with 36 CFR 800.13(b)(3), the State Historic Preservation Officer and Native American tribe contacts as listed on the letter (dated September 28, 2007) received from Native American Heritage Commission, as well as the Advisory Council on Historic Preservation will be notified within 48 hours of the discovery of any archaeological artifacts. Native American groups will be given the option of accepting recovered artifacts.</p>	<p>City of Azusa Community Development Department/Na tive American Heritage Commission</p>	<p>Throughout the life of the project</p>	<p>In the event archeological artifacts are discovered</p>	<p>On-site inspection</p>	
<p><u>Mitigation Measure CR-3:</u> Mine personnel shall receive pre-project paleontological recognition training from a qualified paleontologist. Any possible fossils encountered in the unconsolidated gravels shall be marked with a 50-foot exclusion radius until the qualified paleontologist can respond to the unanticipated discovery. The paleontologist shall then map and record the discovery, test, (if needed) and evaluate the resource in accordance with applicable State regulations. A technical report shall be prepared to document methods and results.</p>	<p>Qualified Paleontologist</p>	<p>Throughout the life of the project</p>	<p>Pre-project training</p>	<p>Training sign- in/attendance sheet</p>	
<p><u>Mitigation Measure CR-4:</u> If human remains of any kind are found during mining activities, all activities must cease immediately and the Los Angeles County Coroner and a qualified archaeologist must be notified. The Coroner will examine the remains and determine the next appropriate action based on his or her findings. If the coroner determines the remains to be of Native American origin, he or she will notify the Native American Heritage Commission. The Native American Heritage Commission will then identify the most likely descendants to be consulted regarding treatment and/or reburial of the remains. If a most likely descendant cannot be identified, or the most likely descendant fails to make a recommendation regarding the treatment of the remains within 48 hours after gaining access to them, Vulcan shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance.</p>	<p>Los Angeles County Coroner/ Qualified Archaeologist/ Native American Heritage Commission</p>	<p>Throughout the life of the project</p>	<p>In the event human remains are discovered</p>	<p>Coroner's report/</p>	

**Project Design Features**

Project Design Features					
Geology and Soils					
<p><u>Mitigation Measure GS-1: Fill material selection and testing.</u> The buttress fill constructed at the toe of the eastern slope to improve its stability shall be constructed of material with a shear strength of equal or better than friction angle of 45° and cohesion of 500 psf. To ensure that these criteria are met, the fill material shall be laboratory tested prior to use. Due to the coarse gradation of the on-site fill available, specialized laboratory shear testing may be required. If laboratory test results indicate that the cohesion of the fill is insufficient, sufficiently strong material could potentially be obtained through the addition of geosynthetic fibers (Geofibers) or application of a geogrid; materials shall be approved by the City of Azusa.</p>	<p>City of Azusa Community Development Department</p>	<p>Prior to use of fill material for buttress construction</p>	<p>Prior to constructing buttress at toe of eastern slope</p>	<p>Laboratory Shear Testing</p>	
<p><u>Mitigation Measure GS-2: Geologic mapping of actual cut slopes.</u> The existing natural and cut slopes are on the order of 1/4-mile from the planned final cut slopes. Considering the highly fractured, discontinuous nature of the rocks, it is possible that the planar discontinuity orientations within the final cut will be significantly different than the present exposures. The orientation of the cut slopes can be a major factor since slopes oriented such that discontinuities are daylighted (i.e. unsupported) will be more susceptible to slides than slopes with discontinuities dipping into slope or neutral to the slope face. The Applicant shall provide additional studies to determine the orientation and characteristics of the rock- mass discontinuities and of the cut slopes, to provide further mitigation of slope failure. By mapping and monitoring cut-slope discontinuities, slope cuts can be oriented to minimize adverse relationships thereby reducing the slide potential. In certain areas, adjusting the design of future phase bench widths and sequencing could mitigate the hazards.</p>	<p>City of Azusa Building Official</p>	<p>Throughout the life of the project</p>	<p>Prior to the design of future phases</p>	<p>Submittal of additional studies analyzing rock mass discontinuities</p>	
Hydrology and Water Quality					
<p><u>Mitigation Measure HWQ-1:</u> The Applicant shall be required to expand on-site storm water detention capacity to a minimum of 12 acre-feet for the duration of the mining and reclamation periods</p>	<p>City of Azusa Community Development Department</p>	<p>Through the duration of the mining and reclamation periods.</p>	<p>Prior to commencing operations within the western 80- acre area.</p>	<p>On-site inspection</p>	

**Project Design Features**

Noise					
<p><u>Mitigation Measure N-1:</u> Mining activities shall only be permitted within Phases I-W and II-W along the western and southern boundary of the Project Site during the defined construction hours of 7 a.m. to 6 p.m.</p>	<p>City of Azusa Community Development Department</p>	<p>Throughout the life of the project</p>	<p>On-site inspections</p>	<p>On-site inspections</p>	
<p><u>Mitigation Measure N-2:</u> During all excavation, hauling, and processing of materials, the operator shall equip equipment with properly operating and maintained mufflers, stationary engine enclosures, or other noise suppression devices consistent with manufacturers' standards.</p>	<p>City of Azusa Community Development Department</p>	<p>Throughout the life of the project</p>	<p>On-site inspections</p>	<p>On-site inspections</p>	
<p><u>Mitigation Measure N-3:</u> Blasting shall only be conducted between the hours of 10 a.m. and 6 p.m. Monday through Saturday with no blasting allowed on Sundays or holidays.</p>	<p>City of Azusa Community Development Department</p>	<p>Throughout the life of the project</p>	<p>On-site inspections</p>	<p>On-site inspections</p>	

If any impacts require long-term monitoring, the applicant shall provide the City with a plan for monitoring the mitigation activities at the project site and reporting the monitoring results to the City.