

General Description of Deliverables

All text documents, tables, charts and illustrations will be provided on 8.5' x 11" sized sheets, and on 11" x 17" where oversized illustrations are necessary. It is likely the EIR will involve two to three volumes, with volume one containing the EIR analysis and subsequent volumes containing technical appendices. Covers to all volumes (related documents) will be coordinated as a set. As requested in the RFP, all efforts will be made to reduce the size of the EIR analysis portion to less than 200 pages. Duplication of information and analysis will be avoided to the extent feasible. Hard copies of administrative, draft and final documents will be two-sided, black ink, and on white or light recycled stock paper.

Following completion of the Final EIR, we will provide the County with one set of CDs (or other electronic medium acceptable to the County), in Word, with the Draft and Final EIR, MMRP and appendices. Spreadsheets and/or other databases developed for the EIR will be included. GIS layers developed will be submitted electronically and compatible with ESRI's Arcview GIS software and registered to the California State Plane NAD 83, Zone 5 coordinate system, units in feet and metadata will be compatible with the ArcCatalog .XML format.

METHODOLOGY FOR ANALYSIS OF ENVIRONMENTAL ISSUES

In accordance with the scope of work set forth in the Revised Initial Study, the EIR will focus on the following environmental issues:

- Aesthetics
- Agricultural Resources
- Air Quality/Global Climate Change
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hydrology, Water Quality (including Wastewater) and Water Supply
- Hazards (including fire and blasting)
- Noise
- Energy
- Recreation
- Transportation/Circulation and Roads

The water quality issues raised in Section 7. *Hazardous Materials* and in Section 13. *Wastewater* of the Initial Study will be addressed in the water quality analysis provided in the Hydrology, Water Quality, and Water Supply section.

Each draft section of the EIR will be reviewed by Mr. Brian McCarthy to ensure consistency throughout. Ms. Lisa Ballin will conduct a quality control review of the entire document.

The following provides a summary of the scope of analysis for each of the EIR impact analyses.

Aesthetics

The project site and its surroundings are characterized as open space with moderate to steep terrain. There is an east-west trending canyon near the center of the site. The proposed mining activity would occur within approximately 60 acres of the 203 acres of open space within the two parcels that comprise the project site. Highway 58 crosses the southeast portion of the site, with the majority of the 203 acres occurring immediately to the northwest of the Highway. The site is largely surrounded by undeveloped open space, with the Hanson Aggregate Quarry located less than one half mile to the northwest, the Salinas River less than one-half mile to the west, Moreno Creek to the south, opposite Highway 58 and the town of Santa Margarita approximately 2.25 miles to the northwest. Development in the area consists mainly of low-density rural residential and ranch holdings.

The proposed project would alter site slopes and add industrial-related facilities to the area in the form of two water tanks, a truck scale and scale house, as well as equipment (excavators and bulldozers, crushers and sorting equipment) and stockpiled mined materials. While these facilities and operations would occur mainly toward the center of the site and would likely be blocked by intervening topography and vegetation, visual impacts would need to be assessed to determine the extent of the project's visibility from surrounding roadways (e.g. Highway 58) and public access areas, and its compatibility with the visual character of the surrounding area. Hours of Operations would generally occur during daylight hours, and the applicant has not requested nighttime lighting at this time. Therefore, our scope of work does not include analysis of nighttime lighting impacts.

The aesthetics section will be prepared by Jack Blok, Ph.D. of Envicom Corporation. Dr. Blok will conduct a field investigation and photo-document the site, its surroundings, and key views. He will use photo-simulations in conducting the impact assessment. These photo-simulations will be prepared by Ron Stevens of Interacta, Inc. Erin Evarts of Envicom Corporation will assist in graphic imaging and modeling.

Key factors to be considered in this analysis include the location, scale, and visual character/quality of the proposed facilities and alterations to the land surface and landforms. The aesthetics analysis will include the following tasks:

- Describe the existing visual character and quality of the project site and the immediate surroundings, utilizing photographs to help illustrate text.
- Identify and describe the quality of existing scenic views that include the project site.
- Determine the visibility (or confirm the non-visibility) of the proposed mining area, the project's equipment, facilities, and stockpiles from public view locations, primarily along Highway 58. We will also assess the site's potential visibility from Highway 101 and possibly from el Camino Real near Pine Lane.

Prepare up to four photo-simulations that illustrate the project's effects from up to four key/representative view locations. Based on our preliminary review of the project's visibility, we suggest two photo-simulations from SR 58 (one from near Digger Pine Road), one from Highway 101, and one from El Camino Real near Pine Ave. Specific locations will be selected in consultation with the County. Surface models will be generated from topographic CAD files and consist of current topography and proposed

grading for each of the three phases. Screening trees will be placed per the re-vegetation plan. The cost estimate for these photo-simulations assumes the following data is provided:

- Autocad and PDF files of terrain with Z values (topo) – existing and graded terrain for each phase.
- Autocad and PDF files of the landscape plan with locations and descriptions of proposed screening trees.
- High Resolution aerial photograph if available.
- We have provided as an optional task, the cost per additional simulation, if it is determined that more than four simulations are required.
- Evaluate the impact of the project on scenic vistas/features and its consistency with the visual character of the area.
- Include written analysis of impacts as they relate to relevant policies and standards.
- Identify measures necessary to mitigate potentially significant impacts. Measures may include landscape screening, restrictions on facility/equipment locations, etc.

Optional Items

(A detailed cost for any of these items can be provided upon request following further site investigations to analyze the duration and complexity of the overlay areas).

- Drive-by Video Simulation: Provide drive-by video simulations that will overlay the proposed development on top of actual video footage while driving by the site. This allows the viewer to better understand the potential impact that the project may have on travelers' views as they pass the site.
- Stop Action Video Simulation: Stop action drive-by video simulations will overlay the proposed development at specific stop action locations (similar to drive-by video simulation, except the model overlay is not continuous.).
- Site visibility analysis: Provide drive-by site visibility analysis by reviewing the 3D site model in conjunction with actual video recordings. The output of this option is a color-coded map that identifies where the site is visible along a given section of road and approximate durations.
- Interactive 3D application: Provide an application that allows the user to explore the potential visibility of the proposed development by moving through the 3D site model used to develop the photo simulations. The application is similar to the Google Earth application except that the camera is programmed to always look at the site while moving along specific roads.

Agricultural Resources

The proposed project would have the potential to adversely affect neighboring agricultural operations. The project site is located within the County's Rural Lands category. The site is not classified by the State as Prime Farmland or Farmland of Statewide Importance. Reclamation of the site post-mining would return the disturbed areas to open space. There is the potential for mining-related impacts to surrounding agricultural activities through the off-site spread of weeds from the transport of seeds, which could result in reduced yields, increased pesticide use, increased wildfire threats and increased erosion or flooding. The operations may also result in

dust from excavation and processing, as well as from truck traffic, which could affect agricultural uses through the spread of vectors such as dust mites and/or cause livestock to health risks such as Valley Fever.

The Agricultural Resources section of the EIR will be prepared by Jack Blok, Ph.D. of Envicom Corporation. Dr. Blok will coordinate with Hans Giroux of Giroux and Associates to incorporate the air quality issues with associated effects on agricultural resources.

Analysis of impacts to agriculture will include:

- Describe existing agricultural resources and uses at, and surrounding, the project site.
- Prepare graphics to illustrate the proximity of adjacent agricultural production to the proposed project operations.
- Determine impacts of mining operations on adjacent agricultural operations/production, such as dust impacts to adjoining productive farmland. This would involve evaluating the potential for the project to spread weeds in the area, resulting in adverse impacts to agriculture including reduced yields, increased pesticide use, increased wildfire threats, and increased erosion and/or flooding. We will review and incorporate issues raised in the Office of Mine Reclamation (OMR) letter (Department of Conservation, July 16, 2010) and SMARA weed management requirements (CCR3705(k)) as necessary.
- Assess ordinance and policy consistency (e.g. Agriculture Policy 18: Location of Improvements) for protection of agricultural resources.
- Consult with the County Agriculture Department to assist in identifying any impacts.
- Assess indirect impacts related to access points and haul routes that might have the potential to impact agricultural production.
- Identify mitigation measures to reduce or avoid significant impacts.

Air Quality and Global Climate Change

The proposed project would result in potential air quality impacts related to on-site excavations, operation of equipment and machinery, off-site truck hauling and employee trip generation. The focus on this analysis will center around fugitive dust and vehicle and equipment emissions. The analysis will consider the proposed erosion control plan and the revegetation phases of the reclamation plan to reduce fugitive dust. The San Luis Obispo County Air Pollution Control District's (APCD's) 2003 CEQA Air Quality Handbook will be used to evaluate project specific impacts and the project's consistency with APCD's Clean Air Plan will be reviewed. The Air Resources Board (ARB) guidance document titled "Air Quality and Land Use Handbook" (ARB Handbook) will also be used where appropriate.

The Air Quality and Global Climate Change section will be prepared by Brian McCarthy of Envicom Corporation. Mr. McCarthy will rely on technical analyses prepared by Hans Giroux of Giroux and Associates.

Specific tasks to be conducted as part of this analysis include:

- Provide a description of the atmospheric setting for the project area based on data from the San Luis Obispo County APCD air monitoring station in Paso Robles.

- Calculate regional trucking emissions using the California Air Resources Board (ARB) URBEMIS2007 computer model, and evaluate whether project-related emissions are within the thresholds identified in the APCD document “CEQA Air Quality Handbook” (revised December, 2009).
- Quantify construction activity emissions, if any, and identify candidate measures for inclusion into a Construction Activity Management Plan (CAMP).
- Discuss diesel particulate matter (DPM) emissions associated with use of off-road heavy equipment during extraction and hauling.
- Conduct a health risk screening analysis using the SCREEN3 computer model. If the screening assessment is above the 10 in a million threshold, a more comprehensive health risk analysis will be required. Our proposal assumes that a comprehensive health risk assessment is not required. However, a cost estimate for such an analysis is included as a contingency item in our cost proposal.
- Quantify potential air quality impacts to off-site agricultural or ranching activities, including potential dispersion of fungus spores associated with Valley Fever.
- Discuss potential air quality impacts to sensitive uses along the proposed truck haul route.
- Discuss project consistency with the San Luis Obispo County Clean Air Plan (CAP).
- Identify analysis and mitigation requirements should Naturally Occurring Asbestos (NOA) be present within the aggregate resources.

Global Climate Change

The EIR will include a discussion of global climate change and an assessment of the project’s contribution to this issue. The analysis will include a calculation of project-related greenhouse gas (GHG) emissions and comparison of GHG emissions to the CARB threshold of significance for industrial projects (7,000 MT/year) and/or other applicable significance threshold used by the County. The analysis will also take into consideration the project’s potential to reduce vehicle miles traveled by providing a local source of decomposed granite and granite aggregate for development activities within the County.

Biological Resources

A prior biological assessment of the project site by LFR (2009) identified sensitive plant communities and special-status plant and wildlife species in the mining impact area within the project site. The biological assessment also identified this portion of the site as suitable habitat for several additional potentially occurring special-status species. Locally important biological resources such as native oak trees and oak woodlands are known to occur at the site, and a drainage supporting wetland vegetation and riparian habitat flows within the mining area boundary. The drainage is tributary to the Salinas River, which contains sensitive riparian plant communities and provides habitat for several protected wildlife species.

The Biological Resources section will be prepared by James Anderson of Envicom Corporation. Field surveys and research will be conducted by Carl Wishner and James Anderson of Envicom Corporation.

The Biological Resources section of the EIR will establish baseline existing conditions and will include an independent impact analysis with respect to:

- 1) Unique or special-status species or their habitats;
- 2) The extent, diversity or quality of native or other important vegetation, including sensitive natural communities;
- 3) Wetland or riparian habitat, including areas under the jurisdiction of responsible agencies; and,
- 4) Wildlife movement, including barriers to movement of resident and migratory wildlife species, as well as factors that could hinder the normal activities of wildlife.

The biological assessment by LFR (2009) provides a comprehensive analysis of the site's biological resources and defines the existing conditions at the date of the study. Envicom Corporation biologists will peer review and update this study as a starting point for our analysis.

We will prepare the Biological Resources section based on the following tasks:

- A literature review that includes updated search and/or review of the following:
 - California Natural Diversity Database (CNDDDB) and the California Native Plant Society (CNPS) Inventory Database for special-status and sensitive "elements" known to occur at or in the vicinity of the site;
 - California Department of Fish and Game (CDFG) Special Vascular Plants, Bryophytes, and Lichens List;
 - CDFG Special Animals List;
 - CDFG List of California Vegetation Alliances, CDFG List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database, and The Manual of California Vegetation, 2nd ed.;
 - Federal, state and local policies and planning documents pertaining to biological resources, including the San Luis Obispo County Draft Conservation and Open Space Element; and
 - Available background data or documents concerning biological resources of the project area and region.
- A peer review of the following documents submitted by the applicant:
 - Sensitive Species and Habitat Survey for the Las Pilitas Rock Quarry, LFR, October 2009.
 - Las Pilitas Rock Quarry Tree Plan, Tartaglia Engineering, September 2009.
 - Las Pilitas Rock Quarry Revegetation Plan, Tartaglia Engineering, September 2009.
- An updated assessment of the potential for occurrence of special-status plant and wildlife species and sensitive natural communities at the site, based on current site conditions and new information on species or sensitive plant community status, occurrence, and distribution from the CNDDDB, CNPS and other sources.
- Envicom Corporation biologists will conduct a field survey to evaluate current conditions and conduct a search for special-status species or sensitive and unique habitats at the site. Field surveys will be conducted during periods when potentially occurring special-status species can be found and identified. Vascular plant surveys will be conducted

within the mining impact area and within a 100-foot buffer, as well as in surrounding areas that may be indirectly affected by the project. General wildlife surveys will also be conducted at and in the vicinity of the mining impact area.

- Resource mapping of vegetation based on the classification system of natural community Alliances and Associations used by the CDFG Vegetation Classification and Mapping Program, as well as mapping of land cover, CDFG riparian habitat, other special habitats, oak woodlands and individual native trees and locations of any special-status species found at the mining impact area.
- Peer review of LFR's assessment that the site lacks areas subject to the regulatory jurisdiction of the Army Corps of Engineers (ACOE) as wetland or non-wetland Waters of the U.S. An ACOE jurisdictional delineation is not included in our initial scope of work. However, the anticipated costs of an ACOE delineation have been provided in the case a delineation is deemed necessary.
- An independent evaluation and analysis of project construction, operational, and cumulative impacts, and incorporation of mitigation measures to reduce significant or potentially significant impacts to less than significant levels. The applicant's reclamation plan to restore the site to native vegetation following completion of mining activities will be considered when evaluating impacts and incorporating mitigation measures. Direct and indirect impacts of the project will be considered, including any potential indirect impacts to biological resources downstream from the project site, as applicable (e.g. Salinas River). Effects of changes in hydrology on biological resources due to slope alteration and vegetation clearance will be considered in conjunction with the hydrological analysis to be prepared in the Hydrology, Water Quality, and Water Supply section as discussed below.
- Envicom Corporation will identify mitigation measures for each of the project's impacts. Mitigation will be based on a hierarchy of first avoidance, followed by minimization, restoration, reduction and compensation. Any restoration and monitoring will include clear and measureable success and monitoring criteria.

Cultural Resources

The project site is within an area that is considered culturally sensitive due to historical occupation of the general area and physical features of the property. The site is relatively undisturbed (except for dirt roads) and is within the upper Salinas River Valley. The Salinas River, located to the south, is within 300 feet of the project site. The Obispeno Chumash and Salinan have historically occupied the Salinas River Valley. A Phase I Archaeological Survey (Heritage Discoveries, Inc., 2009) was conducted for the project on behalf of the applicant, which involved field investigations of the areas proposed for disturbance, as well as records search for known archaeological resource sites in the area. The investigation did not find archaeological resources sites within the proposed disturbance boundary. The records search found that archaeological resource sites are located near water sources in the area of the Salinas River Valley, but not within the proposed project area. The report suggests that no further investigation is warranted unless disturbances extend beyond the proposed mining boundary, and the no mitigation is necessary at this time. The Initial Study provides that the site is not sensitive for paleontological resources.

Erin Evarts of Envicom Corporation will prepare the Cultural Resource section of the EIR based on the Heritage Discoveries Report and a third party review conducted by David Brunzell of BCR Consulting.

Our proposed scope of work includes:

- Conduct a third party review of the Heritage Discoveries, Inc. 2009 Archaeological Investigation Report for compliance with CEQA. Any discovered errors, omissions, and recommendations for additional investigations will be provided in a comments matrix and will be rectified in a letter-report as an addendum to the original study.
- The Heritage Discoveries Report will be predominantly relied upon to develop the EIR analysis.
- Incorporate concerns of the Native American Heritage Commission (NAHC) NOP letter dated July 13, 2010, including consultation with local Chumash representatives and a Sacred Lands File Check to ascertain whether there is knowledge of any cultural resources within the project boundaries. Consultation will include one letter to the NAHC and one mailing to each listed local tribe or individual and a follow-up phone conversation with each tribe or individual. Results of these items will be included in a letter report.
- Identify mitigation measures to avoid potential impacts to resources if present at the site. For example, a possible mitigation measure could include a field investigation prior to initiation of mining in each of the four phases and procedures to be followed in the event something is uncovered during the life of the mining operation.

Geology and Soils

The project site topography ranges from moderately sloping to steeply sloping with soil types (Cieneba-Andregg coarse sandy loams, Metz loamy sand and Xerofluvents-Riverwash association) that are moderately erosive. Potential geology impacts would include seismic shaking, landslides/slope stability, erosion, differential settlement, soil/stockpile stability, excavation characteristics, and other mining-related considerations. The following factors and related issues will be considered in the impacts evaluation:

- Slope geometry (steepness and height);
- Geotechnical and earthquake conditions;
- Topography and surface water flow patterns around and through the site;
- Depths to historical and anticipated high ground water levels;
- Presence of buildings, utilities, and surcharges in the vicinity of the slopes; and
- Examples of past slope performance and erosion.

The Geology and Soils section of the EIR will be prepared by Brian McCarthy with input from Ken Wilson of Wilson Geosciences, Inc. The EIR section will be based on the *Engineering Geology Investigation* prepared by Geosolutions, Inc. and a third party review conducted by Ken Wilson.

The specific tasks include:

- Conduct an independent peer review and reconnaissance-level field verification of surface conditions provided in the *Engineering Geology Investigation* (GeoSolutions, Inc. July 14, 2009) prepared for the projects site.
- Review the applicant's Blasting Plan (Gasch & Associates, December 8, 2009).
- Collect and review other readily available geologic and geotechnical information associated with the area.
- Evaluate impacts for the site factors determined (e.g., those listed above).
- Develop feasible mitigation measures (and monitoring methods) to reduce all potentially significant impacts to less than significant.

Hydrology, Water Quality, and Water Supply

The project site is characterized by moderately steep to steep terrain, with a central east-west oriented valley that drains west to the Salinas River. Excavation would occur between the two ridgelines that bound this valley. The following factors and related issues will be considered in the impacts evaluation:

- Effects of mining, road construction, and infrastructure development (e.g., water tanks) on post-project storm runoff rates, directions, and volumes and the capacity of the proposed stormwater detention system to avoid local and off-site flooding;
- Effects of erosion from mining and internal/access road construction on post-project water quality of storm runoff (i.e., turbidity and suspended sediment) to local wetlands and stream channels, Moreno Creek and the Salinas River;
- Effects of mining and reclamation activities on the water quality of storm runoff to local wetlands and stream channels, Moreno Creek and the Salinas River, from factors other than erosion (e.g., temperature, dissolved oxygen) and pollutants (e.g., fertilizers, pesticides, oil and grease);
- Potential changes in the quantity and/or quality of groundwater recharge resulting from excavation into a currently undisturbed area, reclamation activities (fertilizers and pesticides), or wastewater disposal (nitrogen); and
- Potential changes in local surface water and groundwater flow directions and effects on water budgets for local wetlands, stream channels and riparian habitat.

A limited area in the southwestern portion of the site has been mapped by FEMA as within the 100-year flood zone of the Salinas River. As this area will not be disturbed by the proposed project, potential impacts are considered to be insignificant.

The EIR section will be prepared by James Anderson of Envicom Corporation. Mr. Anderson will coordinate with Chris White of Balance Hydrologics, Inc. and rely upon the technical report and analysis to be prepared by Balance Hydrologics, Inc.

This analysis will include the following tasks:

- ***Perform background research and visit the project site***

We will review available regional and site-specific information (e.g., soils, geology, rainfall) on the hydrology and geology of the quarry area, including the project geology report and drainage calculations for stormwater management, geologic maps and agency publications (CA Division of Mines and Geology, USGS, etc.), and historic and contemporary aerial photography. We will perform a reconnaissance visit to the project site to observe existing conditions related to existing drainage patterns, stream channels, riparian and seasonal wetlands and existing roads. We will query local and regional agency staff (e.g., County and Regional Board) about the planned mining program and the approaches proposed for addressing potential hydrologic and water quality impacts, including assessments of impacts and efficacy of mitigation at the Santa Margarita quarry, as well as Cal Portland's Rocky Canyon quarry, also developed in similar materials.

- ***Regulatory setting***

We will identify and summarize the relevant regulations and guidance related to groundwater and surface water protection from mining activities, including stormwater quality and quantity management. These sources include federal and state regulations, such as the Clean Water Act, Porter-Cologne Act and Surface Mining and Reclamation Act (SMARA), and related permit programs administered by the Office of Mine Reclamation (e.g. SMARA), State Water Resources Control Board (NPDES permits for stormwater runoff and construction activities), Central Coast office of the Regional Water Quality Control Board (Basin Plan compliance; groundwater protection) and FEMA (flood control). County and regional guidance and ordinances provide the framework for management of stormwater and compliance with mandated water quality programs, including design and use of stormwater control facilities, conditioning discharges into receiving waters, and mandating protection of surface water and groundwater quality and quantities.

Mining is one of the 10 categories covered by the NPDES Industrial General Permit for stormwater discharges (1997), which is currently being revised (2005 draft). The project will also need to comply with the revised NPDES permit for Construction General Activities adopted in Sept. 2009 and effective July 1 of this year, including development of a Rain Event Action Plan (REAP) and a Storm Water Pollution Prevention Plan (SWPPP) to guide water quality protection during the construction and post-construction phases of the project.

- ***Rainfall-runoff analysis (runoff quantity, drainage system capacity and downstream flooding)***

We will review the project drainage report (Tartaglia Engineering, 2009) and calculations related to stormwater management. The Initial Study states that the mined slopes would be finished at 1.5:1, with 25-foot wide benches every 50 vertical feet. Slopes would be graded to drain back towards the hillside, where stormwater runoff (and sediment) would be retained, or directed through swales and ditches to basins for detention and/or

infiltration. Graphics show two permanent detention basins would be constructed at the project outset and remain through site closure roughly 30 years later. One basin is located where the project access road joins Highway 58, and the other is near the mouth of the valley, downstream from the mining area. As mining proceeds from the center of the site to the north and northeast, a third detention basin would be constructed, then enlarged, to serve operations during mining phases 2A and 2B. When this area has been excavated, a new basin would be constructed further to the northwest, then enlarged as well, to capture runoff from the phase 3A, 3B and Final mining areas.

Control of drainage will be evaluated for consistency with local (San Luis Obispo County) and regional regulatory criteria for stormwater quantity management. We will evaluate the suitability of the proposed drainage system to control velocities, minimize downstream erosion and avoid contributions to flooding in the drainage network leading to the Salinas River, as well as the portion of the site draining to Moreno Creek. We will also assess the feasibility of measures proposed to maintain flows to preserve wetlands and stream channels.

We will use conventional methods to calculate the likely changes in peak flows resulting from mining as planned/phased. We will review the stormwater calculations and independently estimate the preliminary detention requirements for design storms, such as the 100-year recurrence interval event. We will assess the need for additional measures to maintain or reduce peak flows from the design storms and avoid flooding downstream. If appropriate, we will recommend additional measures that could be installed or implemented to mitigate potential construction-period and post-construction impacts on peak flows.

- ***Water quality (surface runoff)***

According to the Initial Study, the shallow topsoil would be stripped and reserved for reclamation, leaving barren bedrock slopes with low risk of erosion. As described above, stormwater runoff would be routed to detention basins to control peak flows and retain sediment. During this stage (active mining), the primary risk of erosion would be from stockpiled topsoil, spoils and mined materials. Guidance for effective protection of these stockpiles are contained in the portions of the County's Land Use Ordinance addressing sedimentation and erosion control, and in the NPDES Construction and Industrial General permits. The project will be required to prepare an Erosion and Sediment Control Plan, a SWPPP and other stormwater management documents required by the County and Regional Board.

Other than sediment, the primary constituents of potential concern in runoff from the quarry would be chemical contaminants, such as petroleum products (fuel; lubricants) from mining and processing equipment and from operation of the asphalt and concrete recycling plants. If untreated, runoff from the site could degrade water quality in downstream wetlands, Moreno Creek, and the Salinas River.

We will characterize the pollutants of concern under existing conditions (undisturbed lands with dirt roads) and following quarry development and expansion. We will review available monitoring data from runoff water quality sampling at the Hanson Aggregate granite quarry just northwest of the project site. We will also review the project site

designs and engineering reports for consistency with regulatory criteria and suitability of water quality treatment measures proposed to avoid off-site impacts. Where applicable, we will identify additional opportunities and constraints that bracket selection of BMPs and recommend further measures that are appropriate for the project.

- ***Groundwater recharge (volumes and flow directions)***

The extent of existing groundwater recharge on the currently undisturbed project site is unknown but development of a quarry could lead to changes in the quantity (volume) of groundwater recharge and/or modify groundwater flow paths. This could potentially reduce recharge to the local aquifer and the Salinas River, affecting the local water supply, as well as hydrologic support for downgradient wetlands and stream channels. As currently proposed, some portion of the runoff from operating portions of the quarry would be routed to detention basins in other areas of the site, where some fraction would be retained and potentially infiltrated with the remainder released downstream. Our hydrogeologic analysis will consider data from local wells, geology reports and measurements and observations from our reconnaissance visit, in conjunction with the applicant's site plan and drainage study, to assess potential project impacts on groundwater recharge and evaluate the likelihood of infiltration from the proposed detention basin sites. If appropriate, we will recommend additional mitigation measures to maintain pre-development volumes and quality of recharge.

- ***Hydrologic support for wetlands and stream channels (groundwater and surface water)***

Either re-directing surface runoff or lowering groundwater levels significantly could reduce hydrologic support to local wetlands, such as the existing vernal swales, or the riparian wetlands and stream channels draining the un-mined portions of the central valley and/or south-facing slopes north of Highway 58. Changes to the amount or timing of flows would result in modified water budgets and potential adverse effects on habitat and resource quality. In this task, we will use the water balance approach to examine how the proposed operation might modify the amount of recharge reaching local features and, if appropriate, identify suitable mitigation measures to retain hydrologic support and avoid or minimize potential impacts as mining proceeds. Historic aerial photography will be reviewed to better understand wetland and riparian response to periods of wet and dry years. Water budgets will be prepared for wet, normal, dry, and (if necessary) critically-dry years.

- ***Ground water recharge (quality)***

Potential impacts on groundwater quality originate from two sources: mining operations and operation of the on-site septic system for wastewater disposal.

All of the constituents present in surface runoff from the site, except sediment, could potentially infiltrate and contribute to pollution of local groundwater. Changes in the *quantity* of local recharge will be assessed in the above tasks through review of local geologic and hydrogeologic conditions, field reconnaissance, aerial photography and water budgeting. Using this information, we will evaluate the potential for mobilization of some or all of these pollutants into groundwater and recommend additional mitigation

measures, if needed, suitable for maintaining water quality of recharge to the local aquifer.

While the Agricultural Resource section of the Initial Study describes local soils as generally shallow (depth to bedrock), steeply sloped and potentially constrained by drainage or flooding, the Wastewater section concludes that there are areas of the site where an existing wastewater system could be expanded or a new one constructed to meet the criteria in the County's Land Use Ordinance with respect to soil depth, percolation rates, slope, depth above seasonally-high groundwater, and distance from 100-year flood zones, stream channels and wells. We will review the septic system proposed for project use for consistency with local plumbing codes, the Land Use Ordinance, and other regulatory guidance. Based on the location, design, proposed loading and the local hydrogeologic setting (soils, geology, rainfall recharge, aquifer characteristics), we will assess potential risk of impacts from system failure (daylighting effluent), short-circuiting (via bedrock fractures), and nitrogen loading to the aquifer (methemoglobinemia or "blue baby" disease). If appropriate, we will recommend additional mitigation measures for wastewater disposal to avoid these impacts and maintain the quality of groundwater.

- **Water Supply**

We understand that the original Initial Study estimated project water use at 20,000 gallons per day (gpd) of groundwater pumped from an on-site well, primarily for washing excavated materials. However, the Revised Initial Study to which we responded provided no estimated water use but stated that materials would be sorted and not washed prior to export. Accordingly, pending receipt of a revised estimate of project water demand from the applicant, our scope assumes pumping rates of about 3,000 gpd solely for dust control, domestic supply (potable and sanitary), and minor/incidental uses during mining operations, and reclamation once production has ceased. We further assume that the County would provide boring logs for the project well and other nearby wells, and that the applicant could provide some data on recent usage and, perhaps, pump test results as well. This information, in combination with aerial photography review, regional climate data, regional soils (NRCS) and geology (CDMG) reports, and our extensive experience in bedrock aquifer environments, would be sufficient to assess potential impacts of planned withdrawals, evaluate the feasibility of applicant-proposed mitigation measures, and recommend additional mitigation as needed.

Key aspects of this assessment will include: (1) The well is constructed in *granitic* bedrock.² We have found that observed variability in granitic bedrock aquifer properties in coastal California does *not* significantly change with choice of management alternatives, so using data on specific capacities (the water yield per foot of well drawdown) from the Rocky Canyon Quarry, the nearby Santa Margarita Quarry, and local wells will be appropriate; (2) The suitability of an approach based on analysis of bedrock aquifer properties is supported by the lack of evidence of perched aquifers, based on the project engineering geology study (GeoSolutions, 2009) reporting no

² The project setting is completely different from that analyzed in the recent water supply study (Hopkins, 2006), for the Santa Margarita Ranch agricultural residential cluster project south of Highway 58 and across the Salinas River, where the supply wells tap the Paso Robles Formation conglomerate and Santa Margarita formation marine sandstone.

groundwater encountered in trenches and borings to a depth of 84 feet below ground surface, and our preliminary review of local aerial photography revealing no evidence of perched aquifers, such as seep- and spring-supported wetlands outside riparian corridors; and (3) Additional groundwater losses beyond project use will not be incurred by exposure of the aquifer, as the lowest proposed elevation in the constructed project is 1,083 feet in a detention basin, more than 100 feet above the elevation of the Salinas River.

Balance Hydrologics, Inc. staff have assessed the need for recharge to replace water lost to mining at a number of other facilities throughout the state, including multiple sites in Santa Cruz County (at Felton, Bonnie Doon, and the Scotts Valley sand quarries) and in Santa Barbara County, at the Sisquoc Plant.³ Mining-related activities, such as blasting, grading and benching steep slopes, and detention of stormwater runoff will tend to increase recharge over present amounts but typically only partially-mitigate for increased withdrawals due to operations.

As part of the EIR, we anticipate recommending a mitigation measure that outlines a “life-of-mine” groundwater replenishment program to avoid aggravating water shortages. Replacing lost recharge through this type of comprehensive, integrated program employs a balanced set of alternative strategies, combining conservation approaches and passive recharge facilities, thereby allowing the applicant flexibility in mitigation approach.

Optional Water Supply Task

Groundwater Replenishment Mitigation Program: If the County and the applicant would prefer that we fully develop a detailed Groundwater Replenishment Program as a possible mitigation (beyond just a recommended measure), we will submit a separate detailed scope describing this optional task, encompassing all phases of mining from clearing and stripping through post-mine reclamation. The level of effort can vary depending the detail and number of mitigating options.

Hazards

This section will discuss the potential project impacts associated with fire, dam inundation and blasting hazards. It will be prepared by Jack Block, Ph. D of Envicom Corporation and Brian McCarthy. Water quality issues related to the storage and use of hazardous chemicals and the Storm Water Pollution Prevention Plan (SWPPP) will be addressed in the Hydrology, Water Quality and Water Supply section, as described above.

Fire Hazards

The project site is within a Very High Fire Hazard Severity Zone, and is subject to wildland fires. The steep terrain, flammable vegetation (e.g. chaparral, coast live oak woodland, foothill woodland, sage scrub and annual grassland), potential for high winds, dry seasons and remote location are all contributing factors to the fire safety of the project site. County Parkhill Station No. 40 would service the site, and it is anticipated that the response time would be between 5 and 10 minutes. Although the project would not introduce habitable structures into the Zone or

³ References include John Ricker (Environmental Health, Santa Cruz County 831-454-2750) and Steve Zacks (Lehigh Hanson – 805-985-2191).

impede an evacuation plan and would be subject to the Fire Code, there is a potential that the project could increase the likelihood of a fire in the area. Per County Fire Department Review (letter dated July 9, 2010), in addition to compliance with California Fire Code, California Building Code, and Public Resources Code pertaining to fire protection, there are specific measures that should be included in the project to minimize the potential for fire hazards. The EIR analysis will include a discussion of the project site and surroundings as they pertain to fire hazards, such as vegetation, slopes, climate and fire history. Components of the project that have the potential to spark wildfires will be identified. We will incorporate concerns and mitigation provided in the County Fire Department response to the NOP letter dated July 9, 2010.

Dam Inundation Zone

The Salinas River is located 0.25 mile southwest of the proposed mining area. The project site is within the Salinas River/Santa Margarita Reservoir Dam Inundation Zone (i.e., within 500 feet of the Salinas River centerline), and as such, could be affected should there be a catastrophic failure of an upstream dam causing hazardous floodwaters at the project site. Our review will include evaluation of sedimentation within and upstream of the reservoir based on Glysson's classic USGS report (1977) and subsequent updates of sediment-prism growth by the San Luis Obispo County Public Works Department. The EIR will include a review of the inundation maps prepared for the Division of Safety of Dams (DSOD) in conjunction with the site plan, a discussion of applicable regulations, and identification of potential impacts. Mitigation will be developed, if needed, to ensure safety of mine employees and in accordance with State Office of Emergency Services.

Blasting

In instances where blasting is necessary to loosen consolidate aggregate, blasting would include drilling into the aggregate material and placing of explosives within the drilled holes before they are detonated. A California Licensed Blaster would conduct the blasting activity. The applicant's General Blast Plan and Vibration Predictions Pan (Gasch & Associates, December 8, 2009) provides details for carrying out the blasting program. The blasting plan will be described in detail along with applicable regulations that are intended to address potential safety impacts on the project employees and neighboring properties. This section will focus on regulatory compliance and enforcement/oversight during project operations. Blasting will also be discussed in the Geology and Soils and Noise and Vibration sections; the reader will be referred to those sections for issues related to geology, noise, and vibration. Recommendations for the blasting activities will consider:

- Controlled blasting techniques
- Site inspections
- Safety meetings
- Loading of explosives
- Hours of blasting activity
- Drilling operations
- Post blast safety procedures
- Pre-blast notification and survey
- Blasting safety plan

- Blasting Site security
- Safety requirements for ignition systems
- Safety blasting site preparation
- Blast warning signs/signals
- Safe blasting procedures in accordance with regulatory agencies

Noise

The two main noise sources in the immediate project vicinity include Highway 58 traffic and the Hansen Aggregate Quarry to the northwest. The project would add on- and off-site noise sources to the open space/agricultural setting of the project area and roadways through the residential community of Santa Margarita. These sources include heavy equipment operation and truck traffic. Equipment operations would include the use of a wheel loader, hydraulic excavator and/or bulldozer, and a screening and crushing plant to extract and process granite. Trucks would enter the site from Calf Canyon Highway (Highway 58) and would be loaded with a front-end loader before being weighed and exiting back onto Calf Canyon Highway. The large majority of traffic would travel south on Calf Canyon Highway to Highway 101. This route would involve truck trips through the community of Santa Margarita. Residential uses occur along the proposed truck route near the project site entrance (Calf Canyon Highway) and in greater densities in the Santa Margarita community aligning the El Camino Real stretch of Highway 58. Operations on-site would increase ambient noise levels in the area of the mining potentially causing impacts to sensitive receptors in the vicinity of the project site, as well as truck traffic noise along the haul routes.

According to the project description, operations would occur during daytime hours between 6:00 a.m. to 5:00 p.m. Monday through Friday with up to 198 one-way truck trips per day and 10 employee trips.

The nearest residential unit is located approximately 300 feet southeast of the mine's extraction area near the entrance of the site. This residence is within the project boundaries and is associated with the proposed operations. The closest residence outside the project site is located approximately 1,699 feet away. The existing noise study (Dubbink, 2010) found that daytime noise from the project could exceed 50 dB standards for nearby residences. Blasting would exceed County standards for impulsive noise. Residential uses are also located along the proposed haul route. The impacts of the proposed project upon ambient noise levels experienced by sensitive receptors due to long-term operation of the project (30 years) will be evaluated in the EIR.

The noise analysis will include an assessment of the noise environment in terms of existing noise levels as well as the locations of the nearest noise-sensitive receptors. The impact analysis will assess whether the mining operation and trucking levels would result in significant impacts on these receptors.

The Noise section will be prepared by Brian McCarthy of Envicom Corporation. Mr. McCarthy will rely on technical analyses prepared by Hans Giroux of Giroux and Associates, which will involve the following tasks:

- Conduct a third party review of the applicant prepared noise analysis, Noise Analysis Las Pilitas Rock Quarry (David Dubbink Associates, January 26, 2010).
- Develop a baseline truck traffic noise exposure profile in terms of the CNEL noise metric using the FHWA Model with the latest California vehicle noise curves (CALVENO) based upon project truck traffic volumes.
- Evaluate long-term noise exposure (i.e. 30 years) from material extraction, processing and hauling associated both with trucking activity and operation of heavy equipment.
- Evaluate the Blasting Plan and Vibration Predictions provided in the Gasch & Associates, December 8, 2009 report. Because of both the real and perceived issue of noise and vibration from quarry blasting, there are numerous state and federal regulatory constraints as to the overpressure and vibration that may be generated by such activity. These constraints are expressed in a parameter called a "scaled distance" (the closer the receptor, the tighter the constraint). This limits the amount of allowed explosive, and requires that a specified number of blasts be tested to verify compliance. Our experience has been that compliance with these limits will prevent any structural damage and minimize the nuisance impact. The Blasting Plan will be reviewed for adequacy and compliance with applicable federal, state, and local regulations.
- Determine if any additional analysis is needed to assess special noise issues such as back-up alarms, blasting, and recycled concrete and asphalt crushing.
- Relate project noise impacts to the Noise Element noise/land use compatibility guidelines in the San Luis Obispo County General Plan Noise Element and the County Land Use Ordinance (County, 2008) and other applicable noise exposure regulations.
- Include, revise and/or supplement the mitigation measures provided in the Noise Analysis as necessary to reduce potentially significant noise impacts to less than significant levels.

Energy

The project will consume energy as a result of heavy earthmoving equipment such as a wheel loader, hydraulic excavator and/or bulldozer, and front-end loader. Recycling operations will utilize portable crushing and screening equipment. In addition, truck traffic will consume fuel for the delivery of mined products in the market place, generating 198 truck trips per day. Envicom will evaluate the project in light of CEQA Appendix F: Energy Conservation and in conjunction with the Air Quality analysis.

The Energy section will be prepared by Charles Cohn of Envicom Corporation.

The scope of the Energy analysis will consider the following:

- Detail of energy consuming equipment that would be required for the project.
- Estimate energy requirements of the project based on fuel type.
- Identify energy supplies and the project impacts on those resources.
- Mitigation will be developed as necessary and feasible to reduce wasteful inefficient energy consumption.

Recreation

Since the proposed project is not expected to generate a substantial need for local housing, it is not expected to create a significant need for additional parks, natural areas or other recreational resources based from an increased demand. However, since the Salinas River Trail, a public trail, courses through the southwest corner of the project site, the mining plan and operations will be evaluated to determine whether they would affect the trail alignment.

The Recreation section will be prepared by Charles Cohn of Envicom Corporation.

Recreation analysis would include the following:

- Consult with the County Parks Department to determine whether the alignment would be affected by the proposed mining operations, including the access road.
- Assess view corridors from the trail that could be affected by mining operations.
- Develop mitigation to ensure that trail alignment impacts, if any, are minimized.

Transportation/Circulation

The proposed project is located immediately north of State Highway 58 (Calf Canyon Highway) and would provide a single access point located east of the Salinas River Bridge and west of Park Hill Road, between two existing residential homes. The applicant is proposing to construct a left turn lane for the eastbound traffic turning into the project entrance. Trip generation would include 198 one-way truck trips and 10 employee trips per day when operating at maximum capacity, i.e. 500,000 tons per day. It is anticipated that the majority of trips would travel between the project site and Highway 101 (the main north-south corridor), as most of the market area would be south of Santa Margarita. A traffic impact study was prepared on behalf of the applicant by TPG Consulting, Inc. (May 2009). The study indicates that the majority of truck traffic would use Highway 58, traveling through the residential community of Santa Margarita. The study provides an analysis of several intersections along the proposed haul route, but does not analyze the El Camino Real portion of Highway 58 and Highway 101 intersection. In addition, there is a railroad crossing leading up to this intersection, which is of concern to the California Public Utilities Commission (PUC).

This section of the EIR will assess the potential for traffic congestion, level of service at specified intersections, site distance, and road wear impacts. We will peer review the applicant's traffic study, use the data and analysis in this report to the extent possible, and supplement this analysis as necessary to support the EIR analyses. We understand that the County has explored some alternative truck route alternatives, such as, utilizing a route through the nearby Hansen Aggregate mine and will review this alternative in order to present an assessment of its feasibility in the EIR. Hatch Mott MacDonald (HMM) will provide a traffic study upon which the EIR analysis will be based.

The Transportation Circulation section of the EIR will be prepared by Brian McCarthy and Lisa Ballin, both of Envicom Corporation. Mr. McCarthy and Mrs. Ballin will work closely with HMM and rely on HMM's technical report to prepare the analysis. HMM will review the EIR section to ensure technical consistency.

The HMM traffic study will include the following:

Task 1: Site Visit

Hatch Mott MacDonald staff will perform a site visit to the project access and all study intersections for the project. This site visit will include investigation of traffic and parking regulations, intersection lane configurations, roadway geometry (lane widths, shoulder widths, roadway curvature, etc.), observed traffic operational conditions on the area roadway network (including roadway segments and intersections), conditions of rail crossings, pedestrian and bicycle activity, visibility conditions, field measurements, etc.).

Task 2: Initial Peer Review

A peer review of the 2009 traffic impact analysis for the project and all relevant supplementary letter reports will be conducted. This review will focus on level of service calculation methodologies and assumptions. However, all elements of the study will be reviewed including:

1. Study scope,
2. Existing traffic volume data,
3. Trip generation, distribution and assignment assumptions,
4. Level of service calculation methodologies and assumptions,
5. Existing, Project and Cumulative impacts, and
6. Recommended mitigation measures.

Additional issues that arise from the site visit (Task 1) will also be addressed in the peer review, insofar as they are addressed (or not addressed) in the traffic impact analysis.

A memorandum will be created, summarizing all of the comments and issues identified through the peer review. This memorandum will be submitted to Envicom Corporation for initial review and then to San Luis Obispo County.

Task 3: Peer Review Conference Call

HMM staff will attend, via conference call, a meeting to review the peer review memorandum (from Task 2) with Envicom Corporation and County staff. The intent of this meeting is to answer questions, clarify points, and identify which aspects of the traffic study and supplemental letters, if any, would need to be revised prior to completion of the Draft Environmental Impact Report (DEIR) for the project.

Task 4: Revisions to Traffic Report

We anticipate that San Luis Obispo County will request that HMM make the necessary revisions to the applicant's traffic report. These revisions are anticipated to include changes to the analysis, text edits, and exhibit revisions, amongst other items. Analysis of additional study intersections or roadway segments may also be incorporated into the revised report. A total budget of \$4,163 has been allocated for this task; if additional budget would be required to complete the revisions, we will provide a revised cost estimate.

Note 1: This task assumes that HMM will be provided with various electronic files from the applicant's traffic consultant, including level of service calculation files. A list of specific files will be provided in conjunction with the conference call within Task 4, above. Not having access to these files would require additional budget to perform the work of this task, as many of the files would then have to be re-created from scratch in order to be incorporated into the revised analysis.

Note 2: If additional study intersections or roadway segments are added to this scope of work, existing traffic volumes will be required. This task assumes that such volumes are currently available, either from San Luis Obispo County staff or from the project applicant's traffic consultant. If such data is not available, HMM can collect this data through the authorization of Optional Task identified below. A budget for this data collection effort would be provided in this situation. See Optional Tasks, below, for more information regarding this additional data collection effort.

Task 5: Rail Crossing Analysis

We are aware that the California Public Utilities Commission (PUC) has submitted a letter to the County regarding the railroad crossing near the Estrada Avenue/El Camino Real intersection. This letter asks for a review of project impacts to the crossing. The current traffic report does not address this issue. HMM will perform an evaluation of the new railroad crossing signal warrant contained within the new 2009 Manual on Uniform Traffic Control Devices, in order to determine if the project would trigger signalization of this intersection. Interactions between vehicle queues at the Estrada/El Camino Real intersection and the adjacent railroad crossing will be discussed, including any observations from the site visit under Task 1. We will also evaluate the physical condition of the crossing, including the pavement condition and presence of standard crossing gates and advanced signing and pavement striping.

Task 6: Review of Roadway Suitability for Project Traffic

Trucks from the project would be traveling along the state highway system, including State Route 58. This task would involve a cursory review of the suitability of this roadway to accommodate truck traffic from the project, including roadway geometry, safety, and maintenance issues. Likely topics for this review would include presence (or non-presence) of paved shoulders and sharp horizontal and vertical curves, pedestrian and bicycle activity at the crosswalk near Santa Margarita Elementary School and Santa Margarita Community Park, and methods for the study project to aid Caltrans in maintaining good pavement conditions along the project route to US 101.

Note: The primary basis for the conclusions within this task will be the data and observations collected during the site visit under Task 1, above. More detailed analysis of the pavement maintenance issues can be performed with the authorization of the Optional Task described below.

Task 7: Alternative Truck Routes

The applicant's proposed truck route would utilize solely State Route 58 between the project site and US 101. This route would take the project through Santa Margarita and past an elementary school. HMM would investigate potential alternative truck routes that could be utilized by project traffic, including routes that would connect into neighboring Atascadero or avoid Santa

Margarita altogether. A total of three alternative routes would be qualitatively reviewed for potential use by project truck traffic, focusing on the potential benefits and drawbacks of each alternative. The most feasible alternative would then be quantitatively analyzed and compared with the applicant's proposed route, to determine the best route for the project trucks.

The quantitative analysis of the most feasible alternative project truck route would involve level of service analysis under the same analysis scenarios as identified within the applicant's traffic report, namely Existing, Existing Plus Project, 2030 No Project, and 2030 With Project conditions. Channelization and traffic control warrants will be evaluated. Project impacts and associated mitigations will be identified.

Note: If additional study intersections or roadway segments are added to this scope of work, existing traffic volumes will be required. This task assumes that such volumes are currently available, either from San Luis Obispo County staff or from the project applicant's traffic consultant. If such data is not available, HMM can collect this data through the authorization of the Optional Task described below. A budget for this data collection effort would be provided to you in this situation. See Optional Tasks, below, for more information regarding this additional data collection effort.

Task 8: Documentation

HMM will update the applicant's traffic report text, exhibits, and appendix to reflect the revised analysis, including appropriate graphics. The revised traffic report will initially be prepared as an administrative draft report for review by Envicom and San Luis Obispo County staff. The report will be revised as per these comments and a final report will be provided for inclusion in the EIR.

Task 9: Assistance with Environmental Report

HMM staff will assist with the incorporation of the traffic study and supplemental letters into the EIR. This will include both 1) interpretations of the report contents; and 2) review and feedback regarding the draft circulation section of the traffic report, including mitigation descriptions.

Optional Transportation Tasks

Pavement Evaluation: Complementary analysis to Task 7, a more comprehensive pavement analysis would be performed. Vehicle classification counts would be performed over a seven-day period at four different locations on State Route 58 along the proposed project truck route. From this data, and utilizing the project trip generation and future traffic forecasts from the traffic report, a Traffic Index value would be derived. The Traffic index value would determine the level of pavement and structural improvements that would be needed along State Route 58 to accommodate the project truck traffic over the next 20 years. This task will only be performed with prior authorization from the County. Note: An additional recommended pavement analysis would involve an evaluation of the current pavement condition. This would require the hiring of a geotechnical engineer specializing in pavement impacts. If the County is interested in pursuing this analysis, we can provide the names of various firms that can perform this work. The geotechnical engineer's report, in combination with the Traffic Index value, would allow the County and Caltrans to develop a detailed pavement maintenance plan for the State Route 58 corridor that would offset any pavement impacts associated with the project.

Additional Data Collection and/or Field Work: Any necessary additional data collection could be performed for this project. Specifically, this includes additional traffic volume data collection or site visits associated with either the traffic report revisions in Task 4 or the quantitative alternative truck route analysis within Task 7. HMM has traffic count and data collection staff that can perform this work quickly and efficiently upon authorization. As the exact number or type of data collection (intersection traffic counts, segment traffic counts, field measurements, field observations, etc.) is not known as this time, a budget for this work is not provided within this proposal. However, a budget can be provided once the exact level of additional data collection and/or field work is known. This task will only be performed with prior authorization from the County.

Conceptual Design Plans for Recommended Improvements: HMM would develop conceptual designs and cost estimates for the various improvements recommended within the revised traffic report. HMM staff has extensive experience in the design of intersection improvements, signals (including railroad preemption), and traffic calming. Budgets for this work can be provided upon request, and would be customized for each improvement and the level of design requested (conceptual plans, Plans Specifications and Estimates (PS&E), etc.). This task would only be performed with prior authorization from the County.

Land Use

The proposed project site is within the Rural Lands (RL) land use category, and in the Extractive Resource Area 1 (EX1), as defined by Land Use Ordinance Section 22.14.050. The proposed project includes the recycling of asphalt and concrete, which could be imported to the site, processed, and resold. Recycling is not specifically permitted within the RL zone unless it is an ancillary use to a waste disposal facility (Section 22.06.030). However, the applicant is requesting an exception to the special use standards under Section 22.30.020(D) to allow concrete and asphalt recycling as part of its mining operation. Envicom will provide an analysis of the request to permit recycling as part of the Conditional Use Permit. A consistency analysis with the findings required in Section 22.30.020(D) will be prepared.

The land use section will refer the reader to the applicable sections of the EIR for analysis and discussion of issues related to land use compatibility, e.g., aesthetics, traffic, air quality, and noise.

The Land Use consistency analysis will be prepared by Brian McCarthy of Envicom Corporation.

VI. COST ESTIMATE

The cost for the scope of work identified in this proposal is provided in **Table 1** and has been prepared in accordance with Envicom Corporation's 2010 professional fee schedule (attached following Table 1). The total base cost for the EIR is **\$238,030.40**. This cost is based upon the following set of assumptions:

- The project description does not substantially change subsequent to initiating the Administrative Draft EIR.
- Reproduction costs are limited to the number of copies specified in the RFP.
- A total of 100 hours for Response to Comments have been included in our estimate. Upon completion of the public review period, we will review the comments received in cooperation with the County and determine whether this level of effort, along with the level of effort budgeted for other FEIR tasks, is sufficient.
- Costs may be shifted among line items as necessary.
- Additional work beyond tasks included herein would be subject to mutual agreement of scope and costs.
- Travel time to meetings will only be billed for one direction of travel.
- This cost proposal is valid for 60 days.

TABLE 1
Oster (Las Pilitas Quarry) CUP and Reclamation Plan EIR
Cost Estimate

DESCRIPTION	STAFF	HOURS	RATE	COST
Labor Costs				
Task 1	Preparation of Administrative Draft EIR			
1.1 Project Description / EIR Outline	Lisa Ballin Brian McCarthy	8 24	150.00 100.00	1,200.00 2,400.00
1.2 Environmental Setting (including Related Projects)	Brian McCarthy Charles Cohn	10 8	100.00 75.00	1,000.00 600.00
1.3 EIR Impact Analyses				
<i>Aesthetics</i>	Jack Blok, Ph.D Erin Everts	54 8	100.00 80.00	5,400.00 640.00
<i>Agricultural Resources</i>	Jack Blok, Ph.D	36	100.00	3,600.00
<i>Air Quality/Global Climate Change</i>	Brian McCarthy	32	100.00	3,200.00
<i>Biological Resources</i>				
<i>Plant and Wildlife Surveys and Mapping</i>	Carl Wishner Jim Anderson	24 32	130.00 90.00	3,120.00 2,880.00
<i>EIR Analysis</i>	Carl Wishner Jim Anderson Erin Everts	12 48 16	130.00 90.00 80.00	1,560.00 4,320.00 1,280.00
<i>Cultural Resources</i>	Brian McCarthy	30	100.00	3,000.00
<i>Geology and Soils</i>	Jim Anderson	40	90.00	3,600.00
<i>Hydrology, Water Quality, and Water Supply</i>	Jack Blok, Ph.D	28	100.00	2,800.00
<i>Hazards</i>	Brian McCarthy Brian McCarthy	24 34	100.00 100.00	2,400.00 3,400.00
<i>Noise</i>	Charles Cohn	24	75.00	1,800.00
<i>Energy</i>	Charles Cohn	20	75.00	1,500.00
<i>Recreation</i>	Lisa Ballin	16	150.00	2,400.00
<i>Transportation/Traffic</i>	Brian McCarthy	32	100.00	3,200.00
<i>Land Use</i>	Brian McCarthy	24	100.00	2,400.00
1.4 – Evaluation of Alternatives	Lisa Ballin Brian McCarthy Erin Everts Jack Blok, Ph.D Jim Anderson	22 46 8 8 10	150.00 100.00 80.00 100.00 80.00	3,300.00 4,600.00 640.00 800.00 800.00
1.5 – Other Required EIR Sections				
<i>Introduction/Executive Summary</i>	Charles Cohn	14	75.00	1,050.00
<i>Growth Inducing Impacts</i>	Charles Cohn	6	75.00	450.00
<i>Irreversible/Irretrievable Commitments of Resources</i>	Charles Cohn	4	75.00	300.00
<i>Other Sections (TOC, References, Contacts, Preparers, Technical Appendices)</i>	Renee Mauro	8	60.00	480.00
1.6 - Mitigation Monitoring Plan	Brian McCarthy	32	100.00	3,200.00
1.7 – Internal Review/Quality Control	Lisa Ballin	50	150.00	7,500.00
1.8 – Document Preparation/Production of Admin DEIR				
	Lisa Ballin Brian McCarthy Renee Mauro (WP/Production) Erin Everts (GIS) Chris Boyte (Graphics)	8 16 32 28 30	150.00 100.00 60.00 80.00 80.00	1,200.00 1,600.00 1,920.00 2,240.00 2,400.00
Task 2	Preparation of Draft EIR (includes Screencheck)			
	Lisa Ballin Brian McCarthy Renee Mauro (WP/Production) Boyte/ Everts (Graphics/GIS)	12 20 18 16	150.00 100.00 60.00 80.00	1,800.00 2,000.00 1,080.00 1,280.00
Task 3	Preparation of Administrative Final EIR			
<i>Response to Comments</i>	Envicom Corporation Team Brian McCarthy Lisa Ballin	100 26 14	110.00 100.00 150.00	11,000.00 2,600.00 2,100.00
<i>EIR Revisions</i>				
<i>Document Preparation</i>	Renee Mauro (WP/Production) Boyte/Everts (Graphics/GIS)	20 18	60.00 80.00	1,200.00 1,440.00
Task 4	Preparation of Final EIR (includes Screencheck)			
	Lisa Ballin Brian McCarthy Renee Mauro (WP/Production) Boyte/Everts (Graphics/GIS)	14 26 20 20	150.00 100.00 60.00 80.00	2,100.00 2,600.00 1,200.00 1,600.00
Task 5	Management/Coordination (Assumes up to 12 Month Project Duration)			
	Lisa Ballin Brian McCarthy Renee Mauro Roberta Ryniewicz	24 50 28 12	150.00 100.00 60.00 70.00	3,600.00 5,000.00 1,680.00 840.00
Task 6	Attend Meetings and Public Hearings Includes Kick-off Meeting, five (5) other meetings, and four (4) Public Hearings and one hearing presentation Preparation of one hearing presentation			
	Lisa Ballin Brian McCarthy Brian McCarthy	40 50 24	150.00 100.00 100.00	6,000.00 5,000.00 2,400.00
			EIR Labor Costs Subtotal	\$146,700.00
Direct Costs				
Printing/Reproduction				
<i>Draft Project Description and EIR Outline</i>	4 copies/30 pages (no color)			18.00
<i>Administrative Draft EIR</i>	4 copies/200 pages (17 color)			283.20
<i>Administrative Draft EIR Tech Append</i>	4 copies/300 pages (no color)			180.00
<i>Draft EIR</i>	20 copies/200 pages (17 color)			1,416.00
<i>Draft EIR Tech Append</i>	30 copies/300 pages (no color)			1,350.00
<i>Administrative Final EIR</i>	4 copies/300 pages (17 color)			343.20
<i>Administrative Final EIR Tech Append</i>	4 copies/300 pages (no color)			180.00
<i>Final EIR</i>	30 copies/300 pages (17 color)			2,574.00
<i>Final EIR Tech Append</i>	20 copies/300 pages (no color)			900.00
Binding				120.00
Materials/General Reproductions				1,600.00
Overnight Mail				380.00
Travel Expenses/Misc. Materials				1,800.00
Communications (Fax, Phone, etc.)				2,934.00
			EIR Direct Costs Subtotal	\$14,078.40
			TOTAL EIR COST	\$160,778.40
Peer Review/Technical Studies				
Visual Simulations (model and four stills with renderings)			<i>Interacta Inc.</i>	13,600.00
Air Quality/GHG			<i>Giroux and Associates</i>	2,500.00
Cultural Resources			<i>BCR Consulting</i>	1,900.00
Geology and Soils			<i>Wilson Geosciences</i>	14,075.00
Hydrology, Water Quality, and Water Supply			<i>Balance Hydrologics</i>	19,527.00
Noise			<i>Giroux and Associates</i>	3,250.00
Transportation/Traffic			<i>Hatch Mott MacDonald</i>	22,400.00
			Technical Studies Subtotal	\$77,252.00
			TOTAL EIR INCLUDING TECHNICAL STUDIES	238,030.40
Optional Tasks				
Biological Resource Protocol Surveys - If it is determined that protocol level surveys are required, a separate additional cost would be submitted for County approval once the species and scope of work are identified.				
Biological Resources - Additional Survey Day During the Spring Season				\$2,640.00
Biological Resource Jurisdictional Delineation (not anticipated to be necessary)				\$2,880.00
Air Quality Health Risk Assessment Modeling includes AERMOD model and HARP software				\$3,300.00
Additional photosimulations			ea.	\$2,530.00
Video Drive-by, Stop Action Video, 3D Site Model: Separate additional costs for each would be submitted for County approval following detailed field survey				TBD
Groundwater Replenishment Mitigation Program				\$4,000-\$14,000
Transportation/Traffic - Various Potential Optional Tasks Outlined in Scope of Work				TBD
Charette Process re: Truck Traffic Issues and Alternatives				\$14,820-\$23,620
Findings (50 hours at \$100/hour)				\$5,000.00
Attendance at additional meetings and hearings and preparation of presentations beyond those assumed above would be charged on a time and materials basis				
Assumptions:	This cost estimate assumes that the project description does not substantially change once the impact analyses are underway.			
	Cost estimates for tasks such as responses to public comments on the DEIR and County comments reflect our best estimate based on our understanding of the project and EIR scope. However, these costs cannot be fully known until the comments are received and therefore, there may be a need to reevaluate these estimates at that time.			
	Costs may be shifted among line items as necessary.			