SMP-30 Revised Use Permit
Sunol Valley Aggregate Quarry Project

Response to Comments / Final Environmental Impact Report

SCH No. 2011102051

Prepared for:

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SMP-30 REVISED USE PERMIT FINAL EIR

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Introduction

Purpose of the Final EIR

This Environmental Impact Report (EIR) is an informational document prepared by the County of Alameda, as Lead Agency, containing environmental analysis for public review and for County decision-makers to use in their consideration of approvals related to the proposed Revised SMP-30 Surface Mining permit as proposed by Oliver de Silva, Inc. (ODS) the current leaseholder/operator of the Sunol Valley Aggregate Quarry.

On April 2, 2012 the County of Alameda released a Draft Environmental Impact Report (Draft SEIR) for the Revised SMP-30 Surface Mining Permit Project. The 45-day public review and comment period on that Draft EIR ended on May 16, 2012. During the public review and comment period, the County of Alameda held a public hearing on May 15, 2012 to receive oral comments on the Draft EIR. Additionally, written comments have been received by the County, commenting on the Draft EIR.

This Response to Comments document, together with the April 2nd Draft EIR constitute the Final EIR for the Project. The text of the April 2012 Draft EIR is not included with this Response to Comments document, but is incorporated by reference as part of this Final EIR. Following the required 10 day agency review of this Response to Comments document, the County of Alameda Planning Commission will consider certification of the Final EIR, certifying that it adequately discloses the environmental effects of the proposed Project and that the Final EIR has been completed in conformance with the California Environmental Quality Act (CEQA). Before the Planning Commission may consider approval of the discretionary actions needed to approve the Project, it must independently review and consider the information contained in the Final EIR.

The County of Alameda has prepared this document pursuant to CEQA Guidelines Section 15132, which specifies that the Final EIR shall consist of:

- The Draft EIR or a revision of that Draft
- A list of persons, organizations, and public agencies commenting on the Draft EIR
- Comments and recommendations received on the Draft EIR, either verbatim or in a summary
- The response of the Lead Agency to significant environmental points raised in the review process
- Any other information added by the Lead Agency

This Final EIR incorporates comments from public agencies and the general public and contains the Lead Agency's responses to those comments.

No New Significant Information

If significant new information is added to an EIR after notice of public review has been given, but before certification of the Final EIR, the lead agency must issue a new notice and re-circulate the Draft EIR for further comments and consultation.[1]

Although this Response to Comments document may contain corrections or clarifications to information presented in the Draft EIR, none of these corrections or clarifications constitute "significant new information" as defined under Section 15088.5 of the CEQA Guidelines. Specifically:

- No new significant environmental impacts have been identified as resulting from the Project or from a new mitigation measure proposed to be implemented.
- No substantial increase in the severity of a previously identified environmental impact has been identified as resulting from the Project or from a new mitigation measure, and no additional mitigation measures are necessary, reasonable or feasible to reduce such impacts to a level of insignificance.
- There is no feasible alternative or mitigation measure considerably different from others previously analyzed in the Draft EIR that would clearly lessen the significant environmental impacts of the Project that the Project's proponents decline to adopt.
- The Draft EIR was not so fundamentally or basically inadequate or conclusory in nature that meaningful public review and comment were precluded.

Information presented in the Draft EIR and this document support the County's determination that recirculation of the Draft EIR is not required.

Organization of the Final EIR

This Final EIR contains information about the proposed Project, supplemental environmental information, and responses to comments that were raised during the public review and comment period on the Draft EIR. Following this Introduction chapter, the document is organized as described below.

- Chapter 2 – Executive Summary: This chapter summarizes the proposed Project, including any changes made since publication of the Draft EIR. It also provides a summary of impacts and mitigation measures.
- Chapter 3 –Responses to Comments: This chapter includes a list of all agencies, organizations and individuals that submitted written comments on the Draft EIR during the public review and comment period, and/or that commented at the County's public hearing on the Draft EIR. This chapter also contains each of the comment letters received on the Draft EIR and summaries of the comments made at pubic hearings, and presents individual responses to the specific comments raised.

  Chapter 4 - Changes to the Draft EIR: This chapter contains text changes and corrections to the Draft EIR that have been initiated by the Lead Agency or that have resulted from response to comments received on the Draft EIR.

Use of the Final EIR

Pursuant to CEQA, this is a public information document for use by governmental agencies and the general public. The information contained in this Final EIR is subject to review and consideration by the

[1] *Laurel Heights Improvement Association v. Regents of the University of California*, 6 Cal 4th 112 (1993)

County of Alameda and any other responsible agency prior to the County's decision to approve, reject or modify the proposed Project. The Alameda County Planning Commission must ultimately certify that they have reviewed and considered the information in the EIR and that the EIR has been completed in conformity with the requirements of CEQA before making any decision of the proposed Project.

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Executive Summary

Background

Site

The approximately 381-acre Project site is located at 6527 Calaveras Road, approximately one mile south of I-680 in the Sunol Valley portion of unincorporated southern Alameda County. The site is bounded by San Antonio Creek to the north, Alameda Creek to the west and Calaveras Road frontage to the east. To the immediate north across San Antonio Creek and to the immediate west across Alameda Creek is the Lehigh-Hanson Quarry. The site is included within two separate Alameda County Assessor's parcels; portions of APN 096-0080-008 and APN 096-0375-011-05.

The Project site consists of a currently active quarry operating on 323 acres, and a proposed expansion area of approximately 58 acres along the southeast boundary of the current quarry.

Existing Context

The currently active quarry at the site, known as the Sunol Valley Aggregate Quarry, is an active sand and gravel mining operation comprised of active excavation areas, maintenance and operations buildings, silt/holding basins, processing facilities and other outdoor equipment and materials storage areas. The existing plant at the quarry site is actively sorting and producing various aggregate materials, and the material product is being hauled to various locations throughout the Bay Area.

The Project site is located within a portion of the San Francisco Public Utilities Commission's (SFPUC) Alameda Watershed lands. These SFPUC-owned lands include approximately 36,800 acres of the 47,000 acre watershed that is tributary to San Antonio and Calaveras Reservoirs, as well as lands which drain into Alameda Creek. The Sunol Valley Aggregate Quarry site has been leased to several quarry operators and used for sand and gravel extraction for more than 50 years.

The current quarry activities at the Project site are a permitted use pursuant to County Surface Mining Permit 30 (SMP-30), which was approved by Alameda County in 1992. This current permit authorizes the mining of sand and gravel within 323 acres of the Project site to a depth of up to 140 feet. Quarrying operations are permitted through June 1, 2021 or upon completion of reclamation, whichever occurs first.

In 2010, the SFPUC executed a quarry lease agreement with Oliver de Silva, Inc. (ODS), the Project applicant on the currently active quarry site of 323 acres permitted under Alameda County SMP-30. Subject to Project approval by Alameda County and lease approvals by the SFPUC, the lease will be amended to include an additional approximately 58-acre area along the southeast boundary of the current SMP-30 site. As the new leaseholder/operator of the Sunol Valley Aggregate Quarry, ODS has now applied to Alameda County for a Revised SMP-30 mining permit (i.e., the Project).

Project Description

Although resources are available and the site could support additional long-term production of construction aggregates under its existing permit (SMP-30) through 2021, the adjacent 58-acre parcel has

become available, providing opportunity to increase aggregate reserves and to expand the quarry basin, ultimately to be used for water storage.

The overall objectives of the proposed Project (Revised SMP-30) are to:

- expand the overall production potential of the quarry by increasing the area under permit by approximately 58 acres and deepening the depth of excavation;
- to extend the expiration date of the mining permit to 30 years after approval of the modification; and
- to add additional ancillary uses at the site including an asphalt batch plant and a concrete plant.

Proposed Quarry and Plant Operations

Raw material (sand and aggregate resource) extraction activity, crushing and sorting at the Project site will generally continue in the same manner as occurs today, as more fully described in Chapter 3: Project Description. However, the Revised SMP-30 permit (the Project) proposes to deepen the permitted excavation depth from 140 below ground surface, to at least 225 feet below ground surface and potentially to a maximum depth of 400 feet below ground surface. Under current SMP-30 permit conditions the quarry is estimated to have approximately 12 million tons of remaining yield. With the 58 additional surface acres and an increased depth, sand and gravel production from the quarry could increase up to approximately 60 million tons of saleable aggregate.

Currently, all sand and gravel materials produced from the quarry are hauled to separate locations for use in construction projects and/or used in the production of Portland cement concrete and asphalt. The proposed Project includes plans for adding an on-site asphalt concrete plant and a ready-mix concrete plant at the Project site.

The proposed new asphalt batch plant will use aggregate materials directly from the quarry operations, mix them with asphalt cement, and heat the mix in the batch plant for production of asphalt. The asphalt would be hauled to various construction sites throughout the region via truck. It is estimated that the asphalt batch plant may produce up to 1.0 million tons of hot-mix asphalt per year, including recycled asphalt products.

The proposed new concrete plant will use aggregate materials directly from the quarry and mix them with water from the on-site water supply as well as with Portland cement and other chemicals for production of Ready-mix concrete. The concrete can be custom-made at the batch plant to suit different construction application needs, and then delivered to the construction site in truck mixers. It is estimated that the concrete batch plant may produce up to 250,000 cubic yards of mixed concrete per year.

The future annual yield of construction aggregate, asphalt and concrete produced at the Project site will continue to be highly dependent upon market demand for these products by the construction industry. However, with the changes proposed under the Project it is possible that the quarry may increase its annual volume of extracted materials from its regularly recurring peak production of approximately 1.1 million tons per year, to nearly 3 million tons per year (up to 1 million tons to be used in the production of asphalt, up to 0.5 million tons to be used in the production of up to 250,000 cubic yards of concrete, and up to 1.5 million tons of saleable raw aggregate).

Project Phasing

Phase I

Upon approval of the Project, the following activities would occur under Phase I operations:

- Certain existing water transmission lines and overhead power lines traversing the site will be relocated to an alignment parallel to Calaveras Road in order to fully and safely access the expanded quarry pit.
- A soil/bentonite slurry cutoff wall will be installed along the northerly portion of Alameda Creek, and another slurry cutoff wall installed along a portion of San Antonio Creek to prevent creek in-flow into the quarry pit and basins.
- The current quarry pit (plus the 58-acre expansion site) will be excavated to a minimum depth of 225 feet, with a potential maximum depth of 400 feet. Side slopes would be maintained at a 2:1 horizontal to vertical ratio.
- Plant operations such as washing, crushing and sorting of sand and aggregates will continue at the existing plant site, but certain outdated or under-efficient plant equipment may be replaced with modernized, movable sand and aggregate processing facilities. This newer equipment (which can/likely will be replaced under authority of the current SMP-30 permit) would enable mining of the entire site as proposed.
- The existing plant site will be expanded to accommodate the proposed asphalt and concrete batch plants, as well as ancillary structures such as a Quality Control lab, an additional small office and truck scales. On-site circulation throughout the plant will be improved to better accommodate truck circulation.
- Ingress into the site will be maintained at the existing driveway off of Calaveras Road. Egress may continue from the existing driveway, but a new "south gate" exit may be installed in Phase I, further south along Calaveras Road, as an exit-only. With the new south gate, the existing driveway would become an entrance-only.

Phase II

Once the existing quarry pit (and the 58-acre expansion area) has been excavated to its full depth, Phase II of the Project will be initiated, including the following:

- Material wastes (or fines) that are generated during the washing, crushing and sorting of sand and aggregates of sand and aggregates in Phase I will have been stored on site. These fines will be replaced back into the south end of the quarry pit as engineered fill, creating a bench within the quarry with a surface elevation of approximately 50 feet below ground surface.
- All of the Phase I plant equipment (the washers, crushers, sorters, the asphalt and concrete batch plants, and the weigh station, office and scales) will be relocated onto this new bench within the old quarry pit.
- Once the equipment has been moved, the north end of the quarry pit will be expanded so that the former plant site can be excavated.
- Ingress and egress to the Phase II (long-term) plant site would be from the new "south gate" installed during Phase I.

Phase III - Reclamation

The proposed Project includes updating the currently approved SMP-30 Reclamation Plan to incorporate current reclamation standards pursuant to state law. The proposed updated Reclamation Plan will include the following:

- Ultimate reclamation efforts will allow use of the completed quarry pit for SFPUC water storage. At completion, the expanded quarry pit is expected to result in approximately 23,000 acre feet of

water storage at completion. Additional storage could be provided by mining deeper than 225 feet, as may be feasible.

- Native plants will be planted along Calaveras Road to minimize visual impacts. Species to be used in revegetation are proposed to be commercial erosion control species that have a demonstrated high rate of success on surfaces created from processed fines. Species may be modified for consistency with the Sunol Valley Restoration Plan.
- The stream banks along reaches of Alameda Creek and San Antonio Creek adjacent to/fronting the Project site will be re-vegetated.
- Future public access trails through the Project area, as may be desired by the East Bay Regional Park District, will be accommodated. Trails may be accommodated during Phase I and/or Phase II operations if found to be feasible and practical.

Conservation Plan

Subject to Project approval by Alameda County and lease approvals by the SFPUC, the following conservation measures are proposed to be implemented to enhance habitat for special status species in the vicinity of the Project site.

- Both banks of Alameda Creek and both banks of San Antonio Creek adjacent to the Project site will be restored with native vegetation, thus contributing to the SFPUC's efforts toward restoration of a more natural stream function that is compatible with and enhances habitat quality in these stream reaches.
- The Project applicant will contribute funds toward restoration planning for the reach of Alameda Creek in the Sunol Valley; will contribute funds toward a study of the geomorphology of Alameda Creek; will financially support a Sunol Valley Restoration Plan (a separate planning and restoration effort initiated by the SFPUC to include streambed repair, grade stabilization, riparian re-vegetation, migratory fish passage, and fish habitat enhancement of the Alameda Creek); and financially supporting Alameda County Flood Control and Water Conservation District (ACFC&WCD) projects intended to help restore steelhead trout to Alameda Creek.

Summary of Impacts and Mitigation Measures

The following **Table 2-1**: Summary of Impacts and Mitigation Measures, provides a summary of potential environmental impacts, recommended mitigation measures, and the resulting level of significance after implementation of mitigation measures for each of the currently proposed Project's effects on historic landscape and aesthetics.

Table 2-1: Summary of Project Impacts and Mitigation Measures for the Revised SMP-30 Sunol Quarry Project

Potential Environmental Impacts	Mitigation Measures	Resulting Level of Significance
Land Use Policy		
Impact Land Use-1 (Physically Divide an Established Community): The proposed Project is not located in immediate proximity to any established community, and expansion and operation of the Project as proposed would not result in the physical division of an existing community.	None required.	No impact.
Impact Land Use-2 (Land Use Compatibility / Change in Environment): The proposed Project would not be incompatible with surrounding land uses and would not result in a substantial land use change in the surrounding environment.	None needed.	LTS
Impact Land Use 3 (Conflicts with Land Use Plans and Policies): The proposed Project would not conflict with applicable land use plans and policies adopted for the purpose of avoiding or mitigating an environmental effect.	None required.	LTS
Impact Land Use-4 (Habitat and Natural Community Conservation Plans): The proposed Project would not result in a fundamental conflict with any applicable habitat conservation plan or natural community conservation plan.	None required.	No impact.
Cumulative Impact Land Use-5: The proposed Project, in combination with other past, present and reasonably foreseeable future projects, would not result in a cumulatively significant physical	None required.	LTS

Table 2-1: Summary of Project Impacts and Mitigation Measures for the Revised SMP-30 Sunol Quarry Project

Potential Environmental Impacts	Mitigation Measures	Resulting Level of Significance
division of an existing community, would not present a cumulative conflict with adjacent land use, would not present a cumulatively significant conflict with land use policies, and would not present a cumulatively significant conflict with any applicable habitat conservation plan or natural community conservation plan.		
Aesthetics		
Impact Aesthetics-1 (Scenic Vistas): The Project is located in an area visible in scenic vistas from a number of surrounding vantage points. Although implementation of the Project would change existing views of the Project site from these vantage points, the Project would not substantially adversely affect these scenic vistas.	None needed.	LTS
Impact Aesthetics-2 (Visual Resources from the Scenic Highway): The Project would not substantially damage scenic resources such as trees, rock outcroppings or historic buildings within a state-designated Scenic Highway.	None needed.	LTS
Impact Aesthetics-3 (Visual Character and Quality of the Site): The Project would not substantially damage scenic resources along the locally designated scenic route on Calaveras Road, nor would it substantially degrade the existing visual character or quality of the site and its surroundings.	None needed.	LTS
Impact Aesthetics-4 (Light and Glare): The Project would introduce new sources of light which could substantially and adversely affect	**MM Aesthetics-4 (Light and Glare): Night Lighting**. The Permittee shall retain a professional lighting consultant to design a lighting plan for the site. The lighting plan shall ensure that night time lighting and security lighting is placed so that it is no higher than necessary to illuminate the area of	LTS

Table 2-1: Summary of Project Impacts and Mitigation Measures for the Revised SMP-30 Sunol Quarry Project

Potential Environmental Impacts	Mitigation Measures	Resulting Level of Significance
nighttime views in the area.	security concern, and the lighting shall be directed toward the area. Under no circumstances shall areas beyond the Project site boundaries be directly illuminated nor shall general lighting radiate above the horizontal, but shall be shielded to illuminate only the area of concern. a) Any lighting placed on areas nonessential for security or active operations shall be placed on a motion detector circuit so illumination only occurs as necessary. b) Any lighting for operations in the quarry pit shall be placed as low into the pits as possible. c) Monitoring shall include occasional inspection of night time conditions by County staff to ensure that lighting is directed toward the area of concern and that areas beyond the site boundaries are not directly illuminated d) The Permittee shall immediately respond to complaints about excessive night lighting.	
Cumulative Impact Aesthetics-5: Implementation of the Project, combined with other past, present, existing, pending and reasonably foreseeable projects could result in significant adverse changes to scenic resources and in the scenic character of the area.	**MM Aesthetics-5: Calaveras Road Landscape Plan**. The Permittee and the County shall re-assess the Landscape Planting, Irrigation and Maintenance Plan required pursuant to the 1992 SMP-30 Conditions of Approval for the landscape buffers along Calaveras Road to determine what additional plantings are necessary to achieve the condition's objectives of visually filtering and softening views of the site. The Permittee shall prepare a detailed landscape and planting plan for the Calaveras Road landscape buffers which shall include provisions for additional tree plantings consistent with the following measures: a) The visual screen shall be dense enough to filter views from Calaveras Road; b) Trees shall be planted subject to the approval of the Community Development Director; c) There shall be a preference for native species. Different species or tree placement schemes may be used if approved in writing by the Community Development Director; if alternative species are selected, they shall be non-invasive. d) Trees shall not interfere with water or electrical transmission lines; e) A monitoring plan with an implementation schedule shall be prepared and submitted to the Community Development Director for approval within 180 days of approval of Revised SMP-30, including SFPUC lease approvals. The plan shall include the provision that the successful growth and health of trees shall be monitored by the Community Development Agency during their annual review and five year review, or as needed to ensure its success as a visual filter. If proved unsuccessful, then Permittee shall replant with the same or different species as approved	LTS

Table 2-1: Summary of Project Impacts and Mitigation Measures for the Revised SMP-30 Sunol Quarry Project

Potential Environmental Impacts	Mitigation Measures	Resulting Level of Significance
	by the Community Development Director.	
Air Quality		
Impact AQ-1 (Fugitive Dust): Construction of the Project would not result in fugitive dust-related air quality impacts.	None needed. Compliance with Bay Area Air Quality Management District (BAAQMD) regulatory requirements during construction activity results in less than significant impact.	LTS
Impact AQ-2 (Construction Impacts: Criteria Pollutants): Construction-related criteria air pollutant emissions from the Project would not violate an air quality standard or substantially contribute to an existing or projected air quality violation.	None needed.	LTS
Impact AQ-3 (Construction Impacts: Toxic Air Contaminants): Construction -related air pollutant emissions from the Project would not expose sensitive receptors to substantial concentrations of toxic air pollutants or respirable particulate matter.	None needed.	LTS
Impact AQ-4 (Operational Impacts: Criteria Pollutants): Criteria air pollutant emissions generated during operation of the Project could violate an air quality standard or substantially contribute to an existing or projected air quality violation.	US EPA and California ARB emissions standards will result in a reduction in emissions (including the emission of NOx) from the on-road trucking fleet over the duration of the Project. The following mitigation measure is recommended to further reduce or offset these emissions to less than significant levels: **Mitigation Measure AQ-4: NOx Emissions Monitoring and Reduction Plan**. Upon approval of the Project, the Permittee shall initiate implementation of a NOx Monitoring and Reduction Plan (NOx Plan). a) Throughout the first year of operation and then subsequently throughout each following year, the Permittee shall prepare an annual audit of the total aggregate, concrete and asphalt production from the Project. Based on that audit, the Permittee shall prepare a calculation of all Project-related NOx emissions from all Project sources including the aggregate plant, the concrete plant,	LTS

Table 2-1: Summary of Project Impacts and Mitigation Measures for the Revised SMP-30 Sunol Quarry Project

Potential Environmental Impacts	Mitigation Measures	Resulting Level of Significance
	the asphalt plant, on-site off road equipment and mobile sources (i.e., haul trucks). This calculation shall be used to compare the Project's actual annual NOx emissions, as a net increase over the baseline emissions established in the EIR, to the applicable significance threshold. Beginning in the first year (through June 2013), if the total annual aggregate production rate does not exceed 1.5 million tons, the threshold for NOx emissions is not expected to be exceeded and no further emission calculations or mitigation would be required for that year. In subsequent years, new emission standards promulgated by the US EPA and California Air Resources Board are expected to result in a substantial reduction in NOx emissions from the on-road truck fleet. With implementation of ARB emission standards by year 2016, if the annual total annual aggregate production rate does not exceed 2.25 million tons, the threshold for NOx emissions are not expected to be exceeded and no further emission calculations or mitigation would be required for that year. With implementation of ARB emission standards by year 2020, the thresholds for NOx emissions is not expected to be exceeded even at 3.0 million tons of total aggregate production per year (the Project maximum), and no further emission calculations or mitigation would be required. b) If the Project's NOx emissions, measured as the net increase over the EIR-established baseline, exceed the applicable threshold, the NOx Plan shall demonstrate how the Project will reduce or off-set those net emissions exceeding the threshold. Reductions may be achieved by any combination of, but not limited to the following: replacing or retrofitting engines for on-site rolling stock or haul trucks, reducing overall production rates at the Project site so as to not exceed the threshold, providing off-site compensation by reducing NOx emissions elsewhere in the air basin as a "credit" against project emissions, and/or purchasing NOx offset credits. For example, the Permittee could off-set their emissions through the Bay Area Air Quality Management District's (Air District) Carl Moyer	

Table 2-1: Summary of Project Impacts and Mitigation Measures for the Revised SMP-30 Sunol Quarry Project

Potential Environmental Impacts	Mitigation Measures	Resulting Level of Significance
	Memorial Air Quality Standards Attainment Program (CMP) or other Air District emission reduction incentive programs. Under this example, the Permittee would provide funding for the emission reduction projects in an amount up to the emission reduction project's cost-effectiveness limit set by the California Air Resources Board (ARB) for the CMP during the year that the emissions from material hauling are emitted, and the funding would be used to fund projects eligible for funding under the CMP guidelines or other Air District incentive programs meeting the same cost-effectiveness threshold that are real, surplus, quantifiable, and enforceable. c) The NOx Plan will be submitted to the Alameda County Community Development Agency on an annual basis. d) Upon County approval of the NOx Plan, the Permittee shall implement specified measures as necessary.	
Impact AQ-5 (Operational Impacts: Toxic Air Contaminants): Operation of the proposed Project would expose sensitive receptors to substantial concentrations of toxic air pollutants and fine particulate matter.	**MM AQ-5 (Operational Impacts: Toxic Air Contaminants): TAC Emissions Monitoring and Reduction Plan.** Upon initiation of Phase II of the Project's operations the Permittee shall initiate implementation of a Toxic Air Contaminant Monitoring and Reduction Plan (TAC Plan). a) Throughout the first year of Phase II operations and then subsequently throughout each following year, the Permittee shall prepare an annual audit of the total aggregate, concrete and asphalt production from the Project. Based on that audit, the Permittee shall prepare a risk assessment for lifetime cancer risk for a lifetime resident from all Project sources including the aggregate harvesting operations, aggregate plant, the concrete plant, the asphalt plant, on-site off road equipment and mobile sources. This risk assessment calculation shall be used to compare the Project's actual incremental lifetime cancer risk, as a net increase over the baseline risk established in the EIR, to the applicable significance threshold. b) If risk assessment indicates that the Project's net increase in incremental health risk exceeds the applicable threshold, the TAC Plan shall demonstrate how the Project will reduce emissions to below the threshold level. Reductions may be achieved by any combination of, but not limited to the following: replacement or retrofit of engines used in one of the two scrapers, such that they meet a minimum of US EPA Tier 4 interim emissions standard, or	LTS

Table 2-1: Summary of Project Impacts and Mitigation Measures for the Revised SMP-30 Sunol Quarry Project

Potential Environmental Impacts	Mitigation Measures	Resulting Level of Significance
	replacement or retrofit of engines used on other on-site rolling stock, such that they meet a minimum of US EPA Tier 4 interim emissions standard and result in maintaining risk levels below the applicable standards, or reducing overall production rates at the Project site so as to not exceed the threshold. c) The TAC Plan shall be submitted to the Alameda County Community Development Agency on an annual basis. d) Upon approval, the Permittee shall implement specified measures as necessary.	
Impact AQ-6 (Operational Impacts: Carbon Monoxide): Operation of the Project would not result in an increase in localized carbon monoxide concentrations that exceed state or federal standards	None needed.	LTS
Impact AQ-7 (Operational Impacts: Odors): Operation of the Project would not create objectionable odors affecting a substantial number of people	None needed.	LTS
Cumulative Impact AQ-8 (Cumulative Criteria Pollutants): Construction and operation of the Project, in combination with other past, present and reasonably foreseeable future projects, could result in significant adverse cumulative impacts on air quality	Implementation of **Mitigation Measure AQ-4 (NOx Emissions Monitoring and Reduction Plan)**	LTS
Cumulative Impact AQ-9 (Cumulative Health Risk Impact): Construction and Operation of the Project would not contribute to a cumulatively considerable health risk impact on air quality.	Implementation of **Mitigation Measure AQ-5 (TAC Monitoring and Reduction Plan)**	LTS

Table 2-1: Summary of Project Impacts and Mitigation Measures for the Revised SMP-30 Sunol Quarry Project

Potential Environmental Impacts	Mitigation Measures	Resulting Level of Significance
Climate Change		
Impact CC-1 (Stationary Source Emissions): The proposed Project would generate greenhouse gas emissions from stationary source equipment at levels in excess of the BAAQMD-established significance thresholds for greenhouse gas emissions.	**MM CC-1: Stationary Source GHG Monitoring and Reduction Plan**. Upon approval of the Project, the Permittee shall initiate implementation of a Stationary Source GHG Monitoring and Reduction Plan (SS GHG Plan). a) Throughout the first year of operation and then subsequently throughout each following year, the Permittee shall prepare an annual audit of the total throughput of asphalt through the plant. Based on that audit, the Permittee shall prepare a calculation of all stationary source emissions of GHGs from the drum mixer and the hot asphalt oil heater. This calculation shall be used to compare the Project's actual annual stationary source GHG emissions to the applicable significance threshold. If the total annual throughput of asphalt does not exceed 750,000 tons per year, the threshold for stationary source GHG emissions is not expected to be exceeded and no further emission calculations or mitigation would be required for that year. b) If the Project's stationary source GHG emissions, measured as the net increase over the EIR-established baseline, exceed the applicable threshold, then the SS GHG Plan must demonstrate how the facility will reduce or offset those net emissions exceeding the threshold. Reductions may be achieved by any combination of, but not limited to the following: limiting total asphalt production at the plant to levels that would not result in exceeding the threshold, achieving on-site reductions in emissions through such means as more energy-efficient equipment, production of on-site sustainable energy or use of cleaner burning (i.e., bio-diesel) fuels. providing off-site compensation by reducing GHG emissions elsewhere as a "credit" against project stationary source emissions, and/or purchasing offsetting "carbon credits" as an off-site compensation. For example, the Permittee may be able to off-set their emissions through a Bay Area Air Quality Management District (Air District) grant program whereby the funding would be used to	LTS

Table 2-1: Summary of Project Impacts and Mitigation Measures for the Revised SMP-30 Sunol Quarry Project

Potential Environmental Impacts	Mitigation Measures	Resulting Level of Significance
	fund projects eligible for funding under the program's guidelines meeting the same cost-effectiveness threshold that are real, surplus, quantifiable, and enforceable. c) The SS GHG Plan will be submitted to the Alameda County Community Development Agency on an annual basis. d) Upon County approval of the SS GHG Plan, the Permittee shall implement specified measures as necessary.	
Impact CC-2 (Non-Stationary Source Emissions): The proposed Project would generate greenhouse gas emissions from non-stationary sources at levels in excess of the BAAQMD-established significance thresholds for greenhouse gas emissions.	**MM CC-2: Non-Stationary Source GHG Monitoring and Reduction Plan.** Upon approval of the Project, the Permittee shall initiate implementation of a Mobile Source GHG Monitoring and Reduction Plan. a) Throughout the first year of operation and then subsequently throughout each following year, the Permittee shall prepare an annual audit of the total aggregate, concrete and asphalt production from the Project. Based on that audit, the Permittee shall prepare a calculation of all Project-related mobile source GHG emissions from all Project sources including the aggregate plant, the concrete plant, the asphalt plant, on-site off road equipment and mobile sources (i.e., haul trucks). This calculation shall be used to compare the Project's actual annual mobile source GHG emissions, as a net increase over the baseline emissions established in the EIR, to the applicable significance threshold. b) If the Project's mobile source GHG emissions, measured as the net increase over the EIR-established baseline, exceed the applicable threshold, the Mobile Source GHG Plan shall demonstrate how the Project will reduce or offset those net GHG emissions exceeding the threshold. Reductions may be achieved by any combination of, but not limited to the following: achieving on-site reductions in emissions through such means as more energy-efficient equipment, production of on-site sustainable energy or use of cleaner burning (i.e., bio-diesel) fuels, providing off-site compensation by reducing GHG emissions elsewhere as a "credit" against project mobile source GHG emissions, and/or purchasing off-setting 'carbon credits" as an off-site compensation. For example, the Permittee may be able to off-set their emissions through a Bay Area Air Quality	LTS

Table 2-1: Summary of Project Impacts and Mitigation Measures for the Revised SMP-30 Sunol Quarry Project

Potential Environmental Impacts	Mitigation Measures	Resulting Level of Significance
	Management District (Air District) grant program whereby the funding would be used to fund projects eligible for funding under the program's guidelines meeting the same cost-effectiveness threshold that are real, surplus, quantifiable, and enforceable. c) The Mobile Source GHG Plan shall be submitted to the Alameda County Community Development Agency on an annual basis. d) Upon County approval of the Mobile Source GHG Plan, the Permittee shall implement specified measures as necessary.	
Impact CC-3 (Construction Emissions): BAAQMD has not provided a significance threshold for construction-related GHG emissions but requires that projects quantify and disclose such emissions. Without comparison to a significance criterion, these emissions are considered to be less than significant.	None needed.	LTS
Impact CC-4 (Compliance with Qualified GHG Reduction Strategy): The County does not have an approved, qualified GHG Reduction Strategy; therefore compliance cannot be determined.	None needed.	LTS
Biology		
Impact Bio-1 (Special-Status Species): The proposed Project could have a substantial adverse effect on special-status species.	The proposed Project includes measures protective of natural and biological resources that are or will be required as permit or lease conditions. In addition to those measures included as part of the Project, the following additional mitigation measures are recommended to reduce potential impacts to sensitive species to a level of less than significant: **MM-Bio-1a (Special-Status Species): General Measures**: ODS shall ensure that the following general measures are implemented as part of quarry operations and by the construction contractor(s) as applicable to minimize or avoid impacts on biological resources: a) Construction contractor(s) shall minimize the extent of the construction disturbance as much as	LTS

Table 2-1: Summary of Project Impacts and Mitigation Measures for the Revised SMP-30 Sunol Quarry Project

Potential Environmental Impacts	Mitigation Measures	Resulting Level of Significance
	feasible. b) Prior to the start of construction, the construction contractor, in coordination with a qualified biologist, shall install 4-foot-tall fencing at the limits of construction, and outside the driplines of all trees to be retained that are located within 50 feet of any grading, road improvements, underground utilities, or other construction activity. A qualified biologist and ODS must first approve any encroachment into these fenced areas. The contractor shall maintain the temporary fencing until all construction activities are completed. No construction activities, parking, or staging shall occur within the fenced areas. c) Project-related vehicles shall observe a 15-mile-per-hour speed limit on unpaved roads in the work area, or as otherwise negotiated with the applicable regulatory agencies. d) ODS and construction contractors shall provide closed garbage containers for the disposal of all food-related trash items (e.g., wrappers, cans, bottles, food scraps). All garbage shall be collected daily from the Project site and placed in a closed container, from which garbage shall be removed weekly. e) Construction personnel shall not feed or otherwise attract fish or wildlife in the Project area. f) No pets or firearms shall be allowed in the Project area. g) Staging areas shall be located at least 50 feet from aquatic areas. h) If vehicle or equipment fueling or maintenance is necessary, it shall be performed in designated staging areas. i) At individual construction site (not the quarry pit) where excavations require dewatering, the intakes shall be screened with a maximum mesh size of 5 millimeters. **MM-Bio-1b (Special-Status Species): Construction Monitoring and Protocols.** At the beginning of each workday that includes initial ground disturbance, including grading, excavation, and vegetation-removal activities, a USFWS- and CDFG-approved biologist shall conduct on-site monitoring for the presence of California tiger salamander and California red-legged frog in the area where ground disturbance shall occur as follows: a) Exclusion fencing shall be inspected to ensure it does not have any tears or holes, that the bottoms of the fences are still buried, and that no individuals have been trapped in the fences. b) Any California tiger salamander and California red-legged frog along and outside the fence shall	

Table 2-1: Summary of Project Impacts and Mitigation Measures for the Revised SMP-30 Sunol Quarry Project

Potential Environmental Impacts	Mitigation Measures	Resulting Level of Significance
	be closely monitored until they move away from the construction area. c) All open trenches or holes and areas under parked vehicles shall be checked for the presence of California tiger salamander and California red-legged frog. d) All excavated or deep-walled holes or trenches greater than 2 feet in depth shall be covered at the end of each workday using plywood or similar materials, or escape ramps shall be constructed of earth fill or wooden planks. Before such holes are filled, they shall be thoroughly inspected for trapped animals. e) Project personnel shall be required to immediately report any harm, injury, or mortality of a special-status species during construction (including entrapment) to the construction foreman or biological monitor, and the construction foreman or biological monitor shall immediately notify ODS. ODS shall provide verbal notification to the USFWS Endangered Species Office in Sacramento, California and/or to the local CDFG warden or biologist (as applicable) within one working day of the incident. ODS shall follow up with written notification to the USFWS and/or CDFG (as applicable) within five working days of the incident. All observations of federally and state-listed species shall be recorded on CNDDB field sheets and sent to the CDFG by ODS or representative biological monitor. f) While it is not necessary that the biological monitor stay on-site for the entire day, the monitor shall remain on-call in case any of these animals are discovered and it is necessary to move them. ODS shall designate a representative as the point of contact in the event that a California tiger salamander and California red-legged frog is discovered on-site when the biological monitor is not present. g) If the biological monitor or construction personnel find any of these species within the work area, construction activities shall cease in the immediate vicinity of the individual until: (1) the USFWS and/or CDFG are contacted and/or the animal has been removed from the construction area, in accordance with permits, by a USFWS- and CDFG-approved biologist and released near a suitable burrow or other suitable habitat within 0.25 mile of the construction area, or (2) the animal moves away from the construction area on its own. h) Once all initial ground-disturbing activities are completed, the biological monitor shall perform spot checks of the Project area at least once a week for the duration of construction to ensure that any exclusion fencing is in good order, trenches are being covered if left open overnight (or escape ramps provided), Project personnel are conducting checks beneath parked vehicles prior to their movement, and all other required biological protection measures are being followed.	

Table 2-1: Summary of Project Impacts and Mitigation Measures for the Revised SMP-30 Sunol Quarry Project

Potential Environmental Impacts	Mitigation Measures	Resulting Level of Significance
	MM Bio-1c (Special-Status Species): Conduct Preconstruction Surveys for Special Status Bats and Implement Avoidance and Minimization Measures. Not more than one week prior to tree removal or removal of- any abandoned structure, a qualified biologist (i.e., one familiar with the identification of bats and signs of bats) shall survey the tree or structure to be removed in the Project area for the presence of roosting bats. Bats may be present any time of the year. The biologist shall thoroughly search trees or structures that provide appropriate habitat (trees with foliage or cavities or that are hollow) for the presence of roosting bats or evidence of bats. a) If no roosting bats or evidence of bats are found, the removal of trees or structures may proceed. b) If bats are found or evidence of use by bats is present, the biologist shall map and mark the tree or structure with flagging. ODS shall ensure that the trees or structures are not removed until the CDFG has been consulted for guidance on measures to avoid and minimize disturbance of the special-status bats. Measures may include monitoring trees or structures and excluding bats from a tree or structure until it is removed and/or timing tree or structure removal and use of a construction buffer to avoid disturbance of young before they are able to fly.	
Impact Bio-2 (Riparian Habitat and Other Sensitive Natural Communities): The proposed Project could have a substantial adverse effect on riparian habitat or other sensitive natural communities. Specifically, implementation of Phase I and Phase II of the proposed Project would permanently remove approximately 8.75 acres of willow scrub and 0.65 acres of mulefat scrub.	None needed With implementation of the Project's proposed Conservation Plan and Reclamation Plan, impacts to riparian habitats from the proposed Project would be reduced to less than significant.	LTS
Impact Bio-3 (Wetlands): The proposed Project could have a substantial adverse effect on federal or state protected wetlands.	None needed With Project regulatory compliance, implementation of the Project's proposed Reclamation Plan and participation in and contribution of funding to local and regional habitat planning and restoration efforts pursuant to the proposed Conservation Plan, temporary and permanent losses of federal and State waters, if any, would be fully compensated for.	LTS
Impact Bio-4 (Migratory Corridors and Nursery Sites): The proposed Project would not	None required.	LTS

Table 2-1: Summary of Project Impacts and Mitigation Measures for the Revised SMP-30 Sunol Quarry Project

Potential Environmental Impacts	Mitigation Measures	Resulting Level of Significance
substantially interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.		
Impact Bio-5 (Conflict with Local Policies or Ordinances): The proposed Project could conflict with local policies or ordinances protecting biological resources.	None required Compliance with the Alameda County Tree Ordinance, and implementation of the Project's proposed Reclamation Plan and Conservation Plan would provide for consistency with local policies and ordinances protecting biological resources.	LTS
Impact Bio-6 (Conflict with an Applicable Habitat Conservation Plan): The proposed Project would not conflict with an applicable habitat conservation plan or natural community conservation plan.	None required	LTS
Impact Bio-7 (Cumulative Impacts): Quarry expansion and reclamation under the Project, in combination with past, present, and reasonably foreseeable future projects in the site vicinity, could potentially have a cumulatively considerable impact on biological resources.	None required Once the Project's proposed Conservation and Reclamation Plans are fully implemented, local habitat will be considerably improved for special status species. Proposed funding of planning efforts and restoration of habitat that contributes to regional enhancement of values for special status as well as common wildlife provides compensation for the Project's specific impacts as well as for the Project's contribution to cumulative impacts.	LTS
Geology		
Impact Geo-1 (Geologic Risk of Fault Rupture): The Project could potentially expose people or structures to substantial risk of loss, injury, or death involving rupture of the Calaveras Fault.	**MM Geo-1: Structure-Specific Geologic Investigation.** Prior to construction of any structures intended for human occupancy (i.e., expected to be occupied for more than 2,000 person-hours per year) within the Alquist-Priolo zone, a detailed geologic investigation of the structure location shall be prepared by a geologist registered in the State of California. This report shall address the potential for surface fault displacement at the structure site, based on a geologic investigation designed to identify the location, recent activity and nature of faulting that may have affected the structure site in the past and may affect the structure site in the future. If, based upon the findings of the geologic investigation, the site of the proposed structure is underlain by an active fault trace, the structure	LTS

Table 2-1: Summary of Project Impacts and Mitigation Measures for the Revised SMP-30 Sunol Quarry Project

Potential Environmental Impacts	Mitigation Measures	Resulting Level of Significance
	shall be located at least 50-feet away from such an active fault trace	
Impact Geo-2 (Seismically Induced Ground Shaking and Liquefaction): The Project could potentially expose people or structures to substantial risk of loss, injury, or death involving groundshaking and liquefaction.	None needed. Implementation of slope stability design measures incorporated into the Project would reduce the extent potential earthquake-induced hazards resulting from strong groundshaking and ground failure to a less than significant level.	LTS
Impact Geo-3 (Slope Instability): Slope failure could affect cut slopes created by quarry excavations and could affect fill slopes constructed for roads, levees, the backfilled bench at the long-term processing facility, and stockpiles. Slope failure could damage internal and external roads, buried utilities and pipelines, transmission tower foundations or on-site structures.	Current geo-technical investigations have confirmed that the Project's proposed design measures (e.g., slope designs and setbacks) would eliminate or reduce hazards related to slope failure. Further detailed engineering analyses as required in the following mitigation measures is recommended to ensure that such hazard are reduced to a less than significant level. **MM Geo-3a: Engineering Analysis**. Recommendations contained in the Berlogar Stevens Associates' *Geotechnical Investigation, Amended Reclamation Plan for the Sunol Quarry (SMP-30), Calaveras Road, Sunol, California for Oliver De Silva, Inc.*, dated May 25, 2012 (Berlogar, 2012) shall be incorporated into the Project. **MM Geo-3b: Annual Review.** Based on the recommendations of the Project geologists, an annual review of the stability of cut slopes is recommended to determine if exposed conditions indicate that the proposed quarry slopes should be modified. **MM Geo-3c: Managing Stockpile Height.** Stockpiles shall be managed such that they do not become over-steepened or undercut, and the faces of stockpiles shall be maintained to prevent steep, high faces from forming. Where front-end loaders have to carry out undercutting in front of high faces, a cab should be fitted to enclose an operator overhead and on at least three sides.	LTS
Impact Geo-4 (Soil Erosion): Soil erosion could occur at the Project site if proper drainage and erosion control measures are not provided. Excessive soil erosion could create gullies, undercut slopes and cause slope failure. Soil erosion can also affect surface water quality (see Hydrology and Water Quality chapter).	**MM Geo-4a: NPDES Stormwater Permits.** The Permittee (Project operator) shall be responsible for obtaining any necessary amendments and/or updates to the currently applicable NPDES permit for water management within the Project. **MM Geo-4b:** The removal of vegetation and overburden from the 58-acre expansion site shall occur no more than one month prior to commencement of excavation and raw aggregate harvesting activities from the expansion of the quarry pit into this area. Alternatively, if vegetation and overburden removal is to occur more than one month prior to excavation, the Permittee shall take measures such as watering the soil or applying soil binders or chemical stabilizers, as approved by the Community Development Director to control dust during the stripping and subsequent	LTS

Table 2-1: Summary of Project Impacts and Mitigation Measures for the Revised SMP-30 Sunol Quarry Project

Potential Environmental Impacts	Mitigation Measures	Resulting Level of Significance
	transporting of the overburden and topsoil.	
Impact Geo-5 (Expansive Soils): As a quarry operation and processing plant, there is no concern that expansive soils would create substantial risks to life or property.	None required.	No impact.
Impact Geo-6 (Soils Unsuitable for Wastewater Treatment): The Project does not pose any issues related to soils that are incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water.	None required.	No impact.
Hazardous Materials		
Impact Haz-1 (Project Site Located on a List of Hazardous Material Sites): Although the proposed Project is located on a site that is included on a list of hazardous material sites (i.e., hazardous waste facilities or hazardous waste properties) compiled pursuant to Government Code Section 65962.5, the available records indicate that all previous environmental cases are closed or remediated, and thus would not create a significant hazard to the public or the environment.	None required.	LTS
Impact Haz-2 (Accidental Release of Hazardous Materials): The Project could create a significant hazard to the public or environment through upset or accident conditions releasing hazardous materials used in the mining and plant operations.	None required. Compliance with applicable regulations will minimize the potential for accidental release of hazardous materials and will reduce hazards to the public and the environment through upset or accident conditions to less than significant levels.	LTS

Table 2-1: Summary of Project Impacts and Mitigation Measures for the Revised SMP-30 Sunol Quarry Project

Potential Environmental Impacts	Mitigation Measures	Resulting Level of Significance
	The following additional mitigation measures are recommended to further reduce this impact: **MM Haz-2a: Above Ground Storage Tanks.** The Project shall not include any underground storage tanks, and only above-ground storage tanks that have been approved by the U.S. EPA shall be used for storing petroleum products and other regulated substances. Any new above-ground tanks shall be double walled and meet all ballistic and flame impingement requirements in CFC Article 79. The containment structures shall not be equipped with any valves or drains. **MM Haz-2b: Fuel Delivery Requirements.** All delivery, maintenance, and repair trucks containing petroleum products will be required to comply with the California Department of Transportation's regulations for transport of hazardous materials. All trucks carrying petroleum products shall be equipped with quick-connect couplings and automatic shut-off valves to prevent spills, and shall carry appropriate absorbent materials to contain and recover spillage. **MM Haz-2c: Comprehensive Fire Protection Plan.** The Project applicant shall engage a Fire Protection Engineer to perform a Code analysis and submit a Comprehensive Fire Protection Plan for the proposed Project for review by the County Fire Marshall. The submittal shall include an evaluation of the Project's compliance with the Uniform Fire Code requirements relating to storage of hazardous materials (including aboveground tanks), the need for fire suppression system, alarm systems, storage of flammable or combustible materials, containment basins around hazardous materials, and compliance with hazardous materials regulations. Hazardous materials at the proposed asphalt plant shall be specifically considered in the review. **MM Hydro-1: Chemical Release Prevention.** To prevent the inundation of the processing area and the potential release of hazardous materials to water in the basin (once the processing area is relocated to the south end of the mining basin at an elevation of 220 ft. msl) due to a 100-yr storm event, one or more of the following measures shall be taken: a) Bulk storage for Portland cement, asphalt oil, fuels, and other chemicals shall be maintained outside of the basin perimeter. Only those materials needed for daily operations shall be stored and maintained in the processing area once it is relocated to the south end of the basin. If reliable weather predictions call for the potential for a 100-year storm event, or a series of events that could potentially yield equivalent flood flows, then all hazardous materials shall be removed from the processing area; or b) The processing area should not be relocated to the south end of the basin until sufficient excavation has been completed such that the basin volume below the elevation of the processing area (approximately 220 ft. msl) is greater than at least 6,000 acre-feet. At a volume of 6,000	

Table 2-1: Summary of Project Impacts and Mitigation Measures for the Revised SMP-30 Sunol Quarry Project

Potential Environmental Impacts	Mitigation Measures	Resulting Level of Significance
	acre-feet, the basin would be capable of holding the total volume of water that could potentially enter the basin due to a breach during a 100-year storm, without overtopping into the processing area.	
Impact Haz-3 (Asphalt Plant Operations): The Project could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, particularly as pertaining to the asphalt plant operations.	None required. Compliance with applicable regulations will minimize significant hazards to the public or the environment through the routine transport, use, or disposal of hazardous materials to less than significant levels. However, the following additional mitigation measures are recommended to further reduce this impact: **MM Haz-3a: Prohibited Truck Spraying.** The Permittee shall not allow trucks to be sprayed with diesel fuel or any other petroleum hydrocarbon-containing liquid as a means to prevent asphalt from sticking to the beds of the truck beds. Suitable bio-degradable surfactants may be utilized by the truck operators, if desired. The County's annual inspections and review shall ensure that soil contamination has not occurred at the site due to spraying of truck beds with diesel fuel or other petroleum hydrocarbon-containing liquids. **MM Haz-3b: Best Management Site Practices.** The Project site equipment and servicing materials shall be maintained in a neat and orderly manner to aid in accounting for and detecting potential sources of contamination; a) Non-functional equipment, scrap metal, construction debris, used batteries and tires, and similar objects shall be removed from the site on a regular basis and disposed of at appropriately licensed facilities; b) Best Management Practices specific to the storage of spare equipment such as heavy equipment parts, conveyor belts, tires and other replacement or extra equipment pieces, shall be established pursuant to the Project's NPDES General Mining Permit to ensure that runoff from storage areas does not result in surface water contamination. Spare parts containing petroleum products (i.e., lubricants, hydraulic oil, etc.) shall be stored using Best Management Practices (BMPs) to prevent contamination of soil or storm water runoff; and c) Storage areas shall be inspected by the Permittee monthly. Any petroleum leaks shall be documented and cleaned up. Leaking equipment shall be repaired. Inspection and monitoring documentation shall be retained for a minimum of five years and be available to County staff during site inspections. **MM Haz-3c: Reclamation Requirements.** Upon completion of mining and processing operations at	LTS

Table 2-1: Summary of Project Impacts and Mitigation Measures for the Revised SMP-30 Sunol Quarry Project

Potential Environmental Impacts	Mitigation Measures	Resulting Level of Significance
	the Project site and pursuant to implementation of the Reclamation Plan, all hazardous materials and above ground storage tanks shall be removed and the site shall be cleaned of hazardous material. a) Prior to closure of any above ground storage tank used to hold hazardous material, the Project applicant shall obtain a tank closure permit from the County DEH and shall comply with all applicable tank closure guidelines. b) The Project applicant shall obtain a closure permit for all above ground hazardous materials storage facilities. c) Fuel tanks and other hazardous materials containers shall be transported by licensed haulers to an approved disposal or recycling facility in accordance with all applicable laws and regulations. d) Any reported releases of hazardous substances which may have occurred during Project operations shall be fully remediated according to the corrective actions proscribed by the identified lead agency, and a case closure letter from the lead agency obtained.	
Impact Haz-4 (Hazardous Materials or Emissions Near a School): The Project would not emit hazardous emissions or acutely hazardous materials, substances, or waste within a one-quarter mile of an existing or proposed school.	None required.	LTS
Impact Haz-5 (Naturally Occurring Asbestos): The proposed Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials including transport, use or disposal of asbestiform minerals.	None needed.	LTS
Impact Haz-6 (Inconsistency with an Airport Master Plan / Airport Safety): The proposed Project would not result in inconsistency with an airport master plan. The proposed Project would not result in a safety hazard for people residing or	None required.	No impact

Table 2-1: Summary of Project Impacts and Mitigation Measures for the Revised SMP-30 Sunol Quarry Project

Potential Environmental Impacts	Mitigation Measures	Resulting Level of Significance
working at the site.		
Impact Haz-7 (Wildland Fires): The proposed Project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wild lands are adjacent to urban areas or where residences are intermixed with wild lands.	None required. However, the following additional mitigation measure (derived from Impact Haz-2 above) is recommended to further reduce wildland fire hazards: **MM Haz-7: Comprehensive Fire Protection Plan**. The Project applicant shall engage a Fire Protection Engineer to perform a Code analysis and submit a Comprehensive Fire Protection Plan for the proposed Project for review by the County Fire Marshal. The submittal shall include an evaluation of the Project's compliance with the Uniform Fire Code requirements relating to storage of hazardous materials (including aboveground tanks), the need for fire suppression system, alarm systems, storage of flammable or combustible materials, containment basins around hazardous materials, and compliance with hazardous materials regulations. Hazardous materials at the proposed asphalt plant shall be specifically considered in the review.	LTS
Hydrology and Water Quality		
Impact Hydro-1 (Discharge to Surface Water): The Project could result in a violation of water quality standards or waste discharge requirements and substantially degrading surface or groundwater water quality.	None required. The Project will be required to comply with all applicable regulatory requirements to maintain the quality of water discharged to San Antonio Creek and Alameda Creek, thus reducing impacts to a level of less than significant.	LTS
Impact Hydro-2 (Use of Fuels and Other Chemicals): Potential Release of Fuels and Other Chemicals. If flooding occurs on Alameda Creek such that floodwaters enter the basin, the concrete and asphalt batch plants could become inundated and hazardous materials such as Portland cement and asphalt oil could be released to water in the basin. This is a potentially significant impact only after the time the processing area is relocated to the south end of the mining basin at an elevation of 220 ft. msl.	None required. Compliance with applicable regulations would reduce impacts to a less than significant level. The following additional mitigation measure is recommended to further reduce potential impacts to water quality: **MM Hydro-1 Use of Fuels and Other Chemicals): Chemical Release Prevention.** To prevent the inundation of the processing area and the potential release of hazardous materials to water in the basin (once the processing area is relocated to the south end of the mining basin at an elevation of 220 ft. msl) due to a 100-yr storm event, one or more of the following measures shall be taken: a) Bulk storage for Portland cement, asphalt oil, fuels, and other chemicals shall be maintained outside of the basin perimeter. Only those materials needed for daily operations shall be stored	LTS

Table 2-1: Summary of Project Impacts and Mitigation Measures for the Revised SMP-30 Sunol Quarry Project

Potential Environmental Impacts	Mitigation Measures	Resulting Level of Significance
	and maintained in the processing area once it is relocated to the south end of the basin. If reliable weather predictions call for the potential for a 100-year storm event, or a series of events that could potentially yield equivalent flood flows, then all hazardous materials shall be removed from the processing area; or b) The processing area should not be relocated to the south end of the basin until sufficient excavation has been completed such that the basin volume below the elevation of the processing area (approximately 220 ft. msl) is greater than at least 6,000 acre-feet. At a volume of 6,000 acre-feet, the basin would be capable of holding the total volume of water that could potentially enter the basin during a 100-year storm, without overtopping into the processing area.	
Impact Hydro-3 (Depletion of Groundwater Supplies/Interference with Groundwater Recharge): The Project will not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume, or a lowering of the local groundwater table level.	None needed.	LTS
Impact Hydro-4 (Alteration of Existing Drainage Patterns Resulting in Erosion or Siltation): The Project will not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site.	None required.	LTS
Impact Hydro-5 (Increase in the Rate or Amount of Surface Runoff): The Project will not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.	None required.	LTS

Table 2-1: Summary of Project Impacts and Mitigation Measures for the Revised SMP-30 Sunol Quarry Project

Potential Environmental Impacts	Mitigation Measures	Resulting Level of Significance
Impact Hydro-6 (Contribute Runoff Exceeding the Capacity Drainage Systems or Adding Sources of Pollution): The Project will not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems, cause flooding on- and off-site, or provide substantial additional sources of polluted runoff.	None required.	LTS
Impact Hydro-7 (Housing within a Flood Hazard Area): The Project would not place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.	None required.	No impact
Impact Hydro-8 (Structures Which Would Impede or Redirect Flood Flows): The Project would not place a structure within a 100-year flood hazard area, which would impede or redirect flood flows.	None required.	No impact
Impact Hydro-9 (Flooding as a Result of the Failure of a Levee or Dam): The Project will not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.	None required.	LTS
Impact Hydro-10 (Potential Inundation): The Project will not be inundated by, nor result in any inundation by seiche, tsunami, or mudflow.	None required.	LTS
Cumulative Impact Hydro -11 (Cumulative	None needed.	LTS

Table 2-1: Summary of Project Impacts and Mitigation Measures for the Revised SMP-30 Sunol Quarry Project

Potential Environmental Impacts	Mitigation Measures	Resulting Level of Significance
Hydrology and Water Quality Impacts): Implementation of the Project, combined with other past, present, existing, pending and reasonably foreseeable projects would not result in significant adverse changes to hydrology and/or water quality.		
Noise		
Impact Noise-1 (Noise in Excess of Standards): Project operations are calculated to generate noise levels at the nearest sensitive noise receptor that would exceed 50 dBA during the daytime and would exceed 45 dBA at night time, thereby exceeding the applicable noise standards of the County Municipal Code.	**MM Noise-1a (Noise in Excess of Standards): Noise Survey.** A noise survey shall be conducted within 30 days after the plant site and its processing facilities have been moved to the south. At that time, with the final plant layout in place, a determination shall be made as to whether or not additional noise barriers or other noise control measures for the equipment are required to reduce noise levels at affected sensitive receptors to acceptable levels (i.e., to 50 dBA in the daytime and 45 dBA at nighttime), and the exact locations and types of noise control measures, as may be needed, shall be determined. **MM Noise-1b (Noise in Excess of Standards): Noise Barrier.** The method to be used to mitigate Phase II noise impacts shall be noise barriers. Normally, noise barriers are located close to, or on the equipment itself. Typically, the barriers are wood, metal, or quilted noise control blankets. Sometimes, material stockpiles can also be used as a noise barrier.	
Impact Noise-2 (Vibration): Operation of the Project would not expose people to excessive vibration.	None required.	LTS
Cumulative Impact Noise-3 (Cumulative Increase in Ambient Noise Levels): Operation of the Project would result in a permanent increase in cumulative ambient noise levels of up to 5 dBA Ldn over existing levels in the Project vicinity.	Implementation of **MM Noise-1a (Noise Survey)** and **Noise -1b (Noise Barrier)**	LTS

Table 2-1: Summary of Project Impacts and Mitigation Measures for the Revised SMP-30 Sunol Quarry Project

Potential Environmental Impacts	Mitigation Measures	Resulting Level of Significance
Traffic		
Impact Transp-1 (Intersection Level of Service): The Project will not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, including intersection level of service standards.	None required.	LTS
Impact Transp-2 (Peak Signal Warrant): The Project will not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, including but not limited to traffic signal warrant criteria.	None required.	LTS
Impact Transp-3 (Freeway Operations): The Project will not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, including but not limited to freeway operating conditions.	None required.	LTS
Impact Transp-4 (Site Access and Circulation): The proposed Project could substantially increase traffic hazards due to a design feature; existing conditions at the Project site's current driveway create the potential for near-misses and collisions (especially given the mix of heavy trucks, passenger vehicles and recreational cyclists), and the increase in vehicles relying on this driveway under the Project would potentially exacerbate this current condition. Sight distances all along Calaveras Road,	**MM Transp-4a (Site Access and Circulation): Intersection Sight Distance:** Keep the area around the southern driveway intersection free of visual obstructions such as tall landscaping and signage, which would obstruct line of sight for drivers exiting the site. a) Vegetation fronting the site along Calaveras Road should be trimmed as necessary to allow at least 550 feet of sight distance, which is the minimum corner sight distance required per the California Highway Design Manual. b) Allow the location of the southern driveway to shift north or south along Calaveras Road to best accommodate the required sight distance. c) Raising the elevation of the southern driveway approach to Calaveras Road to reduce the grade	

Table 2-1: Summary of Project Impacts and Mitigation Measures for the Revised SMP-30 Sunol Quarry Project

Potential Environmental Impacts	Mitigation Measures	Resulting Level of Significance
including at the proposed new south access drive, are limited by differing grade conditions and vegetation. Additionally, with only one driveway access to the site, if that driveway was blocked or obstructed, an emergency vehicle may not be able to easily access the site in case of emergency.	difference would improve the sight lines at the intersection. **MM Transp-4b (Site Access and Circulation): Two Points of Access, Phase II.** During Phase II, which assumes only one access point to/from the site, consider keeping the existing driveway as a secondary access for emergency vehicles only.	
Impact Transp-5 (Pedestrian Circulation): The Project would not conflict with adopted policies, plans or programs regarding pedestrian facilities.	None required. The Project proposes to accommodate a new trail alignment. However, possible pedestrian/vehicle conflict points associated with one of the potential trail alignments could decrease the performance or safety of such facilities. **Recommendation Transp-5 (Hiking Trail)**: It is recommended that if the future hiking trail moves forward, the western trail alignment along Alameda Creek should be considered preferable as it provides less pedestrian/vehicle conflict points as compared to the eastern alignment along Calaveras Road.	LTS
Impact Transp-6 (Bicycle Circulation): The Project would not conflict with adopted policies, plans, or programs regarding bicycle facilities, or otherwise decrease the performance or safety of such facilities.	None required. Although not required to avoid or reduce a conflict with adopted policies, plans, or programs regarding bicycle facilities, the following recommendation is made to increase the safety for bicycle riders using Calaveras Road: **Recommendation Transp-6 (Signage):** Signage. Due to the presence of recreational cyclists along Calaveras Road, it is recommended that the installation of "Share the Road" signs in conjunction with Bicycle Warning signs be considered along Calaveras Road and on the Project site driveways to warn drivers to watch for bicyclist, who generally travel at slower speeds. Placement of these signs shall be determined in consultation with the Alameda County Public Works Department.	LTS
Impact Transp-7 (Roadway Safety Hazards): The Project would not substantially increase roadway hazards due to a design feature or an incompatible use.	None required.	LTS
Cumulative Impact Transp-8 (Cumulative	None required.	LTS

Table 2-1: Summary of Project Impacts and Mitigation Measures for the Revised SMP-30 Sunol Quarry Project

Potential Environmental Impacts	Mitigation Measures	Resulting Level of Significance
Intersection Level of Service): The Project will not make a significant contribution of traffic to cumulative traffic levels at study area intersections, and no conflicts with applicable plans, ordinances or policies establishing measures of effectiveness for the performance of the circulation system (including intersection level of service standards) would occur.		
Cumulative Impact Transp-9 (Cumulative Peak Hour Traffic Signal Warrant Analysis): The Project will not make a significant contribution of traffic to cumulative traffic levels at study area intersections, and no conflicts with applicable plans, ordinances or policies establishing measures of effectiveness for the performance of the circulation system, including but not limited to traffic signal warrant criteria, would occur.	None required.	LTS
Cumulative Impact Transp-10 (Cumulative Freeway Operations): The Project will not make a significant contribution of traffic to cumulative traffic levels on study area freeways, and no conflicts with applicable plans, ordinances or policies establishing measures of effectiveness for the performance of the circulation system, including but not limited to freeway operating conditions, would occur.	None required.	LTS

3

Responses to Comments

This chapter includes a list of all agencies, organizations and individuals that submitted written comments on the Draft EIR during the public review and comment period, and/or that commented at the County's public hearing on the Draft EIR at the Sunol Citizen's Advisory Committee meeting held on May 16, 2012. This chapter also contains each of the comment letters received on the Draft EIR and summaries of the comments made at the public hearing, and presents responses to the specific comments raised.

List of Agencies, Organizations and Individuals Commenting

Written Comment Letters

The following is a list of written correspondence received from public agencies, organizations, and individuals by the County of Alameda on the Draft EIR for the SMP-30 Revised Use Permit Project:

- Letter A: State of California, Governor's Office of Planning and Research, State Clearinghouse and Planning Unit; Scott Morgan, Director; May 17, 2012
- Letter B: State of California, Natural Resources Agency, Department of Conservation, Office of Mine Reclamation; Beth Hendrickson, Manager of Reclamation Unit; May 10, 2012
- Letter C: San Francisco Public Utilities Commission; Ellen Levin, Deputy Manager of Water Enterprise; May 17, 2012
- Letter D: East Bay Regional Park District; Brad Olson, Environmental Programs Manager, May 10, 2012

Public Speaker Comments

County staff held a public hearing before the Sunol Citizen's Advisory Committee at the Sunol Glen Elementary School on May 16, 2012 to obtain oral comments on the Draft EIR. Individuals in attendance at this hearing provided oral comments, which are summarized and also responded to below.

Comments and Responses

This chapter of the Final EIR includes copies of the written comments received during the public review period on the Draft EIR. Each written correspondence is identified by an alpha designator (e.g., "Letter A"). Specific comments within each written correspondence are identified by a corresponding numeric designator (e.g. "A-1" for the first comment in Letter A). The responses to each comment immediately follow the letters. Specific responses to the individual comments of public speakers are also provided along with responses to each oral comment.

The following responses specifically focus on comments that pertain to the adequacy of the analysis in the Draft EIR or other aspects pertinent to the environmental analysis of the proposed Project pursuant to CEQA. Comments that address topics beyond the purview of CEQA are noted as such for the public record.

Where comments and/or responses have warranted changes to the text of the Draft EIR, these changes are indicated within the response, and are presented in Chapter 4: Revisions to the Draft EIR, where they are listed by order of text in the Draft EIR document.

STATE OF CALIFORNIA
GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH
STATE CLEARINGHOUSE AND PLANNING UNIT

EDMUND G. BROWN JR.
GOVERNOR

KEN ALEX
DIRECTOR

May 17, 2012

Bruce Jensen
Alameda County
399 Elmhurst Street, Suite 141
Hayward, CA 94544

Subject: Revised SMP-30 Use Permit, Sunol Valley Aggregate Quarry
SCH#: 2011102051

Dear Bruce Jensen:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. The review period closed on May 16, 2012, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Scott Morgan
Director, State Clearinghouse

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report
State Clearinghouse Data Base

SCH# 2011102051
Project Title Revised SMP-30 Use Permit, Sunol Valley Aggregate Quarry
Lead Agency Alameda County

Type EIR Draft EIR

Description The current Sunol Valley Aggregate Quarry is under operation on an approximately 323-acre site. The quarry was approved for aggregate mining by the County in 1992 pursuant to Surface Mining Permit-30 (SMP-30). Under this currently effective permit, quarry operations can continue through year 2021. An adjacent 58-acre parcel has now become available, and the applicant seeks to revise the SMP-30 permit to increase aggregate reserves by expanding and deepening the quarry pit, which will ultimately be used for water storage. The proposed revised permit (the project) seeks to increase the area under permit, deepen the excavation, extend the permit expiration date to 30 years after approval, to add an on-site asphalt batch plant and a concrete batch plant, and to amend the Reclamation Plan for the site.

Lead Agency Contact

Name Bruce Jensen
Agency Alameda County
Phone 510 670 5400 **Fax**
email
Address 399 Elmhurst Street, Suite 141
City Hayward **State** CA **Zip** 94544

Project Location

County Alameda
City
Region
Lat / Long
Cross Streets I-680 / Calaveras Road
Parcel No. 096-0080-008, 096-0375-011-05
Township **Range** **Section** **Base**

Proximity to:

Highways I-680
Airports
Railways
Waterways Alameda Creek, San Antonio Creek
Schools
Land Use County General Plan: "Water Management"; County zoning: A: Agriculture, subject to County Surface Mining Ordinance

Project Issues Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Septic System; Sewer Capacity; Soil Erosion/Compaction/Grading; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Growth Inducing; Landuse; Cumulative Effects; Aesthetic/Visual

Reviewing Agencies Resources Agency; Department of Conservation; Department of Fish and Game, Region 3; Department of Parks and Recreation; Department of Water Resources; California Highway Patrol; Caltrans, District 4; Regional Water Quality Control Board, Region 2; Native American Heritage Commission

Date Received 04/02/2012 **Start of Review** 04/02/2012 **End of Review** 05/16/2012

Note: Blanks in data fields result from insufficient information provided by lead agency.

Response to Letter A

State of California, Governor's Office of Planning and Research, State Clearinghouse and Planning Unit

Scott Morgan, Director; May 17, 2012

Response A-1

This letter acknowledges that the County of Alameda has complied with the State Clearinghouse review requirements for draft environmental documents pursuant to CEQA, and that no state agencies submitted comments on the document through the Clearinghouse.

No response is necessary.

DEPARTMENT OF CONSERVATION
Managing California's Working Lands
OFFICE OF MINE RECLAMATION
801 K STREET • MS 09-06 • SACRAMENTO, CALIFORNIA 95814
PHONE 916 / 323-9198 • FAX 916 / 445-6066 • TDD 916 / 324-2555 • WEBSITE conservation.ca.gov

Letter "A"

May 10, 2012

VIA EMAIL: bruce.jensen@acgov.org
ORIGINAL SENT BY MAIL

Bruce Jensen
Alameda County Planning Department
224 West Wilton Avenue
Hayward, CA 94544

Dear Mr. Jensen:

SUNOL QUARRY AMENDED RECLAMATION PLAN AND DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR)
CALIFORINA MINE ID# 91-01-0007, SMP 30, SCH# 2011102051

The Department of Conservation's Office of Mine Reclamation (OMR) has reviewed the amended reclamation plan for the Sunol Quarry dated November 2011. The applicant, Oliver de Silva Inc., is proposing to continue mining aggregate on 275 acres of a 381-acre project site for a period of 30 years. The applicant estimates that approximately 3 million tons of material will be removed annually.

The purpose of the amendment to the permit and reclamation plan is to

- expand the quarry by 58 acres, from 323 to 381 acres total
- deepen the excavation from 140 feet to a maximum of 400 feet below ground surface
- increase production to a maximum of 3 million tons per year
- extend the expiration date of the mining operation from 2021 to 2042
- add an asphalt batch plant and a concrete plant

The project site is on Calaveras Road, approximately one mile south of Interstate 680 in Sunol Valley. OMR staff conducted a site visit on May 8, 2012 to discuss reclamation issues.

An initial public hearing date is set for the project for June 4, 2012. OMR recommends that the hearing date be postponed, because this hearing date is inconsistent with the requirements of SMARA section 2774, which addresses the requirements with respect to *lead agency* approvals of reclamation plans, plan amendments, and financial assurances. **Once OMR has**

B-1

provided comments, a proposed response to the comments must be submitted to the Department at least 30 days prior to lead agency approval. The proposed response must describe whether you propose to adopt the comments. If you do not propose to adopt the comments, the reason(s) for not doing so must be specified in detail. At least 30 days prior notice must be provided to the Department of the **time, place, and date of the hearing** at which the reclamation plan is scheduled to be approved. If no hearing is required, then at least 30 days notice must be given to the Department prior to its approval. Finally, within 30 days following approval of the reclamation plan, a final response to these comments must be sent to the Department.

The following are several reasons that this hearing date is premature and should be postponed:

- The cover letter from the County did not include correct certification language, only: "We provide this for your 30-day review." The following is the correct certification language: "The Sunol Quarry Amended Reclamation Plan is enclosed for OMR's 30-day review. Alameda County certifies that this submission is in compliance with the applicable requirements of Article 1 of Chapter 8 of Division 2 of Title 14 of the California Code of Regulations."
- The cover letter notes that the revised reclamation plan is a draft. These two factors indicate that OMR was being asked for a preliminary review only.
- The June 4th date does not allow adequate time for the County to provide a response to our comments after receiving OMR's comments. As described above, the statute requires that there be a minimum of 60 days from the time of receipt of the reclamation plan for official review to the hearing date. B-2
- OMR did not receive the complete DEIR until the site visit on May 8th. We only received the summary of mitigation measures with the submittal so could not provide a complete review of the project. B-3
- The reclamation plan is inadequate and needs another revision and review cycle before it is ready for an approval hearing, as described in detail in this comment letter.

The Surface Mining and Reclamation Act of 1975 (SMARA) (Public Resources Code section 2710 et seq.) and the State Mining and Geology Board Regulations (California Code of Regulations (CCR) Title 14, Division 2, Chapter 8, Subchapter 1) require that specific items be addressed or included in reclamation plans. The following comments prepared by Leah Gardner, Restoration Ecologist, and John Wesling, Senior Engineering Geologist, are offered to assist in your review of this project. We recommend that the reclamation plan be revised and/or supplemented to fully address these items and resubmitted to OMR.

The title of the document should be changed from "SMP-30 Reclamation Plan Amendment" to "Amended Reclamation Plan for Sunol Quarry (or Sunol Valley Aggregate Quarry)". SMP-30 can be part of the title but is not a meaningful name by itself since this mine has had several *different* Alameda County Surface Mining Permits since it was first approved in 1985 (SMP 13, 22, and 26). The mining operation was formerly known as Santa Clara Sand and Gravel under SMP 26; their application to expand by 45 acres in 1991 resulted in SMP 30.

The name of the operation under the Plan Summary on page ii should also be changed to "Sunol Quarry" or "Sunol Valley Aggregate Quarry" rather than "SMP-30 Quarry". All of the

map sheets bear the sub-title: "Revised SMP-30 Reclamation Plan"; these should also be changed to match the document title. The project is referred to both as Sunol Valley Aggregate Quarry and Sunol Quarry throughout the DEIR, so this will provide consistency.

Information intended to meet the requirements of SMARA and the CCRs is on the five map sheets rather than in the text of the plan, which is only seven pages long. OMR recommends that the plan be revised to be a complete, stand-alone document supplemented with maps. Some of the information contained in the DEIR and the San Francisco Public Utility Commission (SFPUC) Alameda Watershed Management Plan, Alternative F, also needs to be added to the reclamation plan in order for it to be complete, as noted in the following comments.

Mining Operation and Closure

(Refer to SMARA sections 2770, 2772, 2773, CCR sections 3502, 3709, 3713)

1. SMARA 2770.5 requires the Lead Agency to notify California Department of Transportation (Caltrans) whenever a surface mining operation is proposed within the 100-year flood plain of any stream and within one (1) mile of a state highway bridge. The location of this project triggers that requirement. Alameda County should contract Caltrans, who shall have a 45-day review period to comment on the mining operation with respect to potential damage to the state highway bridge. B-4

2. SMARA section 2772(c)(4) requires that the maximum anticipated depth of the surface mining operation be indicated in the reclamation plan. The maximum depth of excavation is given as 400 feet below ground surface, but the elevation of the 381-acre site varies from 260 to 280 feet. The depth of mining should be clearly stated and tied to a verifiable benchmark, such as mean sea level, that can be referenced in the field for compliance monitoring. B-5

3. SMARA section 2772(c)(5) requires that a map of the site clearly show the limits of mining, reclamation, proposed access roads and existing roads on site, and utilities within or adjacent to the mine site. The map(s) provided should include existing and proposed interim and final contours and drainage patterns, and depict existing areas of vegetation and proposed areas of revegetation. In addition, the map should include setbacks from adjacent property boundaries, soil and waste rock stockpiles, erosion control facilities, and existing and proposed structures. The final map(s) should be of readable scale. Many of the maps in the reclamation plan need revisions as described in the following:

    a. The text on many of the map sheets does not appear to relate to the map(s) depicted on those sheets or the title of the map sheets. For example, Sheet 2 includes a large amount of text about vegetation, wildlife, sensitive habitats, and special-status species; however, the map images on that sheet do not appear to show the "site conditions" described in the text on the sheet. Sheets 3 *and 4 also* contain extraneous text that does not relate to the map images. To avoid confusion and perhaps reduce the number of map sheets needed, the text on many of the maps should be moved into the body of the reclamation plan.

b. Sheet 2 includes an image, "1991 Site Plan," that is very small scale and largely illegible. The image apparently shows the previously proposed excavation limits and depth and does not show actual "site conditions." The purpose of this map, if any, in depicting "Site Conditions," as indicated by the title of the map sheet, should be explained in the text of the reclamation plan. Similarly, maps on the other sheets should be explained in the text of the reclamation plan.
c. The Legend and Notes on the map sheets should be reviewed for accuracy and clarity. For example, the legend on Sheet 4 states "See Sheet 4 for Cross Sections." Cross sections are shown on Sheet 5. Additionally, there are symbols and lines depicted on the maps that are not explained in the "Legend." The map sheets should be reviewed carefully and corrected to clearly explain all symbols, lines, and patterns shown on the map.
d. Cross section lines on the various map sheets should exactly match the cross sections shown on Sheet 5. For example, Section A-A' on Sheet 2 is shown to be 1050 feet long; however, the actual section on Sheet 5 is 1200 feet long. Other cross sections for this and other sheets appear to be similarly inaccurate. Also, Sheet 1 depicts cross section lines; however, no cross sections for that sheet were included on Sheet 5. The cross sections and/or maps should be revised to be consistent, complete and accurately depicting existing and proposed site conditions. Additionally, it would be helpful for cross sections to show locations of utility lines and other pertinent features where they intersect the sections.
e. Sheets 1, 3 and 4 depict the locations and lateral extent of a landscaped berm; however, no detail sections showing the height and slope of the berm are included on the map sheets or are described in the text of the reclamation plan. The reclamation plan should be revised to show details and specifications of the construction of the berm.

B-6

f. Several of the map sheets showing excavated and final topography appear to have errors that should be corrected before signature and stamps of the engineer and/or land surveyor are added. For example, Sheet 3 includes map images of an "Excavation Plan" and an "Excavation Plan Plus Fill." The maximum depth in the former is shown as -100 feet (elevation datum unspecified), and the maximum depth in the latter is shown as -130 feet (elevation datum unspecified). However, both maps indicate the bottom of the pit is 400 feet below ground surface (bgs). Additionally, the 220-foot and -120-foot contour lines split, which is not possible in the real world. The topography should be checked for accuracy and maps revised as necessary. Details of the topographic data, such as the topographic datum (e.g. mean sea level), should be described on the map sheet. The maps should be signed and stamped, as appropriate, by the responsible professional that oversaw their preparation (see following comment).
g. Pursuant to the Professional Engineers Act, Geologist and Geophysicist Act, and Professional Land Surveyors' Act (Business and Professions Code sections 6700 – 6799, 7800 – 7887, and 8700 – 8805, respectively), all applicable documents shall be prepared by a California-licensed professional, shall include his or her license number and name, and shall bear the signature and seal of the licensee. When reviewing documents submitted pursuant to SMARA section 2774, OMR must have confidence that the documents are complete and genuine, and have been prepared by or under the supervision of licensed professionals if and as

required by law and regulation. Therefore, at least one copy of all documents which must, under applicable law, regulation, or code, be prepared by or under the supervision of licensed professionals bearing an original signature, stamp impression or seal, and date affixed by the author should be submitted to OMR prior to approval. As a quasi-judicial body operating in the public trust, the County of Alameda should consider adopting a policy similar to that of the State Mining and Geology Board's Internal Policy on Validating and Accepting Professionally Prepared Reports and Other Documents Submitted for Consideration. The State Mining and Geology Board's policy can be found at: http://www.conservation.ca.gov/smgb/staffreports2004/May/Documents/0513-3a.pdf.

h. Sheet 3 indicates that there will be a 100-foot setback of the pits from Alameda Creek and a 50-foot setback from San Antonio Creek. The edge of the pit appears to be set back from an arbitrary blue line that has been placed near the middle of the creek channel, which was observed to have a crude trapezoidal shape during the site visit. To represent a true setback, the edge of the pit should be setback from the closest approach of the top of the creek bank. The maps should be revised to show a genuine setback from the creeks. B-7

4. SMARA section 2772(c)(6) requires that the reclamation plan include a time schedule that provides for initiation of reclamation at the earliest possible time on each portion of the mined land that will not be subject to further disturbance. The reclamation plan depicts two phases on Sheet 4, but lacks any discussion or time frame for the phases. The DEIR describes three phases on pages 1-5 and 1-6; this information should be added to the reclamation plan. The plan should include the addition of the information from the DEIR and a phasing schedule with a description of phased reclamation.

5. CCR section 3709(a) requires that all equipment, supplies, and other material is stored in a designated area and shown on the reclamation plan maps and waste is disposed of according to state and local health and safety ordinances. A section needs to be added to the reclamation plan to address these items. B-8

End Land Use

(Refer to SMARA section 2772, CCR sections 3707, 3708)

6. SMARA section 2772(c)(7) requires that the reclamation plan include a description of the proposed use or potential uses of the mined lands after reclamation and SMARA section 2772(c)(8) requires a description of the manner in which reclamation, adequate for the proposed use or potential uses will be accomplished. The stated end use for the site is water storage. It appears that there will be areas around and between the various basins/ponds that could be reclaimed to a different end use such as open space or agriculture, as was depicted in the 1992 reclamation plan. Another way to address this could be to note the end uses as "Water Storage and Ancillary Uses" to provide for uses to be determined by SFPUC to support their water management activities. B-9

Additionally, there is an area denoted as "Long-term Plant Site". If it is to remain after

the completion of mining, it should be described as an industrial end use. Alternately, it may be more appropriate to label it as "Future Plant Site". B-10

Geotechnical Requirements

(Refer to CCR sections 3502, 3704)

7. CCR sections 3502 and 3704 require reclamation plans to include final slopes that are designed to be stable with a minimum slope stability factor of safety that is suitable for the proposed end use and that conforms with surrounding topography and/or end use. The amended reclamation plan indicates that the final cut and fill slopes will be inclined at 2H:1V (i.e., horizontal to vertical slope ratio). A study that addresses slope stability by Berlogar Stevens & Associates (BSA), dated April 9, 2012, discusses the stability of final slopes; however, the data and analyses have not been included in sufficient detail to allow for independent review. The slope stability analyses have been run assuming that the pits will be filled with water; it is unclear if this is a reasonable assumption or whether it would be more suitable for the analyses to be based on static groundwater level during dry years. Also, important geologic information, such as the location of the Calaveras fault and associated special study zone boundaries, are discussed but are not shown on any maps. No discussion of the findings and recommendations of the BSA study were included in the reclamation plan. The BSA study should be revised to include data analyses in sufficient detail to allow for independent review by OMR. The study should address geologic hazards at the site, including the potential for coseismic fault rupture and creep through any structures for human occupancy. The amended reclamation plan should be revised to incorporate the findings and recommendations of the revised BSA study in slope design and geologis hazards at the site. B-11 B-12 B-13

8. CCR section 3502(b)(4) requires that a reclamation plan consider the impacts of settlement of filled areas on the ultimate site use and, when necessary, requires that backfill be compacted in conformance with good engineering practice. The end use of the mine for water storage is not described in enough detail to know if some areas of fill will need to be compacted in accordance with good engineering practice. The BSA study refers to the processed fines slope in the pit as an "engineered" fill slope; however, no specifications for placement and compaction of the fill are given in the study or the reclamation plan. The BSA study should be revised to include specification for the placement and compaction of the fill in accordance with good engineering practice and include studies that form the basis for those recommendations. The reclamation plan should be revised to incorporate the findings and recommendations of the revised BSA study. B-14

9. CCR section 3704(b) states that where backfilling is required for resource conservation purposes, fill material shall be backfilled to the standards required for the resource conservation use involved. The reclamation plan also needs to describe the placement and compaction fill that are being created for resource conservation purposes and that will not support structures sensitive to settlement. The reclamation plan should be revised to include specifications for resource conservation fills. B-15

Hydrology and Water Quality

(Refer to SMARA sections 2772, 2773, CCR sections 3502, 3503, 3706, 3710, 3712)

10. CCR sections 3706 and 3710 require that surface and ground water be protected in accordance with the Porter-Cologne and Clean Water Acts as implemented by the Regional Water Quality Control Board and the State Water Resources Control Board. Regulations approved by the State Water Resources Control Board require that a mine site which discharges storm waters that may have contacted any overburden, raw material, intermediate products, by-products, or waste products on the mine site obtain a general industrial activities storm water permit and submit a Storm Water Pollution Prevention Plan (SWPPP). We recommend that the applicant consult with the Regional Water Quality Control Board to determine if these requirements are applicable to this operation. If the permit and the SWPPP are obtained, the required information, monitoring requirements and water quality standards should be incorporated into the reclamation plan to help satisfy erosion and sediment control requirements of SMARA. B-16

11. CCR section 3706(b) states that water quality, recharge potential, and storage capacity of groundwater aquifers that are the source of water for domestic, agricultural, or other uses dependent on the water, shall not be diminished, except as allowed by the approved reclamation plan. The reclamation plan does not address the fact that the mining operation will impact the groundwater aquifer. The mining operation will reduce the storage capacity of the aquifer and expose groundwater to evaporation and potential pollutants. Additional impacts, such as potentially reducing the infiltration capacity of the aquifer by adding processed fines in the pit, also should be considered. It was discussed during the site visit that SFPUC's Alameda Watershed Management Plan addresses the overall site development and the final uses for water management. This should be described in more detail in the reclamation plan, and the plan must identify and describe potential impacts to the groundwater aquifer, as well as any mitigation necessary to minimize or eliminate those impacts. The assessment should be based on a groundwater study by responsible professionals. The CEQA document also should address potential impacts to the groundwater aquifer. If the SFPUC has already addressed the potential impacts for this specific mining operation through the CEQA process for the Alameda Watershed management Plan, these impacts and mitigations should be described. B-17

12. CCR section 3706(a) states that surface mining and reclamation shall be conducted to protect on-site and downstream beneficial uses of water. The Mine Plan, Sheet 3, indicates that a slurry wall will be constructed between the mining operation and Alameda and San Antonio creeks. There is no discussion of the purpose, design, and construction specification of the slurry wall in the reclamation plan. Notes on Sheet 3 indicate that the locations are conceptual and that studies to support the design are ongoing. During the site visit, it was discussed that the SFPUC was requiring construction of the slurry wall to protect water discharges in the creeks from infiltrating into the pits, thereby protecting the discharges and transmitting them downstream. The construction of the slurry wall appears to be an integral component of stream protection for mining and long-term reclamation that must be included in the reclamation plan. The reclamation plan should be revised to include the design specifications for the slurry wall, and any technical reports documenting the need for the slurry wall and its design B-18

should be provided for OMR's review.

The reclamation plan maps indicate that there will be 100- and 50-foot setbacks from Alameda and San Antonio creeks, respectively, presumably to protect the stream from pit capture and other purposes related to stream protections. The Draft Environmental Impact Report (Impact Hydro-4 on page 12-22) indicates the Conditions of Approval for SMP-30 requires a setback from the creek bank to the mining pit to protect the existing drainage patterns from erosion or siltation. As indicated in a previous comment, the setbacks do not appear to be accurately shown on site maps. The setback should be established from the top of the creek bank to the closest approach of the pit in order for them to be effective in preventing adverse effects on the stream channel from the mining operation. Cursory examination during the site visit indicates that the mining pits already may encroach in this setback. The reclamation plan should accurately depict this setback describe this setback and the basis for the distances chosen. B-19

FEMA mapping indicates that creek flows during floods likely will overtop the creek bank and flow into the pits. This situation, if it occurs, may cause erosion and possible pit capture, and may entrap fish. It is unclear if the previously mentioned Condition of Approval in SMP-30 that establishes the setbacks was based on the results of the FEMA study. The reclamation plan should be revised to address and reference the FEMA study as it relates to the mining setbacks and the protection of the streams from pit capture. B-20

13. CCR section 3503(b)(1) requires that settling ponds or basins be constructed to prevent potential sedimentation of streams at mining operations that may otherwise impact water quality. The reclamation plan documents indicate that existing make-up water and desilting basins, such as the North Basin, will be used for sediment and runoff control. No documentation or studies were provided to show that these basins have the capacity to hold all of the sediment and runoff from the mining operation. During the site visit, it was discussed that the North Basin filled to capacity during the winter of 2010-11. The reclamation plan should be revised to include hydrologic studies that demonstrate that the design of the basins is sufficient to retain sediment and storm water runoff that will be generated by the mining operation. B-21

Environmental Setting and Protection of Fish and Wildlife Habitat

(Refer to CCR sections 3502, 3503, 3703, 3704, 3705, 3710, 3713)

14. All of the information on vegetation and wildlife that appears on a Map Sheet 2 should be copied into the body of the amended reclamation plan.

15. Potential adverse effects from the mining operation will be identified and mitigation will be proposed during the environmental review process. Due to the fact that the project is in the early stage of environmental review under CEQA, it is recommended that the reclamation plan not be finalized or approved until mitigation is determined, since mitigation measures recommended under CEQA may substantially change the manner in which mining and reclamation are accomplished. For example, if exclusionary B-22

fencing is required to be installed and maintained around the perimeter of the mine site as mitigation for impacts to California tiger salamander and red-legged frog, this should be noted in the reclamation plan.

Resoiling and Revegetation

(Refer to SMARA section 2773, CCR sections 3503, 3704, 3705, 3707, 3711)

16. Information on resoiling and revegetation is currently located only on Map Sheet 4. It should be copied into the text of the amended reclamation plan and expanded to address the following comments.

17. CCR section 3711 establishes mandatory standards for topsoil salvage, maintenance, and redistribution. Sheet 4 mentions that topsoil has already been salvaged and stockpiled. A section needs to be added to the body of the plan to describe how the stockpiles will be managed and how the soil will be replaced for reclamation. The topsoil stockpiles must be clearly signed to prevent inadvertent use and protected from erosion by planting with an erosion control mix. Topsoil must be redistributed in a stable, consistent thickness to support revegetation.

18. CCR section 3705 (h) requires that planting be conducted during the most favorable period of the year for plant establishment. A statement should be added to the revegetation section of the plan stating that planting will occur during the fall-winter months.

19. CCR Section 3705(c) requires that where surface mining activities result in the compaction of the soil, ripping, discing or other means should be used in areas to be revegetated to eliminate compaction and establish a suitable root zone in preparation for planting. On Sheet 4, it states that surface preparation will consist of scarification to a depth of 2-3 inches. This is very shallow, even for establishing grasses, and should be increased to a minimum of 1 foot.

20. CCR section 3705(m) requires that sampling methods to monitor the success of revegetation are set forth in the reclamation plan and should provide an 80 percent statistical confidence level. Sampling should be carried out not just for 2 years, but until success criteria are achieved.

21. CCR 3705(k) requires management of noxious weeds and a section on weed abatement is included on Sheet 4. However, it lacks adequate detail. Several species of weeds were noted as abundant on the site including pampas grass, black mustard, Italian thistle, milk thistle, poison hemlock, and fennel. A weed control program must include a monitoring program with threshold values (weed cover or density per unit area) that trigger control and abatement procedures. In order to be effective, weed control should be conducted both during operations and reclamation. The plan should be revised to include these additional details.

Administrative Requirements

(Refer to SMARA sections 2772, 2773, 2774, 2776, 2777, Public Resources Code section 21151.7)

22. SMARA section 2773.1 authorizes OMR to review cost estimates prior to lead agency approval. The reclamation plan has a general discussion on page 4-5, but does not include a detailed calculation of the financial assurance. The financial assurance cost estimate (FACE) should include detailed calculations that support any costs identified for site reclamation, including mobilization to and from the site, costs for seeds and plants, etc. The financial assurance mechanism must include both the lead agency and the Department of Conservation as obligees. Prior to approval, a copy of the financial assurance must be forwarded for a 45-day review to the Office of Mine Reclamation, Reporting and Compliance Unit.

If you have any questions on these comments or require any assistance with other mine reclamation issues, please contact me at (916) 445-6175.

Sincerely,

Beth Hendrickson, Manager
Reclamation Unit

Response to Letter B

Natural Resources Agency, Department of Conservation, Office of Mine Reclamation

Beth Hendrickson, Manager of Reclamation Unit (May 10, 2012)

The Department of Conservation's Office of Mine Reclamation (OMR) letter indicates that they have reviewed both the Draft EIR and the amended Reclamation Plan for the Sunol Quarry, and have provided comments on both the Reclamation Plan and the Draft EIR together in one letter. In many instances, the comments included in this letter relate solely to the Reclamation Plan and as such are not responded to in this Final EIR. The margin indicators shown on the OMR letter (previous pages) identify those comments which pertain to the adequacy of the analysis in the Draft EIR or to other aspects pertinent to the environmental review of the proposed Project pursuant to CEQA. These comments are responded to below. The Project applicant and/or the County will respond in separate correspondence on those comments specifically and only pertaining to the Reclamation Plan.

Response B-1

This comment recommends that the hearing date for consideration of CEQA certification and project approvals be postponed because the anticipated hearing date (preliminarily scheduled for June 4, 2012) is inconsistent with the requirements of the state Surface Mining and Reclamation Act (SMARA).

Aside from those issues specifically pertaining to SMARA, County staff has chosen to reschedule the hearing for CEQA certification and project approvals until July 16, 2012. This schedule will enable preparation of responses to all comments received and will allow for the 10-day review period for these responses as required under CEQA.

Response B-2

This comment indicates that SMARA requires that there be a minimum of 60 days from the time of receipt of the Reclamation Plan for official review to the hearing date.

As previously indicated, issues specific to SMARA will be addressed in separate correspondence with OMR. However, there is no requirement for a 60-day review period under CEQA. CEQA Guidelines, Section 15105, when a Draft EIR is submitted to the State Clearinghouse for review by state agencies, the public review period shall not be less than 45 days. Section 15088 provides that the lead agency shall provide a written response to public agency comments on a Draft EIR at least 10 days prior to certifying the EIR.

Response B-3

This comment indicates that OMR did not receive the complete Draft EIR until their site visit on May 8, 2012, and only received the summary of mitigation measures with the submittal so could not provide a complete review of the project.

Pursuant to CEQA Guidelines, Section 15023, the State Clearinghouse within the Office of Planning and Research is responsible for distributing environmental documents to state agencies, departments, boards and commissions for review and comment. Alameda County, as lead agency for this EIR, submitted 15 hard copies of the Draft EIR's Executive Summary and 15 CDs of the entire text of the Draft EIR and appendices to the State Office of Planning and Research (OPR) on April 2, 2012. This submittal procedure complies with OPR requirements. In their letter to the County (Letter A in this Final EIR),

OPR acknowledges that the County complied with State Clearinghouse review requirements for Draft EIRs under CEQA, and indicates that the Clearinghouse distributed individual copies of the Executive Summary and CDs to the Natural Resources Agency and to the Department of Conservation.

Response B-4

This comment indicates that lead agencies are required to notify the California Department of Transportation (Caltrans) whenever a surface mining operation is proposed within the 100-year flood plain of any stream and within one (1) mile of a state highway bridge, that Alameda County should contract Caltrans, and that Caltrans shall then have a 45-day review period to comment on the mining operation.

As also indicated in their letter to the County (Letter A in this Final EIR), OPR indicates that the Clearinghouse distributed individual copies of the Executive Summary and CDs of the entire Draft EIR to Caltrans for their review and comment. The CEQA required 45-day review period on the Draft EIR expired on May 17, and no comments were received from Caltrans.

Response B-5

This comment indicates that the maximum anticipated depth of the surface mining operation should be indicated in the Reclamation Plan, and that although the maximum depth of excavation is given is 400 feet below ground surface, the ground surface elevation of the site varies. This comment suggests that the depth of mining should be clearly stated and tied to a verifiable benchmark.

Table 3-2 of the Draft EIR indicates that the currently approved SMP-30 permit allows excavation to a depth of 140 feet below the ground surface, which is also referenced as being 120 feet above mean sea level. This table also shows that the proposed excavation to a depth of a maximum of 400 feet below ground surface is also referenced as being 140 feet below mean sea level. Mean sea level is a verifiable benchmark that can be referenced in the field. Topography was established through an engineering survey, as referenced on the map sheets. The benchmark is Alameda County Benchmark 184 A. (Survey disk set on bridge; described by National Geodetic Survey, 1973; elevation 273.94; datum NGVD29).

Response B-6

This comment indicates that the locations and lateral extent of landscaped berms are indicated on Project plans, but no detailed sections showing the height and slope of the berms are included on the map sheets or are described in the text of the Reclamation Plan.

The Draft EIR, page 6-29 describes the landscape berms as being "spoils sites" made from the construction spoils derived from several major water supply facilities under construction by SFPUC. These spoils sites are shown in Figure 6-15 of the Draft EIR. As planned by the SFPUC, these landform berms may be stacked up to a height of approximately 25 feet above Calaveras Road along the northerly portion of the Project site (approximately the height of the existing row of trees along the road right-of-way), and up to a height of 4 feet above the grade of Calaveras Road along the southerly portion of the Project site. The landform berms will ultimately be designed with an undulating top surface in order to reduce the linear character of the berm.

However, in their letter to the County (Letter C in this Final EIR), the San Francisco Public Utilities Commission (SFPUC) has further clarified that "the resulting height of the berms will be dependent on how much spoil material is generated from the construction, and the ultimate location of the spoils will be consistent with the Final EIRs for both projects but may not reach the ultimate height covered by those Final EIRs." As such, detailed sections showing the height and slope of the berms cannot be provided at this time. Recognizing the uncertainty of the final height and slope of these landscape berms, the County has further conditioned approval of the Project as follows:

Upon the SFPUC's completion of the placement of "spoils material" landform berms along the edge of Calaveras Road within the Revised SMP-30 site, the Permittee shall retain a professional agronomist or qualified landscape architect to recommend detailed methods and specifications of revegetation of these landform berms.

a. The berm revegetation and planting plan shall be approved by the Community Development Planning Director and monitored by the County Planning Department during the annual or five-year review, or as needed.

b. Revegetation of the landscape berms shall be completed within five (5) years of completion of the berm construction by the SFPUC and any and all necessary regulatory permits have been obtained.

c. The Permittee shall guarantee vegetation establishment during a period of five years.

Response B-7

This comment acknowledges that the Project proposes a 100-foot setback of the mining pits from Alameda Creek and a 50-foot setback from San Antonio Creek. However, the comment suggests that the edge of the pit appears to be set back from an arbitrary blue line that has been placed near the middle of the creek channel. To represent a true setback, the edge of the pit should be setback from the closest approach of the top of the creek bank and the Project should show a genuine setback from the creeks.

According to the Alameda County Surface Mining and Reclamation Ordinance all future mining excavations pursuant to this Revised SMP-30 permit are required to be set back from water courses, flood control channels, reservoirs and water conservation facilities by a distance as determined by the Planning Commission on recommendation of Alameda County Flood Control and Water Conservation District (including the Zone 7 Water Agency) or Community Development Agency sufficient to protect existing or planned facilities. The proposed Project includes a setback of 100 feet from Alameda Creek and a setback of 50 feet from San Antonio Creek. These setbacks are consistent with previous setback requirements established pursuant to the County's 1992 approval of SMP-30. These setbacks are more specifically described as follows:

- A 50 foot buffer zone/setback provided between the top of the San Antonio Creek upper bank and the top of slope of the North Basin. A further setback from San Antonio Creek currently exists and will continue to be maintained from the edge of the East Basin settling pond.
- A 100 foot buffer zone/setback provided between the top of the Alameda Creek upper bank and the top of slope of the North Basin and the expanded South Basin.

The definition of these setbacks is consistent with the recommendation made in Comment B-7

Response B-8

This comment indicates that SMARA requires that all equipment, supplies, and other material be stored in a designated area and shown on the Reclamation Plan maps, and waste be disposed of according to state and local health and safety ordinances.

As indicated in the Draft EIR beginning on page 10-18, the Project will be required to comply with all existing regulations including preparation of a Hazardous Materials Business Plan (HMBP); submittal of a Best Management Practices (BMPs) Plan with its Notice of Intent to obtain coverage under the Regional Water Quality Control Board's General Aggregate Mining Permit; and to submit for approval a Storm Water Pollution Prevention Plan (SWPPP). Each of these requirements provide for implementation of Best Management Practices for the handling and storage of hazardous and other materials used during construction to minimize the potential for releases. All use, storage, transport and disposal of hazardous materials shall be performed in accordance with these existing local, state, and federal hazardous materials regulations.

An additional mitigation measure is also recommended and made part of the Project's conditions of approval which requires that Project site equipment and servicing materials be maintained in a neat and orderly manner to aid in accounting for and detecting potential sources of contamination. For example, non-functional equipment, scrap metal, construction debris, used batteries and tires, and similar objects shall be removed from the site on a regular basis and disposed of at appropriately licensed facilities; Best Management Practices specific to the storage of spare equipment such as heavy equipment parts, conveyor belts, tires and other replacement or extra equipment pieces shall be established pursuant to the Project's SWPPP to ensure that runoff from storage areas does not result in surface water contamination. Spare parts containing petroleum products (i.e., lubricants, hydraulic oil, etc.) shall be stored using Best Management Practices (BMPs) to prevent contamination of soil or storm water runoff; and storage areas shall be inspected by the Operator monthly. Any petroleum leaks shall be documented and cleaned up. Leaking equipment shall be repaired. Inspection and monitoring documentation shall be retained for a minimum of five years and be available to County staff during site inspections.

Response B-9

This comment indicates that the Reclamation Plan is required to include a description of the proposed use or potential uses of the mined lands after reclamation, and that SMARA Section 2772(c)(8) requires a description of the manner in which reclamation, adequate for the proposed use or potential uses will be accomplished. Although the stated end use for the site is water storage, it appears to the commenter that there will be areas around and between the various basins/ponds that could be reclaimed to a different end use such as open space or agriculture as was depicted in the 1992 Reclamation Plan.

Pursuant to the requirements of the Surface Mining and Reclamation Act (SMARA), the end use of the site upon complete reclamation will be water storage and watershed management, with the accommodation of recreational trails. The manner by which reclamation will be accomplished includes:

- Use of the completed quarry pits (the North and South Basins) will ultimately be for SFPUC water storage. At completion, the expanded surface area mined to a minimum depth of 225 feet below ground surface with resulting side slope of 2:1 is expected to result in approximately 23,000 acre feet of water storage at completion. Additional storage could be provided by mining deeper than 225 feet, as may be feasible.
- The Fines Settling Pond (East Basin) will be reclaimed as watershed/open space. During mining operations the East Basin will accumulate settled fines materials which will be allowed to dry, topsoil which has previously been stockpiled near this basin will be applied and compacted, and the basin area will be re-seeded for return to watershed use.
- The exposed slopes adjacent to the North and East Basins have already been re-vegetated. All other banks and bare soil areas will be reclaimed through re-vegetation with native grasslands.
- Existing roads throughout the site will remain to provide maintenance access to water storage reservoirs.

Additionally, pursuant to the County's Surface Mining Ordinance, conditions of approval imposed on the Project pursuant to the original 1992 SMP-30 approvals, as well as other agreements made by the Project applicant, the following additional reclamation and conservation activities have been and/or will be implemented concurrent with the SMARA-required reclamation efforts:

- A large oak tree located along Calaveras Road near the plant entrance and which has been protected by a fence established 5-feet outside of the tree drip-line will be preserved.
- A native tree and shrub planting plan has been implemented along the entire bank of San Antonio Creek between Calaveras Road and its confluence with Alameda Creek.

- A Riparian Screening Plan has been established along the banks of San Antonio Creek, acting as a visual filter and providing natural wildlife habitat. The Riparian Screening Plan was implemented in 1996 based on direction provided by the County and the US Army Corps of Engineers.
- A Landscape Plan has been established along Calaveras Road to visually screen quarry and plant operations from the road. The Landscape Plan was implemented in 1995 and the growth and health of trees are monitored by the County. This Landscape Planting, Irrigation and Maintenance Plan shall be re-assessed to determine what additional plantings are necessary to achieve the objectives of visually filtering and softening views of the site. A detailed landscape and planting plan for additional tree plantings along the Calaveras Road landscape buffers shall be prepared and implemented.
- A native tree and shrub planting enhancement plan will be implemented for the entire bank area of San Antonio Creek on both sides of the creek between Calaveras Road and Alameda Creek, and for the entire bank area of Alameda Creek on both sides of the Creek between San Antonio Creek and the site's southern boundary.
- Upon SFPUC's completion of the placement of "spoils material" landform berms along the edge of Calaveras Road, the landform berms will be revegetated with native grasslands.

Response B-10

This comment suggests that if the long-term operations plant site is to remain after the completion of mining, it should instead be described as an industrial end use or as a "Future Plant Site."

As indicated in the Draft EIR's Project Description and again on page 4-9 of the Draft EIR, the final phase of the Project consists of implementation of the proposed Reclamation Plan. The proposed Reclamation Plan anticipates ultimate use of the completed quarry pit for SFPUC water storage. The entire pit, including the Phase II plant site, would be inundated with water at the end of mining.

Although there is a possible future scenario under which aggregates mined at a different site could be delivered via a conveyor system to the long-term processing plant at the Sunol Valley Quarry for stockpiling and processing after mining at SMP-30 is complete, such a scenario would require subsequent surface mining permits through the County, additional environmental reviews, Alameda County approvals and revised leases with the SFPUC. No such applications have been filed, the currently proposed Project does not contemplate this possible future scenario, and any analysis or indication of such a scenario at this time would be premature.

Response B-11

This comment indicates that final slopes must be designed to be stable with a minimum slope stability factor of safety that is suitable for the proposed end use and that conform to surrounding topography. It also indicates that the available data and analysis is not sufficiently detailed for independent review. It also questions whether the analysis assumptions that the pits will be filled with water is a reasonable assumption, or whether it would be more suitable for the analysis to be based on static groundwater levels during dry years.

The Draft EIR beginning on page 10-14 includes a thorough assessment of slope stability issues at the proposed Project. This assessment indicates that, based on the Project's Mine Plan and Cross Sections (shown on Figure 10-5), all mined slopes within the Project will be excavated at a design angle of 2:1 (horizontal: vertical). This slope design is consistent with the Alameda County Surface Mining Ordinance requirements which regulate sand and gravel operations in the County and which provides slope stability requirements that are applicable to all mining and reclamation projects in the County. These regulations require that all finished slopes constructed during mining and reclamation shall not be steeper than two feet horizontal to 1 foot vertical (2:1) unless the applicant can demonstrate to the satisfaction of the Planning Commission that any steeper slope would not be incompatible with alternate

future uses, would not be hazardous to persons that may utilize the site under alternative future uses, or would not reduce the effectiveness of revegetation and erosion control measures. The Project does not propose to construct any slopes steeper than 2:1.

Furthermore, as part of the 1992 approval of Surface Mining Permit SMP-30 and adoption of the 1992 MND, Alameda County found that mitigation measures had been incorporated as conditions for approval of SMP-30, including the requirement that cut or fill slopes above seepage or groundwater levels shall be no steeper than 2:1, that cut slopes below groundwater level shall be no steeper than 2:1, and that cut slopes where the groundwater level has been lowered causing seepage through the slope, shall be no steeper than 4:1. The County found that these requirements would eliminate or reduce hazards related to slope failure to a less than significant level. Subsequently, the permittee of SMP-30 requested modification of these gradient requirements based on an engineering and geotechnical report that demonstrated that the slope gradients of 2:1 throughout the entire site would be safe, stable and otherwise consistent with the intent, standards and requirements of the ACSMO and the County accepted these modifications. [1]

As also noted in the Draft EIR (on page 10-17), the proposed quarry pit slope design for water storage is based on a slope stability analysis that assumed a "theoretical worst-case" static condition wherein the water level within the pit is assumed to be 20 feet deep at the top of the quarry (a conservative assumptions because groundwater levels within the pit are likely much deeper), and the phreatic surface was varied such that it sloped down the quarry face and day-lighted 40 feet below the top of the quarry, and another scenario where it day-lighted near the bottom of the quarry pit. Based on these "worst-case" variables, the slope stability analysis indicates that at the designed 2:1 slope, the resulting factor of safety is greater than 1.5, thus exceeding the safe slope stability factor.

More recent geo-technical investigations have also been conducted for the Project by Berlogar Stevens Associates (Berlogar 2012). Under these more recent 2012 investigations, the slope of the quarry wall was modeled at 400 feet in height and at 2:1 slopes in homogeneous native material overlying impermeable bedrock. For quarry operation conditions, the investigation assumed various groundwater levels corresponding to the top of the quarry slope, between 20 feet to 40 feet below the top of the quarry, and several water levels in the quarry up to 300 feet deep. The water levels after completion of mining were analyzed with water levels at 300 and 400 feet below the top of the quarry. A minimum static factor-of-safety (FS) of 1.2 is considered acceptable for quarry operation conditions, and a static FS of 1.5 is considered acceptable after completion of mining.

The analysis found that the factor of stability (FS) increases with higher water levels in the quarry, so shallower water levels were not analyzed. The static FS was found to be more than 1.5 in all cases. When the pseudo-static analysis indicated FS of approximately 1.0 or less, further deformation analyses were performed per DMG Special Publication 117 guidelines. Deformation analysis resulted in maximum deformation of the slope toe of less than 1 inch, indicating relative stability. These more recent Berlogar geo-technical investigations confirm the prior recommendations and conclusions which had previously demonstrated that the slope gradients of 2:1 throughout the entire site would be safe, stable and otherwise consistent with the intent, standards and requirements of the ACSMO.

[1] The Annual Progress Report for the RMC Pacific Materials Sunol Plant (SMP-30) prepared by Spinardi Associates, November 2002 indicates that; "As part of the SMP-30 application, the permittee submitted a geotechnical report entitled Geotechnical Study to Evaluate Slope Inclinations for the Santa Clara Sand and Gravel Quarry, Existing Quarry Areas, Sunol, California (Geomatrix Consultants, Inc. October 1990). That report recommended 2:1 (horizontal to vertical) slopes throughout the existing 285-acre parcel. The County retained Berlogar Geotechnical Consultants to review that report. Berlogar responded to the County with a letter dated May 28, 1993 approving the proposed slope recommendations.

Response B-12

This comment indicates that important geologic information, such as the location of the Calaveras fault and associated special study zone boundaries, are not shown on any maps.

The Draft EIR, starting on page 10-3 provides a detailed description of seismicity in the Project area, including information pertaining to the Calaveras Fault system and the Alquist-Priolo Special Study Zone. Maps showing the location of the Calaveras Fault and its associated Special Study zone boundaries are included in the Draft EIR as Figures 10-2 and 10-3.

Response to B-13

This comment suggests that additional study is warranted to address geologic hazards at the site, including the potential for co-seismic fault rupture and creep through any structures intended for human occupancy.

The Draft EIR beginning at page 10-12 does provide a thorough assessment of the potential exposure of people and structures to risk of loss, injury or death involving rupture of the Calaveras Fault system. This assessment concludes that, based on detailed mapping efforts compiled by others, it is unlikely that any structures located on the Project site would be placed across the trace of this fault. Only if a local, as-yet undiscovered step-over fault trace were to cross Calaveras Road at the precise location of a proposed structure would this hazard occur. The only structures that are part of the proposed Project that would be considered "structures for human occupancy" (i.e., a structure used or intended for supporting or sheltering any use or occupancy which is expected to have a human occupancy rate of more than 2,000 person-hours per year) would be the scale/office building, the quality control lab and the new weigh station, and the relocation of each of these structures during Phase II of the Project.

Mitigation measures are recommended in the EIR for further, structure-specific geologic investigations to be conducted prior to construction of any structures intended for human occupancy (i.e., expected to be occupied for more than 2,000 person-hours per year) within the Alquist-Priolo zone. If, based upon the findings of the geologic investigation, the site of any such proposed structure is underlain by an active fault trace, the structure shall be located at least 50-feet away.

Response B-14

This comment notes that the Reclamation Plan should consider the impacts of settlement of filled areas on the ultimate site use, which may require that backfill be compacted in conformance with good engineering practice, and notes that no specifications for placement and compaction of the fill are given in the study or the Reclamation Plan.

As indicated in the Draft EIR (page 10-19), Phase II of the Project includes a long-term processing yard which will be created in the southern end of the South Basin (the primary mining pit). To create a surface for this future processing yard, mining waste will be placed back into the South Basin, creating a bench. This backfilled bench will be filled and compacted at a design angle of 2:1, consistent with the Alameda County Surface Mining Ordinance requirements. The slope stability analysis presented in the Draft EIR indicates that at the designed 2:1 slope, the resulting factor of safety is greater than 1.5, exceeding the safe slope stability factor.

More recent geo-technical investigations have also been conducted for the Project by Berlogar Stevens Associates (Berlogar 2012). Under these more recent 2012 investigations, slope stability analyses were performed for the proposed 2:1 engineered fill slope at the south end of the quarry. The engineered fill material is expected to be comprised of compacted process fines and other fill material. The fill slope was modeled as homogeneous engineered fill slope, 350 feet high, with a 2:1slope. The water level in the quarry was modeled at depths of zero, 100 feet, and 200 feet below the top of the quarry. In their

professional opinion, the static FS of 1.4 is acceptable for operating quarry conditions. Other assumptions underlying the analysis, which are part of the Project's more detailed design elements, include:

- The engineered fill would have an average minimum friction angle of 30 degrees, and 500 psf cohesion.
- Groundwater levels during quarry operations would be controlled by a drainage system to intercept groundwater that could be emanating from the south cut slope and the quarry floor. The drainage system is needed to intercept groundwater inflow and to reduce the potential for saturating the engineered fill during active mining.

This analysis indicated that the static FS would be greater than 1.4 during quarry operations, and less than 1.0 for pseudo-static conditions. Deformation analyses indicated approximately 1 to 2 feet of slope deformation, which would be unacceptable for structures located within the failure zone (approximately 100 to 150 feet back from the top of the engineered fill slope). Due to the low pseudo-static FS and the anticipated deformation for the southern engineered fill slope, the Berlogar 2012 study we recommends specific setbacks from the top of the fill slope for various equipment and stockpiles. A separate analysis was also conducted for the proposed fill slope which assumed the installation of a geo-grid reinforced engineered fill slope. The geo-grid reinforcement was found to provide a pseudo-static FS of at least 1.1. Because the FS is acceptable with the geo-grid reinforcement, substantially smaller setbacks from the top of the fill slope are recommended.

After final reclamation, all equipment will be removed and the long-term processing yard will be under water (i.e., at the bottom of the water storage reservoir). No slope stability analysis or factor of safety for the engineered slope is applicable under reclaimed conditions, other than the slope stability of the quarry walls (see Response B-11).

Response B-15

This comment states that where backfilling is required for resource conservation purposes, fill material should be backfilled to standards required for the type of resource conservation use involved. It also suggests that the Reclamation Plan should describe the placement and compaction of fills created for resource conservation purposes.

Pursuant to the Reclamation Plan, the Fines Settling Pond (East Basin) will either be backfilled for watershed management / open space use or will be utilized for water storage. Assuming that this pond will be backfilled, the Project's geotechnical report (Berlogar Stevens, May 2012) recommends that engineered fill be placed in the upper few feet. The silt in the ponds will need to remain untouched for a few years in order for a dry crust to form by air drying. Once a crust has formed, a geo-grid layer (such as Tensar TX160) should be placed on the ground surface. A bulldozer should then spread approximately 2 feet of soil over the geo-grid. The dried crust, geo-grid and 2-foot layer of soil will act as a bridge over the softer silt. Engineered fill can then be placed in thin lifts and compacted as described below. A minimum thickness of compacted fill should be 3 feet. Fill should be placed in thin lifts (normally 6 to 8 inches in loose lift thickness depending on the compaction equipment), properly moisture conditioned, and compacted as specified below.

- Soils with rock particles less than about 12 inches in size should be moisture conditioned to at least 3 percent above the optimum moisture content [2] and compacted to at least 90 percent relative compaction.[3]

[2] Optimum moisture is the water content (percentage by dry weight) corresponding to the maximum dry density.

[3] Relative compaction refers to the in-place dry density of the soil expressed as a percentage of the maximum dry density determined by ASTM D1557 compaction test procedure.

- Gravelly material should be moisture conditioned to at least 3 percent above the optimum moisture content and should be compacted with at least 5 passes of an 825 sheepsfoot compactor.

Response B-16

This comment notes that regulations approved by the State Water Resources Control Board require that a mine site which discharges storm waters that may have contacted any overburden, raw material, intermediate products, by-products or waste products on the mine site obtain a general industrial activities storm water permit and submit a Storm Water Pollution Prevention Plan (SWPPP). The comment also recommends that the applicant consult with the Regional Water Quality Control Board to determine if these requirements are applicable to this operation, and that if the permit and the SWPPP are obtained then the required information, monitoring requirements and water quality standards should be incorporated into the Reclamation Plan.

As identified in the Draft EIR (page 12-14), discharges from aggregate mining, sand washing and sand off-loading facilities are regulated by the RWQCB subject to permitting requirements of the NPDES General Waste Discharge Requirements for Discharges of Process Wastewaters from Aggregate Mining, Sand Washing, and Sand Offloading Facilities to Surface Waters (Aggregate Mining General Permit). The RWQCB established the Aggregate Mining General Permit, in part, to reduce surface water impacts from the discharge from aggregate mining facilities. As indicated in the Draft EIR beginning on page 12-18, the current mining operation operates under an NPDES permit from RWQCB for discharge of process water, storm water, and groundwater pumped from the existing mine basin into San Antonio Creek and Alameda Creek. Data collected pursuant to the self-monitoring requirements of this NPDES permit demonstrates that the current operations do not violate any water quality standards or waste discharge requirements. The proposed Project will not result in appreciable changes to the way in which storm water and pumped groundwater are managed and discharged. There will, however, be changes to the processing facilities including the addition of a concrete ready-mix plant and an asphalt batch plant. These new processing facilities will be required to comply with existing regulations for containment of process materials, best management practices (BMPs) to control storm water, and additional practices for the containment of concrete wash-out fluids.

The Draft EIR makes it clear that the applicant will be required to file a Report of Waste Discharge (RoWD) with the RWQCB for Waste Discharge Requirements (WDRs) in the form of an updated NPDES permit. The RoWD must document the change in operator and will describe the engineering and construction methods that will be used in the process area related to the new facilities. Compliance with these regulatory requirements will maintain the high quality of the water discharged to San Antonio Creek and Alameda Creek, and prevent any potential violations. Consideration of approval of such an updated NPDES permit can only occur after certification of this CEQA document.

Response B-17

This comment states that water quality, groundwater recharge potential, and storage capacity of groundwater aquifers that are the source of water for domestic, agricultural or other uses dependent on the water shall not be diminished, except as allowed by an approved Reclamation Plan. It also suggests that the proposed mining operation will impact the groundwater aquifer, reduce the storage capacity of the aquifer and expose groundwater to evaporation and potential pollutants.

The Draft EIR (starting on page 12-21) assesses the extent to which the Project might deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume, or a lowering of the local groundwater table level. The assessment concludes that de-watering requirements and groundwater levels surrounding the Project will be comparable to current baseline conditions, resulting in a less than significant effect.

Groundwater has been pumped from the current excavation at rates reportedly ranging from 1,000 gpm to over 2,500 gpm, whereas peak pumping rates may be as high as 10,000 gpm during excessive rainfall in late winter and early spring seasons. Pumped water is sent to the North Basin where it is used for process water, percolates back to the groundwater table, or is discharged to San Antonio Creek and Alameda Creek. Most of the dewatering requirement is due to percolation of water from Alameda Creek into the alluvium. The deeper Livermore Formation is generally considered to be a poor groundwater aquifer in the Project vicinity. Groundwater within the Livermore Formation is typically limited to discrete lenses or layers of gravel. While these zones may produce water in test holes and seep into the basin when exposed in the excavation, the total volume of groundwater present is limited and will diminish as the lens or layer of gravel is excavated. Therefore, the mechanism and volume of groundwater pumped from the excavated basin during mining is not expected to change substantially for the Revised Use Permit. The dewatering requirements and effects on the groundwater levels in the area surrounding the Project will not change appreciably over time.

The Project includes the proposed installation of a slurry wall along the Project perimeter adjacent to Alameda Creek and San Antonio Creek. The slurry wall would extend through the alluvium and be keyed into the upper part of the Livermore Formation, at a depth of approximately 40 ft. bgs. The intent of the slurry wall is to reduce the amount of groundwater that seeps from the adjacent creeks into the quarry basin through the alluvium. Until the time a slurry wall is installed, it is anticipated that the dewatering requirements and groundwater levels surrounding the Project will be comparable to current baseline conditions. Once the slurry wall is installed, seeps from the adjacent creeks into the quarry basin will be reduced and dewatering requirements are expected to be lowered. Groundwater levels surrounding the Project area would not be affected.

The Draft EIR also stipulates that the Project will be required to comply with all applicable regulations to minimize and prevent the contamination of water within the aquifer, including: 1) preparation and implementation of an Emergency Response Plan/Contingency Plan pursuant to an updated Hazardous Materials Business Plan; 2) development of a Risk Management Plan pursuant to the California Accidental Release Program; 3) preparation and implementation of a Spill Prevention Control and Countermeasure Plan to provide appropriate containment and/or diversionary structures or equipment to prevent a discharge from all above-ground storage tanks; 4) preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP); as well as 5) implementation of additional Mitigation Measure Hydro-2 to prevent the inundation of the processing area and the potential release of hazardous materials to water in the basin.

Response to B-18

This comment states that surface mining and reclamation must be conducted in a manner that protects on-site and downstream beneficial uses of water. It notes that a slurry wall is proposed to be constructed between the mining operation and Alameda and San Antonio creeks, but that the Reclamation Plan does not identify the purpose, design and construction specifications of the slurry wall.

As indicated in the Draft EIR (page 12-22), the Project includes proposed installation of a slurry wall along the Project perimeter adjacent to Alameda Creek and San Antonio Creek. The slurry wall would extend through the alluvium and be keyed into the upper part of the Livermore Formation at a depth of approximately 40 ft. bgs. The intent of the slurry wall is to reduce the amount of groundwater that seeps from the adjacent creeks into the quarry basin through the alluvium. Once the slurry wall is installed, seeps from the adjacent creeks into the quarry basin will be reduced and dewatering requirements are expected to be lowered. The location of the slurry walls are shown on Figure 3-9 of the Draft EIR. Although construction details for the slurry walls are not available at this time, the environmental effects associated with the construction of the slurry wall have been fully addressed in this EIR.

Response to B-19

This comment acknowledges the proposed 100-foot and 50-foot setbacks from Alameda and San Antonio Creeks, presumably to protect the stream from pit capture, other purposes related to stream protections, and to protect the existing drainage patterns from erosion or siltation. It also suggests that the setbacks do not appear to be accurately shown on site maps, and recommends that the setback should be established from the top of the creek bank to the closest approach of the pit in order for them to be effective in preventing adverse effects on the stream channel from the mining operation. It further suggests that mining pits may already encroach in this setback.

According to the Alameda County Surface Mining and Reclamation Ordinance all future mining excavations pursuant to Revised SMP-30 shall be set back from water courses, flood control channels, reservoirs and water conservation facilities a distance as may be determined by the Planning Commission on recommendation of Alameda County Flood Control and Water Conservation District (including the Zone 7 Water Agency) or Community Development Agency to be sufficient to protect existing or planned facilities. The proposed Project includes a setback of 100 feet from Alameda Creek and a setback of 50 feet from San Antonio Creek. These setbacks from water courses are consistent with previous setback requirements established pursuant to the County's 1992 approval of SMP-30.

These setbacks are more specifically described on page 10-19 of the Draft EIR as follows:

- A 50 foot buffer zone/setback provided between the top of the San Antonio Creek upper bank and the top of slope of the North Basin. A further setback from San Antonio Creek currently exists and will continue to be maintained from the edge of the East Basin settling pond.
- A 100 foot buffer zone/setback provided between the top of the Alameda Creek upper bank and the top of slope of the North Basin and the expanded South Basin.

The Project's proposed setbacks and this CEQA analysis are forward-looking and proscriptive as to future quarry operations, irrespective of current conditions.

Response B-20

This comment references FEMA maps which indicate that creek flows during floods likely will overtop the creek bank and flow into the pits, and indicates that if this situation occurs, it may cause erosion and possible pit capture of entrapped fish. This comment also questions whether the Project's setbacks are based on the FEMA study and suggests that the Project be revised to address and reference the FEMA study as it relates to the mining setbacks and the protection of the streams from pit capture.

The stream channel of Alameda Creek in the vicinity of the Project was relocated to its current position sometime after 1981, and in 2009 the Federal Emergency Management Agency completed new Flood Insurance Rate Maps (FIRMs) for this relocated portion of Alameda Creek. These flood maps are shown on Figure 12-3 of the Draft EIR, and indicate that 100 year flood flows would spread along Alameda Creek approximately 400 feet to 800 feet out from the top of creek bank relative to base ground elevations. The 100-foot and 50-foot mining setbacks bear no relationship to the FEMA flood zone.

If flood flows were to overtop the creek banks they would not spread across the site as indicated in these maps, but instead would flow first into the existing mining pits on both sides of the creek; this capacity would lessen the effects of flooding on downstream properties. This condition exists today (as an existing condition) and would continue to occur at the site in the future under the Project. As presented in the Draft EIR, the total volume of runoff from a 100-year storm may be as much as 7,000 to 12,000 acre-feet, half of which (a maximum of approximately 6,000 acre-feet) could enter into the SMP-30 quarry pit and the other half entering into the quarry pit on the western side of the creek. Based on the size of the current South Basin quarry pit, the existing pit has a volume of nearly 6,000 acre feet now, and would have a volume of as much as 23,000 to 27,000 acre feet at completion. Thus, under a 100-year flood

condition the existing quarry pit could potentially be filled with overbank flows, and future pit conditions would accommodate all projected overbank flows.

With regard to the potential for fish to become entrapped within the quarry pit under such a flood condition, there are several factors to be considered:

- Steelhead and rainbow trout, as well as other native fish historically inhabited some portions of the Alameda Creek watershed. However, during the last 150 years, human activity in the watershed has resulted in the elimination of the historic steelhead run, and reduced the available habitat for rainbow trout.
- The Alameda Creek Fisheries Restoration Workgroup and others are working to address steelhead restoration issues in the Alameda Creek watershed.[4] Initial Workgroup efforts focused in part on the identification and removal or modification of physical barriers preventing the migration of steelhead to and from, and the movement of rainbow trout within, the Alameda Creek watershed. As part of the Project's proposed Conservation Plan agreements, the applicant has agreed to implement a number of conservation measures to enhance habitat (including fisheries habitat) in the vicinity of the Project site.
- Upon the success of recovery efforts, water flows and habitat restoration in the Alameda Creek watershed could restore and support steelhead, while considering other native fishes and riparian communities.
- Upon such success, it would then be possible that this restored fishery could support a fish population that might become entrapped in the quarry pit in the event of a major flood.

Even if all of these factors were to occur in the future, there is nothing about the currently proposed Project that creates or exacerbates such an impact. If Alameda Creek were to be restored as a fishery today, any flood flows over-topping the banks of Alameda Creek would enter into the existing quarry pit and could theoretically entrap fish. Even when the quarry pit becomes larger and deeper under the Project, the projected volume of flood flows within the creek are unaffected by the Project. The same volume of water (and theoretically the same numbers of fish) would flow into the quarry pit under both existing and with-Project conditions. The Project does not adversely affect existing fisheries habitat, does not contribute to cumulatively significant impacts to fisheries, and would not adversely affect or exacerbate a potential impact related to fish becoming entrapped in the quarry pit even under a future scenario wherein fisheries habitat is restored in Alameda Creek adjacent to the Project site.

Response B-21

This comment questions whether the North Basin and the East Basin have sufficient capacity to retain sediment and storm water runoff that will be generated by the mining operation.

As indicated in the Draft EIR (page 12-6), the North Basin receives water pumped from the quarry basin and is used as water storage for make-up water for aggregate processing and dust control. Dewatering rates from the main quarry basin vary from 1,000 gpm up to 2,500 gpm during dry periods and normal rainfall years. Dewatering rates in 2011 were approximately 10,000 gpm due to high rainfall and from

[4] The Working group includes Alameda County Flood Control and Water Conservation District, Alameda County Resource Conservation District, Alameda County Water District, Alameda Creek Alliance, American Rivers, California State Coastal Conservancy, California Department of Fish and Game, East Bay Regional Park District, National Marine Fisheries Service, Natural Resources Defense Council, Pacific Gas and Electric Company, San Francisco Public Utilities Commission, San Francisco Regional Water Quality Control Board, U.S. Army Corps of Engineers, U.S. Natural Resources Conservation Service, U.S. Fish and Wildlife Service, and the Zone 7 Water Agency.

additional inflow from a new overflow pipe and trench installed by SFPUC at the south end of the basin. During periods of high rainfall or elevated dewatering requirements, excess water is discharged at the northwest corner of the North Basin into San Antonio Creek or to Alameda Creek. This discharge is permitted pursuant to NPDES General Permit No. R2-2008-0011 as issued by the San Francisco Bay Regional Water Quality Control Board (RWQCB), and serves as an emergency outflow in the event that the North Basin is unable to hold the volume of dewatering and runoff flows.

Response B-22

This comment suggests that the Project is in the early stage of environmental review under CEQA, and recommends that the Reclamation Plan (which is part of the Project) not be finalized or approved until mitigation is determined because mitigation measures recommended under CEQA may change the manner in which mining and reclamation are accomplished. This comment cites an example wherein exclusionary fencing may be required around the perimeter of the mine site as mitigation for impacts to California tiger salamander and red-legged frog, and this mitigation should be included as part of the Reclamation Plan.

Although the Project is actually now in the Final EIR stage of its CEQA review, the County agrees with the suggestion that the Project not be approved until the CEQA process is complete, as is consistent with CEQA Guidelines. As noted in the Draft EIR (page 1-9), the information contained in the EIR is subject to review and consideration by the County of Alameda as lead agency, the SFPUC, and any other responsible agencies prior to the County's decision to approve, reject or modify the proposed Project. The Alameda County Planning Commission must ultimately certify that it has reviewed and considered the information in the EIR and that the EIR has been completed in conformity with the requirements of CEQA before making any decision on the proposed Project. Certification of the EIR does not constitute approval of the Project, and mitigation measures recommended in the EIR must either be adopted as conditions of project approval or found to be infeasible pursuant to the CEQA Findings which must also be approved by the Planning Commission.

Specifically in regard to fencing as mitigation for potential impacts to California tiger salamander and red-legged frogs, the terms of the Conservation Plan for SMP-30 provide that exclusionary fencing such as silt fences shall be installed around all construction areas that are within 150 feet of or adjacent to documented CRLF or CTS habitat. Once fencing is in place, it shall be maintained until completion of construction within or adjacent to the exclosure. Additional mitigation measures recommended for the Project require that the exclusion fencing shall be inspected to ensure it does not have any tears or holes, that the bottoms of the fences are still buried, and that no individuals have been trapped in the fences. Any California tiger salamander and California red-legged frog along and outside the fence shall be closely monitored until they move away from the construction area.

These Conservation Plan requirements and mitigation measures will be made conditions of Project approval and implemented pursuant to the Mitigation Monitoring and Reporting Plan adopted by the County for this Project (including the Project's Reclamation Plan).

San Francisco
Water Power Sewer
Operator of the Hetch Hetchy Regional Water System

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May 17, 2012

Letter "C"

Mr. Bruce Jensen, Senior Planner
Alameda County Community Development Agency
224 W. Winton Avenue, Suite 110
Hayward, CA 94544

Re: Draft Environmental Impact Report for the Sunol Valley Aggregate Quarry Revised Surface Mining Permit-30 (SMP-30) in Alameda County

Dear Mr. Jensen:

Under the provision of Section 15082 of the CEQA guidelines, the San Francisco Public Utilities Commission (SFPUC) hereby submits comments on the April, 2012 Draft Environmental Impact Report (DEIR) for the Sunol Valley Aggregate Quarry Revised Surface Mining Permit-30 (SMP-30).

Figures

Figure 1-2, project site location (see also Figures 3-1, 3-4, 3-6, 6-2), shows pit F3 West as within boundary of SMP 30; figures should be revised to be consistent with the text on page 3-1 that accurately describes the Project location as "... bounded by San Antonio Creek to the north, Alameda Creek to the west and Calaveras Road frontage to the east." (Note Figure 3-2, Assessor's parcel map, and Figure 3-5, the original SMP 30 mining area drawing, both appear to show the inclusion of land on the far side of San Antonio Creek, which was moved as part of that approval and is not part of SMP-30..

The figures should also make clear that the sliver of land on the left bank of Alameda Creek at the bottom of the drawing is no longer part of the mining permit as the area has never been mined and is not in the premises boundary of the lease- the permit should only extend to the left bank of Alameda Creek, not beyond. Table 3-2 on p. 3-30 (comparing old and revised permit) should be revised in the "Site and Parcels" row to include these differences. The acreage figures on Table 3-2 may also need to be reduced to account for removal of these areas. The small reduction in acreage would not appear to create lots smaller than those permissible under Measure D (see discussion on p. 5-4).

> "The Project does not propose to subdivide or further split these parcels and would not reduce parcels sizes below the 100-acre minimum..."

C-1

Figure 5-3: Names of mining operators in figure (e.g. "RMC Materials", "Mission Valley Rock") should be updated to match current operators.

C-2

Lease Agreement Acreage

Pages 1-4, 2-1 & 3-14: "The lease includes the currently active quarry site of 323 acres permitted under Alameda County SMP-30 and an additional approximately 58-acre area along the southeast boundary of the current SMP-30

C-3

site." The lease does not include the 58 acre expansion area, which is subject to the current CEQA process being completed, after which the lease may be amended following Alameda County approval to include the Expansion Premises, if approved by the SFPUC and the San Francisco Board of Supervisors. Such statements might be preceded by the wording used on page 2-3 of the DEIR: "Subject to Project approval by Alameda County and lease approvals by the SFPUC,..."

Revegetation

Pages 1-6, 2-2, 3-20 & 4-9: The Draft EIR does not provide a consistent description of the timing of revegetation on the creek banks. In some places, the document states that the banks will be revegetated within two years of Project approvals and in other places in the document the timing is described differently. For example in the discussion of the Conservation Plan on p. 3-28 the document states: "ODS will restore both banks of Alameda Creek and both banks of San Antonio Creek adjacent to the SMP-30 lease (i.e.. the Project site) with native vegetation. The revegetation would be completed within two years of Project approvals (including the Revised SMP-30 Lease with SFPUC)." Similarly in the discussion regarding impact Bio-2 on p. 2-12, there is a statement that no mitigation is necessary because "[w]ith implementation of the Project's proposed Conservation Plan and Reclamation Plan, impacts to riparian habitats from the proposed Project would be reduced to less than significant" it is unclear when the plantings will occur and in this case, whether the timing of the plantings affects the impact determination. C-4

Page 2-6, Mitigation Measure Aesthetics-5: Calaveras Road Landscape Plan: states "a detailed landscape and planting plan for the Calaveras Road landscape buffer which shall include provisions for additional tree plantings consistent with the species types and sizes as originally required pursuant to SMP-30 Condition of Approval #21." These plantings should be native species appropriate for the site and the purpose involved (screening). C-5

SFPUC Discretionary Approval Action

Page 3-32: The statement "As a public agency landowner, the City and County of San Francisco and the SFPUC have retained some discretion with respect to modification of SMP-30, including the right to require certain modifications to the quarry lease as may be related to Project-required mitigation measures" should be modified to make clear that the City's retained discretion also includes the ability to not approve the modified lease even if the revised mining permit is approved by Alameda County acting as lead agency under CEQA. C-6

Fire Protection Plan

Page 2-19 and MM Haz-7: Comprehensive Fire Protection Plan states:

"The Project applicant shall engage a Fire Protection Engineer to perform a Code analysis and submit a Comprehensive Fire Protection Plan for the proposed Project for review by the County Fire Marshal. The submittal shall include an evaluation of the Project's compliance with the Uniform Fire Code requirements relating to storage C-7

of hazardous materials (including aboveground tanks), the need for fire suppression system, alarm systems, storage of flammable or combustible materials, containment basins around hazardous materials, and compliance with hazardous materials regulations. Hazardous materials at the proposed asphalt plant shall be specifically considered in the review."

This fire protection plan should be consistent with the SFPUC Alameda Watershed Management Plan, Alameda Watershed Fire Management Element and be reviewed and approved by the SFPUC.

Aesthetics – SFPUC Berm Heights

The Aesthetics analysis of the Draft EIR assumes that the SFPUC's planned landscape berms along Calaveras road will provide appropriate visual screens that therefore, do not require any mitigation measures for the Project to reduce impacts to aesthetics. For example: Page 6-32 states "With construction of SFPUC's planned landscape berms along Calaveras Road, certain views of the Project's encroaching elements will be blocked."

The SFPUC projects currently under construction in the Sunol Valley will construct these berms along Calaveras Road. The final height of these berms may be up to 4 feet above the grade of Calaveras Road but may be less., as stated on Page 3-28 in the New Irvington Tunnel FEIR (December 2009):

C-8

> "Spoils at Spoils Site North may be stacked up to a height of approximately 25 feet above Calaveras Road, approximately the height of the existing row of trees along the road that would be preserved, and up to a height of 4 feet above the grade of Calaveras Road at Spoils Site South."

The SFPUC will use these spoils sites in the construction of New Irvington Tunnel, Alameda Siphons #4 and may use them for the San Antonio Back-up Pipeline, however, the resulting height of the berms will be dependent on how much spoil material is generated from the construction and the ultimate location of the spoils will be consistent with the Final EIRs for both projects but may not reach the ultimate height covered by those Final EIRs. As a result, the SFPUC cannot ensure specific berm heights and the completed berms may not provide the visual screen anticipated by the Draft EIR of this Project.

Biological Resources

Page 9-12, Table 9-1 lists the tricolored blackbird with low potential to occur in the project area. The text acknowledges that there are documented occurrences in the vicinity of the survey area, with "Limited and marginal breeding habitat within the survey area." Since there are documented occurrences of large flocks in the Sunol Valley, there is a greater potential to occur than "low potential."

C-9

Page 9-42 describes a portion of an ephemeral stream (ES-1) "within the Project area that had been apparently culverted and backfilled in association with the SFPUC's NIT and Alameda Siphons projects. It is assumed that the impacted area will be restored to its original condition at the conclusion of those projects." The EIR should be revised to state that the impacted area of ES-1 has been restored.

C-10

24-hour Operations
Mitigation Measure Aesthetics-4 (Light and Glare): Night Lighting provides measures to address night lighting by directing light on site and minimizing off-site illumination. The DEIR should acknowledge that this measure would be relevant for avoiding impact on wildlife as well.

C-11

Figures 13-3 through 13-7 show noise contours from existing and proposed quarry operations. These figures show the Garcia residence, but do not show the two SFPUC watershed keepers residences. The locations of these watershed keeper residences should be added to the figures and appropriately considered in the analysis (see attached figure for reference). The SFPUC commented on the NOP stating: "Additional land uses within the SMP-30 project site include…two SFPUC watershed keeper residences (only one is mentioned in the NOP) - one near Alameda East Portal and another on Andrade Road…"

C-12

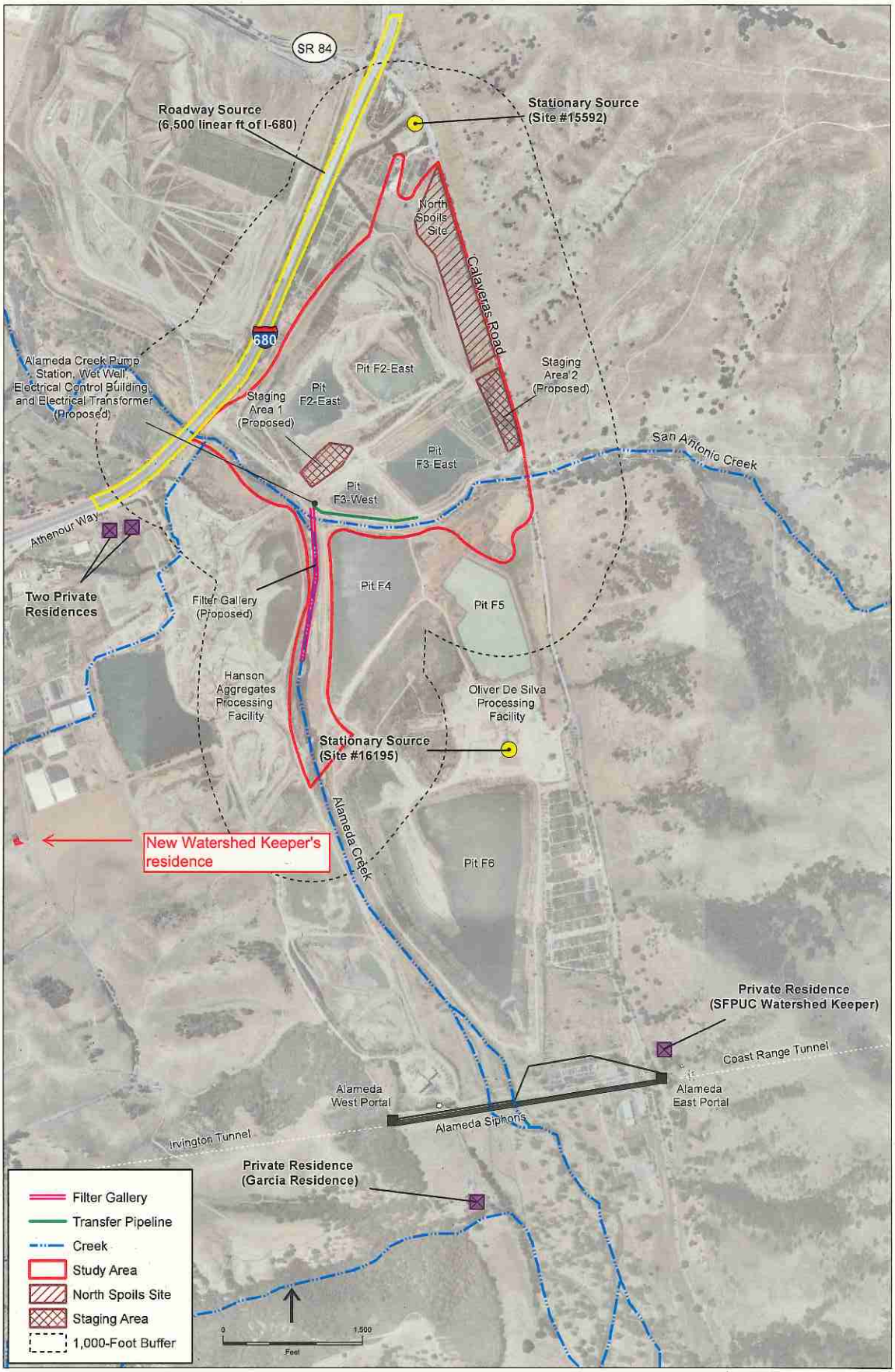
The SFPUC appreciates the opportunity to comment on the Sunol Valley Aggregate Quarry Revised SMP-30 Draft Environmental Impact Report. Please contact me if you have any questions regarding these comments.

Sincerely,

Ellen Levin
Deputy Manager, Water Enterprise

Attachment: Figure of residences in the vicinity of the Project site

cc: Tim Ramirez, SFPUC Natural Resources and Lands Management
Rosanna Russell, SFPUC Real Estate
Irina Torrey, SFPUC Bureau of Environmental Management



SOURCE: ESA, 2011; Date of aerial photo is 2006.

SFPUC Upper Alameda Creek Filter Gallery Project

Figure 1

Project Area and 1,000-Foot Buffer

Response to Letter C

San Francisco Public Utilities Commission

Ellen Levin, Deputy Manager of Water Enterprise (May 17, 2012)

Response C-1

This comment provides clarification of the Project site boundaries, indicating certain changes particularly pertaining to lands on the far side of San Antonio Creek which was moved as part of prior County permits, and on lands on the left (west) bank of Alameda Creek that are not in the premises boundary of the lease between the SFPUC and Oliver de Silva, Inc.

Alameda County appreciates the clarifications of the Revised SMP-30 permit boundaries. Please see **Figure 4-1** in the Errata chapter of this Final EIR, which replaces and supersedes Figure 3-1 of the Draft EIR. Other figures included throughout the Draft EIR were also prepared using a Project site boundary that is consistent with Figure 3-1 of the Draft EIR, but which are no longer accurate. Pursuant to this response, all Project boundaries as shown in the Draft EIR are intended to be approximate, with the boundaries shown on Figure 4-1 of the Errata chapter of this Final EIR as prevailing. These minor changes in Project boundaries do not affect the environmental analysis as presented in the EIR. Similarly, neither these changes in the Project boundaries nor the boundaries of any existing or presumed subsequent lease agreements result in a subdivision or split of existing parcels or reduce parcel sizes below the 100-acre minimum parcel size required pursuant to the County General Plan (Measure D).

Response C-2

This comment suggests that Figure 5-3 of the Draft EIR should be updated to match current operators' names and boundaries.

Comment noted, please see revised Figure 5-3 as presented in Chapter 4: Errata of this Final EIR.

Response C-3

This comment clarifies that the lease between SFPUC and the Project applicant does not currently include the 58 acre expansion area. This area is subject to this CEQA process, after which the lease may be amended following Alameda County approval to include the Expansion Premises, if approved by the SFPUC and the San Francisco Board of Supervisors.

Comment noted. The text on pages 1-4, 2-1 and 3-14 are hereby amended (see Chapter 4: Errata) to read: "Subject to Project approval by Alameda County and lease approvals by the SFPUC, the lease will include the currently active quarry site of 323 acres permitted under Alameda County SMP-30 and an additional approximately 58-acre area along the southeast boundary of the current SMP-30 area."

Response C-4

This comment points out that the Draft EIR does not provide a consistent description of the timing of revegetation on the creek banks and questions whether the timing of the revegetation plantings affects the determination of environmental impacts.

Comment noted, and the County acknowledges that the Draft EIR did contain such inconsistencies. For clarification, revegetation of both banks shall be completed within two years of approval of the Revised SMP-30 permit, and final lease approval by SFPUC and/or final approval of the Sunol Valley Restoration Plan.

This timing clarification is intended to clarify two points. First, the SFPUC's consideration of approval of the lease will occur after Alameda County's action on the permit approvals, and secondly to recognize that the revegetation effort should be consistent with the SFPUC's Sunol Valley Restoration Plan, which is intended to determine what restoration is physically and biologically feasible in the Sunol Valley reach, and to guide restoration, conservation and monitoring efforts. In this case, the County believes that consistency with the Sunol Valley Restoration Plan will ensure greater mitigation value than a potentially earlier revegetation effort that may not be consistent with that Plan.

Response C-5

This comment suggests that Mitigation Measure Aesthetics-5: Calaveras Road Landscape Plan should indicate that plantings should be native species appropriate for the site and for the purpose involved (i.e., visual screening).

Comment noted. Please see Chapter 4: Errata which further clarifies the obligations and requirements pursuant to the Calaveras Road Landscape Plan and which stipulate a preference for native, non-invasive species which are able to provide a visual screen dense enough to filter views from Calaveras Road.

Response C-6

This comment clarifies that the City and County of San Francisco has retained the discretion to not approve the modified lease, even if the Revised SMP-30 mining permit is approved by Alameda County.

Comment noted. Please see Chapter 4: Errata, which adds this additional note to page 3-32 of the Draft EIR.

Response C-7

This comment suggests that the Fire Protection Plan recommended pursuant to Mitigation Measure Haz-7 should be consistent with the SFPUC Alameda Watershed Management Plan, Alameda Watershed Fire Management Element, and be reviewed and approved by the SFPUC.

Alameda County believes that Mitigation Measure Haz-7 is adequate for its requirements as lead agency under CEQA, requiring the Project applicant to engage a Fire Protection Engineer to perform a Code analysis and to submit a Comprehensive Fire Protection Plan for the proposed Project for review by the County Fire Marshal, including an evaluation of the Project's compliance with the Uniform Fire Code. If the SFPUC wishes to impose additional consistency provisions related to the Alameda Watershed Management Plan and the Alameda Watershed Fire Management Element, and to have review and approval authority over that Plan, the County suggests that such requirements be incorporated into the lease agreement between SFPUC and the Project applicant.

Response C-8

This comment asserts that the Draft EIR assumes that the SFPUC's planned landscape berms along Calaveras road will provide appropriate visual screens that therefore, do not require any mitigation measures for the Project to reduce impacts to aesthetics. The comment further clarifies that the height of the berms provided by SFPUC will be dependent on how much spoil material is generated from construction of the SFPUC projects, but may not reach a height sufficient to provide the visual screening anticipated in the Draft EIR.

Alameda County understands and appreciates that the landscape berms along Calaveras Road may not be as tall as the images shown on Figure 6-16 of the Draft EIR, which were re-printed from the SFPUC San Antonio Pipeline Project EIR.

However, the County respectfully disagrees that the Draft EIR made a potentially incorrect assumption about these berms which led to its conclusion that the Project would not need to provide additional mitigation. As stated on page 6-32 of the Draft EIR, ". . . the Project would not substantially damage scenic resources along Calaveras Road because the existing visual character and quality of the site and its surroundings in foreground views is not visually significant, and because the Project would not substantially degrade or affect the character-defining features of the hills and ridgelines in the distant views." Therefore, the Draft EIR does not recommend any mitigation measures because it does not identify the Project as having a substantial adverse aesthetic impact.

The Draft EIR does indicate that, "the SFPUC's planned landscape berms would improve the visual character and quality of portions of the Project site during operations, and would not adversely affect the character-defining long range views." The County believes that this statement is also accurate irrespective of whether these berms ultimately reach the full height as presented in the SFPUC San Antonio Pipeline Project EIR.

Response C-9

This comment suggests that since there are documented occurrences of large flocks of tricolored blackbirds in the Sunol Valley, there is a greater than "low" potential for them to occur in the Project area.

While tricolored blackbirds do indeed occur in the Sunol Valley and were observed flying over the Project area in 2009 (ESA, 2011a), based on observations of habitat in the Project vicinity and the literature on tricolored blackbird habitat preferences[5], it is the professional opinion of the EIR's biologist (ESA, Martha Lowe, Senior Watershed Ecologist) that there is a low potential for tricolored blackbird to occur at the Project site and be affected by the proposed Project. Tricolored blackbirds typically nest in dense vegetation surrounding freshwater wetlands. When nesting, tricolored blackbirds generally require freshwater wetland areas large enough to support colonies of 50 pairs or more. They prefer freshwater emergent wetlands with tall, dense cattails or tules for nesting, but will also breed in thickets of willow, blackberry, wild rose, or tall herbs. A narrow fringe of bulrush marsh occurring around the settling pond on SMP-30 (the North Basin) which did provide limited and marginal habitat for the species as described in the DEIR, has since been removed in association with ongoing quarry activities. There are two large areas of freshwater marsh, approximately six and eight acres in size, to the west of the Project site and across Alameda Creek, that provide high quality habitat for the species and blackbirds were observed using this habitat in 2009, as well as foraging on grassland slopes to the east of the project site (ESA, 2011a). Low-quality nesting habitat occurs on the Project site in tall mustard (Brassica sp.) and other ruderal herbaceous vegetation, as well as small patches of willow, but tricolored blackbirds are not expected to nest in these areas when high-quality aquatic emergent habitat is present nearby in sufficient acreage to support nesting colonies. In addition, preferred foraging habitat consists of rice and alfalfa fields, other irrigated fields, annual grasslands, dairies and feedlots, and remnant native habitats including seasonal wetlands, riparian scrub and open marsh borders (Beedy, 2008). None of these habitats occur on the Project site, with the exception, as noted, of small patches of willow. It is therefore unlikely that tricolored blackbirds would occur at the Project site on anything other than a transient basis and thus the determination of "low potential to occur" is appropriate.

[5] Beedy, E.C.. 2008. Tricolored Blackbird (Agelaius tricolor). In: Shuford, W.D., and Gardali, T., eds. 2008. California Bird Species of Concern: A ranked assessment of species, subspecies, and distinct subpopulations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California and California Department of Fish and Game, Sacramento, California. Pages 437-443

Response C-10

This comment indicates that a portion of an ephemeral stream (ES-1) within the Project area that had apparently been culverted and backfilled in association with the SFPUC's NIT and Alameda Siphons projects has now been restored to its original condition.

Comment noted and Alameda County appreciates the updated information. Since the Draft EIR had assumed that the impacted area would be restored to its original condition at the conclusion of those construction projects, no changes to the analysis or impact discussion is needed. Please see Chapter 4: Errata, which includes the revision to state that the impacted area of ES-1 has now been restored.

Response C-11

This comment notes that Mitigation Measure Aesthetics-4: Night Lighting, which requires that night lighting be directed on-site and that off-site illumination be minimized would also be relevant for avoiding impacts on wildlife.

Comment noted. Mitigation Measure Aesthetics-1 requires that under no circumstances shall areas beyond the Project site boundaries be illuminated, and that general lighting not be allowed to illuminate above the horizontal. The requirements would reduce the potential aesthetic effects related to light and glare to less than significant levels, and would benefit surrounding habitat values.

Response C-12

This comment notes that Figures 13-3 through 13-7 show noise contours from existing and proposed quarry operations and their effects on the nearby Garcia residence, but do not show the two SFPUC watershed keepers residences, and suggests that the locations of these watershed keeper residences should be added to the figures and appropriately considered in the analysis.

The County acknowledges that the two watershed keepers' residences, one to the east of the Project site off of Andrade Road and one to the southwest of the Project site off of Calaveras Road, were not fully accounted for in the analysis presented in the Draft EIR. These two residences are sensitive receptors in the vicinity of the Project site. Although the SFPUC identified these two locations in their comments on the County's Notice of Preparation for this Draft EIR, the one residence off Andrade Road was not identified as being significantly affected, whereas the residence off of Calaveras Road was not identified by the EIR preparers. The analysis for noise impacts at these two watershed keepers' residences is presented below, and the changes to the Draft EIR necessary to reflect this analysis are also presented in Chapter 4: Errata.

Daytime noise levels during Phase I of Project operations would not adversely affect either of the watershed keepers' residences. Noise contours for the Project and output from the SoundPlan noise model indicate that daytime noise levels from Phase I of the Project at the keeper's residence off Andrade Road would be approximately 44 dBA, and the daytime noise levels from Phase I of the Project at the keeper's residence off of Calaveras Road would be approximately 49 dBA. Both of these noise levels would be below the County noise limit of 50 dBA L_{50} during the daytime.

Nighttime noise levels from Phase I of the Project at the keeper's residence off Andrade Road would be approximately 34 dBA, and the nighttime noise levels from Phase I of the Project at the keeper's residence off of Calaveras Road would be 37 dBA. Both of these nighttime noise levels would be below the County nighttime noise limit of 45 dBA L_{50}.

Noise contours for the Project and output from the SoundPlan noise model indicate that daytime noise levels from Phase II of the Project at the keeper's residence off Andrade Road would be approximately 44 dBA, but the daytime noise levels from Phase II of the Project at the keeper's residence off of Calaveras Road could be as high as 58 dBA. Similar to the noise effects of Phase II of the Project at the Garcia

residence, this Phase II daytime noise impact at the Calaveras keepers' residence would be significant, exceeding the County noise limit of 50 dBA L_{50} during the daytime by as much as 8 dBA. Localized and site-specific factors at the keepers' residence at Calaveras could have the effect of lowering the predicted noise levels from Phase II of the Project at this specific site below the 58 dBA as predicted in the model, but not below the County threshold of 50 dBA L_{50}.

Nighttime noise levels from Phase II of the Project at the keeper's residence off Andrade Road would be approximately 32 dBA, and the nighttime noise levels from Phase II of the Project at the keeper's residence off of Calaveras Road would be 46 dBA. The night time noise level of 46 dBA would exceed the County night time noise limit of 45 dBA L_{50} by 1dB.

The Draft EIR identified that noise levels are projected to exceed allowable noise limits during Phase II operations, and recommended that detailed noise surveys be conducted based on the final plant layout of noise-generating equipment pursuant to implementation of Phase II. Based on the noise surveys completed for the Draft EIR, the Draft EIR recommended that noise barriers be placed on or close to the plant equipment, and that wood, metal or quilted noise control blanket barriers are capable of reducing noise levels by up to 15 dBA. With implementation of the mitigation measures already recommended in the Draft EIR, noise impacts at both the Garcia residence and at the watershed keepers' residence off of Calaveras Road would be reduced to a level of less than significant.

The Draft EIR did disclose that Phase II noise impacts would exceed County thresholds, but did not specifically identify impacts at the watershed keepers' residence. The analysis presented above indicates that noise impacts from Phase II of the Project would be significant at the Calaveras Road keepers' residence. Phase II daytime noise levels could approach 58 dBA (in excess of the 50 dBA daytime noise limit) and Phase II night time noise levels are projected to be 46 dBA (in excess of the 45 dBA nighttime noise limit) at the keepers' residence on Calaveras Road. However, as specifically provided in CEQA Guidelines Section 15088.5(a)(2), recirculation of this information is not required. Even under a very conservative interpretation that noise impacts at the watershed keepers' residence could be considered a "substantial increase" in the severity of those noise impacts from Phase II operations as disclosed in the Draft EIR, the mitigation measures that were included in the Draft EIR and which will be adopted pursuant to the Project's MMRP and Conditions of Project Approval will reduce impacts at both the Garcia's residence and at the keepers' residence to a level of less than significant. Given that the applicant has agreed to implement these mitigation measures, no new impacts would occur.

East Bay Regional Park District

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Letter "D"

May 10, 2012

Bruce Jensen, Senior Planner
Alameda County Community Development Agency
224 West Winton Avenue, Suite 110
Hayward, CA 94544

Subject: Comments on the DEIR for the SMP-30 Revised Use Permit for the Sunol Valley Aggregate Quarry Project

Dear Mr. Jensen,

Thank you for providing the East Bay Regional Park District ("District") with a copy of the draft Environmental Impact Report (DEIR) for the proposed Sunol Valley Aggregate Quarry Project. Our comments focus on project related impacts to Calaveras Road and visual impacts to regional parks. The following are the District's comments.

Calaveras Road

Calaveras Road is the primary means of access to the 6,858 acre Sunol Regional Wilderness. It is a two-way rural road with 10 to 11 foot lanes and one foot shoulders. In some places, such as at the San Antonio Creek Bridge, the road has no shoulders. *See attached Figure 1.* Access to the park is primarily by motor vehicle, with a growing percentage of bicyclists accessing the park using Calaveras Road. *See attached Figure 2.* There is no safe pedestrian access or use via Calaveras Road.

D-1

Alameda County, as a condition of its permits for the Calaveras Dam replacement and other projects required the San Francisco Public Utilities Commission (SFPUC) to fully resurface Calaveras Road and provide a bike lane easement. It is our understanding that the County did not actually require the SFPUC to construct the bike lane. As the reader can see in Figures 1 and 2 there is insufficient usable right-of-way on Calaveras Road to provide adequate width to construct a useable and safe bike lane, let alone a grade separated trail. Construction of a bike lane on Calaveras Road is further limited by narrow bridges, electrical utilities (see Figures 1 and 2), narrow shoulders abutting steep embankments or cut slopes, and vegetation that encroaches into the traveled way.

D-2

Figure 1 shows a SUV driving south on Calaveras Road. The approximate two foot distance between the SUV's side mirror and the adjacent vegetation is clearly inadequate and unsafe for bicyclists and pedestrians. Figure 2 shows that bicyclists hugging the shoulder of Calaveras Road. They cannot ride closer to the shoulder due to overgrown vegetation, gravel and steep

Healthy Parks Healthy People

embankments. When the SUV in Figure 1 passed the bicyclists in Figure 2 the SUV had to straddle the center line to pass. Clearly the existing situation is unsafe for motor vehicles and bicyclists traveling in both directions. As a result of the proposed project there will be a substantial increase in traffic on Calaveras Road. This will make the present conditions substantially more unsafe. We believe this is a significant adverse effect that requires mitigation as part of the proposed project.

At full operating capacity, the proposed project would nearly triple the volume of material being extracted from the quarry (see *page 2-2 in the executive summary of the DEIR*). This would result in a substantial increase in vehicular traffic on Calaveras Road. Commercial trucks traveling on Calaveras Road are often considerably wider than private vehicles, such as the SUV shown on Figure 1. A large truck with side mirrors would occupy the full lane, leaving no room for bicyclists. Increased large truck trips on Calaveras Road will substantially degrade the level of safety for both motor vehicles and bicyclists. We believe this is a significant adverse effect that requires mitigation as part of the proposed project. D-2 cont.

The increased volume of truck traffic on Calaveras Road will greatly accelerate damage to the road surface, including cracking, crumbling, settlement and pot holes. The DEIR describes on page 14-9 that the 1992 SMP-30 Conditions of Approval required the applicant post a $5,000 bond to repair roadway damage. While this amount may have been sufficient in 1992, road repair costs have increased substantially in the past twenty years. We suggest a substantially larger figure that is reflective of current costs and increase level of useage. D-3

Spilled aggregate, concrete, asphalt, debris, oil and grease on the road will also impact roadway safety. These impacts will create road conditions especially hazardous to bicycles. They may lose control and crash on damaged roads. Motor vehicles would also experience increased wear of tires and damage to suspension systems, including strut and axel failures. In addition, motorists and bicyclist may be swerve to avoid damaged road sections and would be subject to greater risk of collision with other vehicles, trees, embankments and power poles along Calaveras Road. The EIR should provide mitigation measures for this impact, including regular sweeping and debris collection on Calaveras Road. D-4

The SFPUC is currently constructing several projects that affect Calaveras Road. These include the Water Supply Improvement Program, Calaveras Dam Replacement, Habitat Reserve Program, Sunol Valley Water Treatment Plant, Irvington Tunnel and San Antonio Tunnel. The proposed project would add a substantial increase in truck traffic on Calaveras Road and this will result in cumulatively significant adverse effects to public safety and level of service. D-5

The DEIR proposes that "Share the Road" signs be installed on Calaveras Road to advise motorists of the presence of bicyclists on the road. While this is a useful suggestion, it clearly does not mitigate the significant individual and cumulative effects of this project. We believe that in order to fully mitigate these impacts the County must require dedication/acquisition of right of way and construction of a multi-use grade separated trail along Calaveras Road or through SFPUC property as depicted on Figure 14-12 of the DEIR. This trail is identified on the District's 2007 Master Plan map as the Sunol to Pleasanton Ridge Trail. D-6

Construction of a new trail will be an expensive and time consuming mitigation project to implement; however, given the substantial cost and sheer magnitude of the proposed and approved projects that affect Calaveras Road this measure is clearly warranted. CEQA guidelines require a mitigation measure must have nexus to the project and is in "rough proportionality" to the individual and/or cumulative effects of the project. We believe this mitigation measures passes both tests and we urge the County to take the necessary steps to secure funding and right of way to implement this mitigation measure in a timely manner.

D-6 cont.

Aesthetics

The Sunol Valley is located within the viewshed of several regional parks, including Mission Peak, Sunol Wilderness (McGuire Peaks), Vargas Plateau and Pleasanton Ridge. McGuire Peaks are clearly visible from the project area. *See attached Figure 3.* The DEIR concludes that the proposed project will not result in adverse effects to scenic vistas. However, with the exception of Figure 6-5 for Pleasanton Ridge, it provides no visual simulations to support this conclusion for other regional parks, including McGuire Peaks.

Construction of new concrete and asphalt plants will require new structures (up to 100 feet tall), will discharge plumes of steam, increase lighting, remove vegetation and grade a 58-acre expansion area. The project may also require new electrical transmission lines and appurtenant structures. It's unclear if the project area is visible from the identified regional parks or if there would be visual impacts to these parks. The EIR should address this concern and provide visual simulations to substantiate its conclusions that there would be no significant visual effects.

D-7

Thank you for the opportunity to comment on the DEIR. Should you have any questions regarding this letter, please call me at (510) 544-2622.

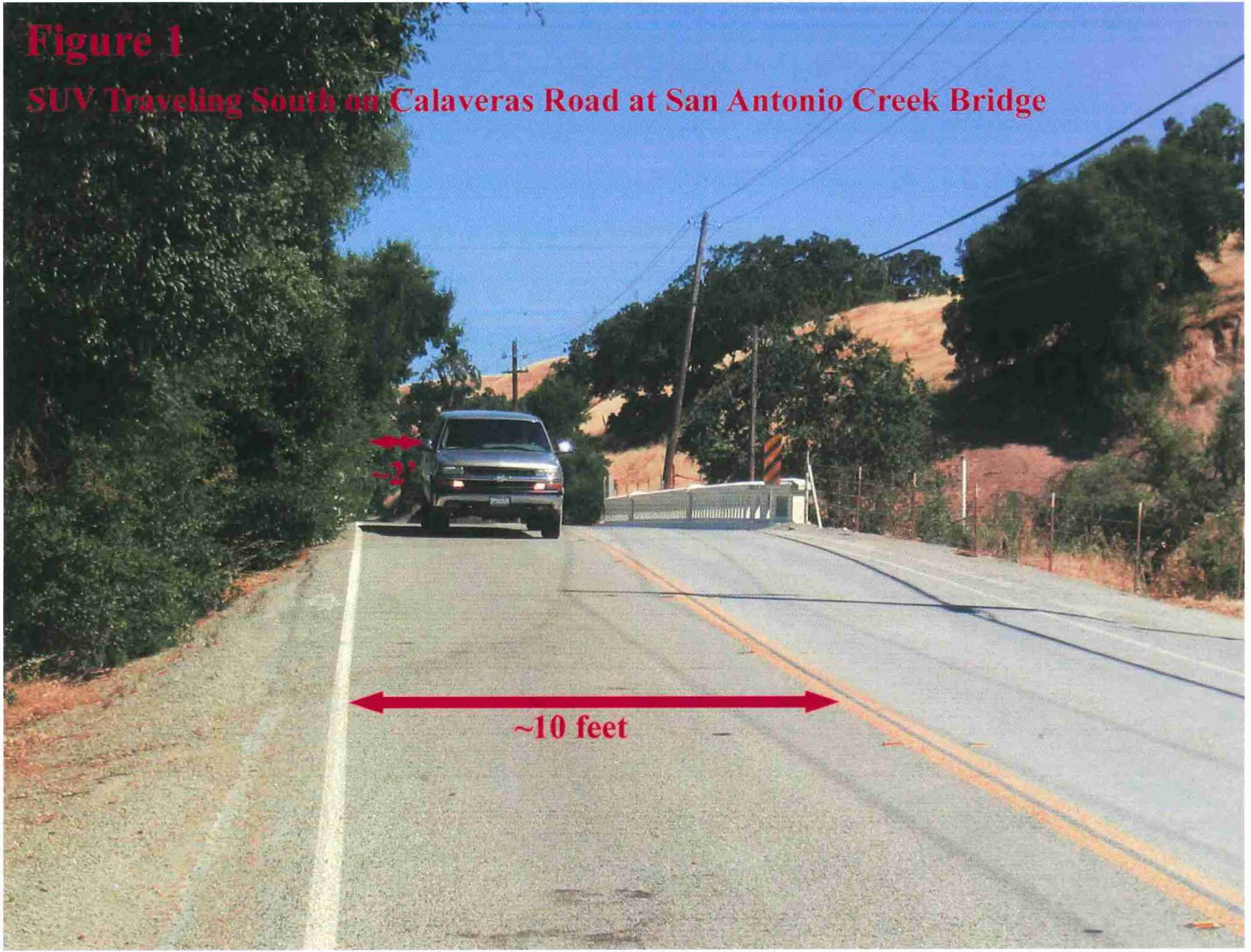
Sincerely,

Brad Olson
Environmental Programs Manager

Enclosures (3)

Figure 1

SUV Traveling South on Calaveras Road at San Antonio Creek Bridge



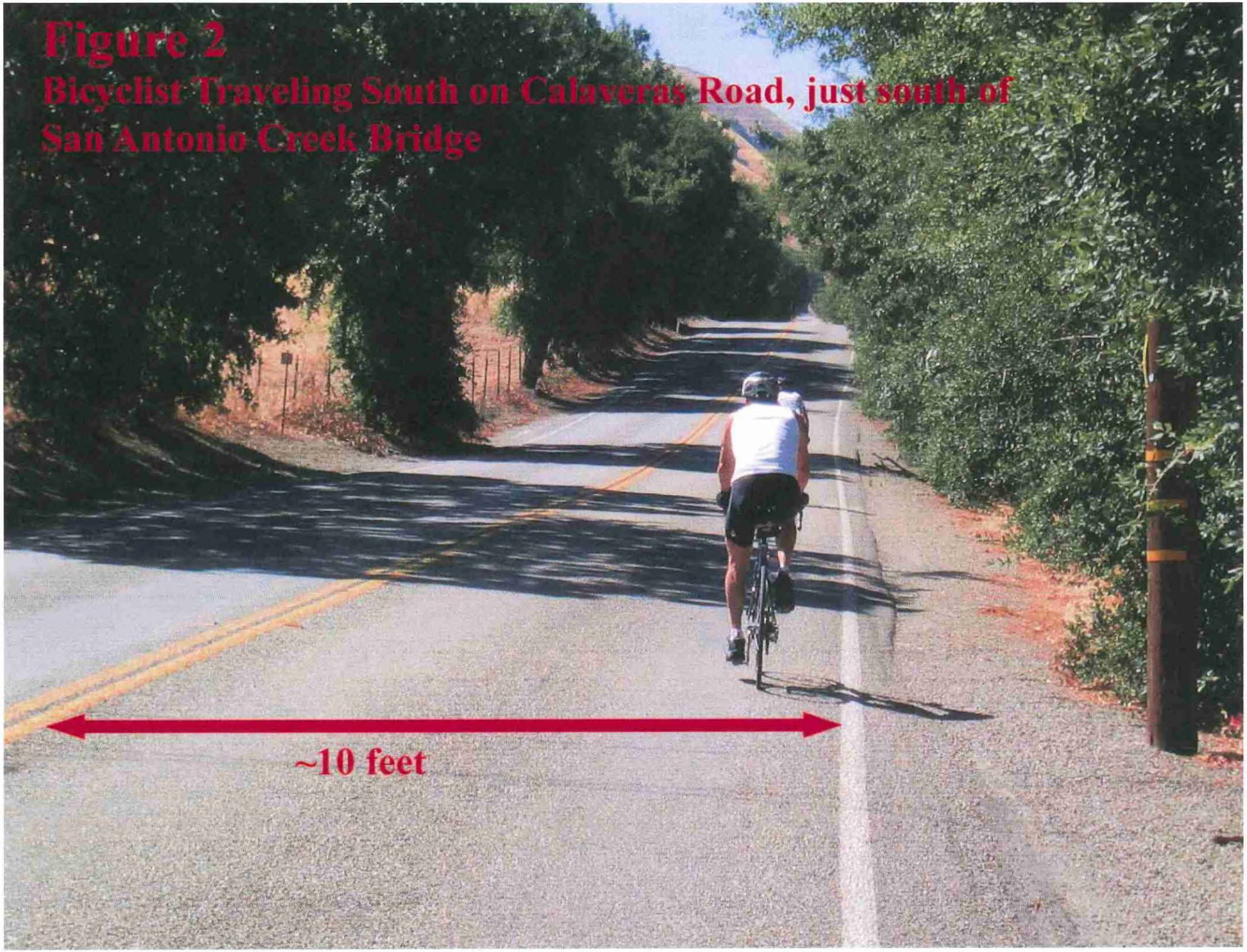


Figure 2
Bicyclist Traveling South on Calaveras Road, just south of San Antonio Creek Bridge
~10 feet

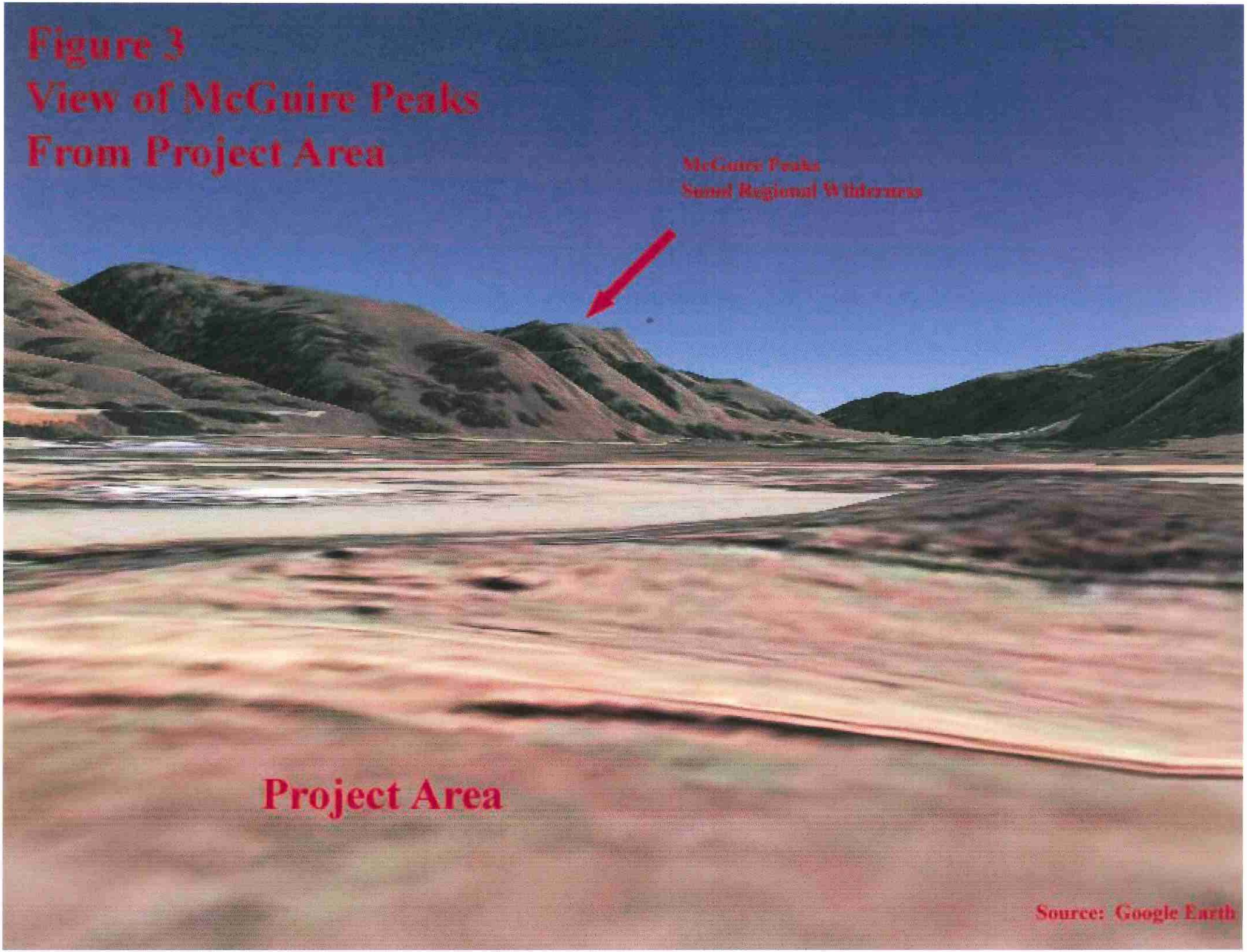


Figure 3
View of McGuire Peaks
From Project Area
McGuire Peaks
Sawtooth Regional Wilderness
Project Area
Source: Google Earth

Response to Letter D

East Bay Regional Park District

Brad Olson, Environmental Programs Manager, May 10, 2012

Response D-1

This comment describes the existing condition of Calaveras Road and indicates that the road does not provide safe pedestrian or bike access to the Sunol Regional Wilderness and indicates that there is currently insufficient usable right-of-way on Calaveras Road to provide adequate width to construct a useable and safe bike lane, let alone a grade separated trail. This comment also indicates that EBRPD understands Alameda County has required the SFPUC to fully resurface Calaveras Road and to provide a bike lane easement as a condition of its permits for the Calaveras Dam Replacement and other projects, but did not require the SFPUC to construct a bike lane.

The County agrees that there is not a designated bike route or pedestrian trail on or along Calaveras Road providing access to the Sunol Regional Wilderness, and that Calaveras Road has insufficient right-of-way to construct a bike lane or pedestrian path. The County's most current Bicycle Master Plan (the Alameda County Bicycle Master Plan for Unincorporated Areas, updated and adopted in April 2012) indicates that Calaveras Road is not an existing designated bicycle route. That Plan does recommend providing a Class IIIc facility on Calaveras Road. Class IIIc facilities are defined for rural routes, and include signage only for routes below 2,000 vehicles per day and widening to provide 4-foot shoulders as volumes increase above 2,000 vehicles per day. The references underlying the 2,000 vpd threshold are not cited in the document. Appendix C-1 of the Bicycle Master Plan indicates that signage on Calaveras Road is a low-priority improvement.

The Revised SMP-30 Project does propose to provide access through the SMP-30 site for establishment of a segment of an off-road pedestrian trail which could eventually link with other segments. To the extent that such an off-road pedestrian trail is desirable during the time period which the quarry is in operation, the Draft EIR recommends that such a trail be established along the Alameda Creek alignment rather than parallel with Calaveras Road to minimize conflicts with quarry vehicles.

Alameda County and the City and County of San Francisco (CCSF) have entered into a Memorandum of Understanding (MOU) regarding a number of items related to Calaveras Road in relation to the CCSF's Calaveras Dam Replacement Project. One of these agreements is the understanding that CCSF will resurface Calaveras Road from I-680 to the entrance of Calaveras Road upon completion of the Calaveras Dam Replacement Project. This MOU also indicates that Alameda County intends to propose a future project to install striped bicycle lanes on Calaveras Road from 1-680 to Geary Road, and that if such a bike lane project is approved by Alameda County following necessary environmental review, CCSF will grant an appropriate additional easement area to Alameda County at no cost over the CCSF-owned lands that border Calaveras Road for purposes of installing striped bicycle lanes in each direction. The MOU also stipulates that CCSF will assist Alameda County in securing grant and other outside funding for the actual construction of bicycle lanes. Alameda County and the CCSF have agreed to coordinate their efforts in planning for the bicycle lanes and reconstructing Calaveras Road to ensure that the bicycle lanes are installed when Calaveras Road is reconstructed, if doing so becomes financially feasible. Alameda County and the CCSF have agreed to support joint efforts to leverage additional federal, state and local funds for this project and to coordinate the overall schedule to facilitate such funding efforts. CCSF had agreed to consider using the Calaveras Dam Replacement Project construction contractor selected to resurface Calaveras Road to install the proposed bike lane as a separate project, provided that (1) the funding for the bicycle lane project is provided by Alameda County or other sources, (2) Alameda County provides a complete design and specifications for such work, including the surveys required for any realignment of the Calaveras Road easement and transfer of property rights from CCSF to Alameda

County; (3) the work can be performed in compliance with state law and applicable ordinances of CCSF and Alameda County; and (4) Alameda County has completed required review for the bicycle lane installation under the California Environmental Quality Act and obtained necessary permits for such construction to proceed.

At this point, the County has not proposed a striped bike lane project on Calaveras Road, has not initiated environmental review of such a project, has not approved such a project, and has not sought grants or other outside funding specifically for such a project.

Response D-2

This comment indicates EBRPD's belief that the existing situation on Calaveras Road is unsafe for motor vehicles and bicyclists traveling in both directions, and that as a result of the proposed Project there will be a substantial increase in traffic on Calaveras Road making the present condition substantially more unsafe. The commenter believes this is a significant adverse effect of the Project that requires mitigation.

The County appreciates and shares the District's concern about bicyclist safety along Calaveras Road. The County respectfully disagrees that the Project creates a significant impact on bicycle safety; however, there are additional steps that can be taken to improve bicyclist comfort and convenience, as traffic volumes grow.

Alameda County Bicycle Facilities Planning

While it is the goal of the County to provide 4-foot minimum shoulders on all rural roads, it may take many years to find the funds to retrofit all the existing miles of roadway. In the short-term, where traffic volumes are below 2,000 vpd, roads with narrow shoulders (i.e., only an edge line) are generally acceptable from a bicyclist's point of view, since the amount of oncoming and passing traffic is minimal. According to research by others as presented in the Alameda County Bicycle Master Plan for Unincorporated Areas (updated and adopted in April 2012), a road with 24 feet of pavement including shoulders could accommodate traffic volumes of up to 1,760 vpd and still be compatible with bicycle travel. Others suggest that 12-foot shared lanes on rural roads are acceptable to experienced bicyclists if traffic volumes are under 2,000 vpd and sight distance is adequate. Therefore, it is suggested that low volume rural roads can be implemented as Class IIIC rural bike routes with only the addition of signage. As traffic volumes increase on these roadways to levels above 2,000 vpd, 4-foot minimum shoulders should be provided.

As described in this excerpt from the Alameda County Bicycle Master Plan for Unincorporated Areas, the 2,000 vehicle-per-day threshold for providing wider shoulders on these routes is stated as guidance, not as a threshold separating unsafe conditions and safe conditions. This threshold was estimated specifically for the purposes of the Alameda County Plan and is not based on quantitative research. The threshold is useful guidance developed by knowledgeable experts but is not sufficiently well documented to serve as the basis for identification of a significant impact. Safety along such routes is a function of many factors, including roadway width, shoulder width, horizontal and vertical curves, edge-of-roadway clear distance and vegetation encroachment, pavement condition, prevailing speeds, and roadway user behavior among others. Additionally, as noted in the Plan, there are significant financial and physical constraints to widening all of the rural routes in the Plan. The projects list in Appendix C.2 of the Plan lists a signage project for Calaveras Road, as a low priority improvement.

Project Impact on Calaveras Road Bicycling Environment

The existing traffic volume on Calaveras Road is 1,300 vehicles per day, based on a count conducted in October 2010. That count also identified a total of 17 bicyclists on the roadway during that same day. According to the Statewide Integrated Traffic Accident Reporting System, there have been no collisions involving bicycles on the section of Calaveras Road between I-680 and the Project driveway for the

period 2005 through mid-2011 (the latest available data). There were three bicycle collisions at locations several miles to the south, one of which involved an automobile. Thus, the roadway between the Project site and I-680 is currently operating in an apparently safe condition. The Project, at peak operation, would increase the volume to about 2,050 vehicles per day on the two-mile stretch between I-680 and the Project driveway. While this is just above the 2,000 vpd guideline discussed above, the County does not find that the Project would create a significant impact on bicyclist safety, for the following reasons:

- There is no current bicycle collision history on Calaveras Road, even with the substantial truck volume on the roadway;
- There is no documented correlation between an increase to 2,000 vehicles per day and increased collision incidence;
- The two-mile length of Calaveras Road between I-680 and the Project driveway is relatively flat and straight, with a few gentle horizontal curves that moderately reduce sight distance, and no significant grades substantially slow bicyclists. Thus, the relative advantage of wider shoulders in this stretch is less than would be the case in a more physically constrained section such as the section further south on the approach to Calaveras Dam.
- Bicyclists on Calaveras Road are typically experienced road cyclists on long recreational or training trips. They typically "take the lane" on rural roadways like Calaveras Road as allowed under California Vehicle Code 21202, which requires slow moving vehicles to ride as close to the right hand curb or edge of the road as practicable. In order for bicyclists to operate safely on a rural two-lane roadway like Calaveras Road, they must ride in a position so as to not endanger themselves by riding too close to the edge of pavement. When slow moving vehicles (including bicyclists) accumulate five or more vehicles behind them, they are required to pull off the roadway where safe to do so, per California Vehicle Code 21656. This common courtesy provision frequently plays out between bicyclists and motorists on Bay Area rural roads, with bicyclists using available intermittent narrow paved shoulders outside the white edge line stripe to enable faster moving vehicles to pass without crossing the double yellow centerline. This behavior is not provided for in any code, but is an important element of how bicyclists and motorists practically share narrow roadways.

Benefits and Drawbacks of Alternative Bicycle Improvements

Widening Calaveras Road to provide 4-foot shoulders would provide additional width for bicyclists. However, the extra roadway width would likely encourage more high speed passing, both legal and illegal (i.e. crossing the double yellow line), and would also likely increase speeds incrementally.

As noted in the comment letter, the EBRPD 2007 Master Plan Map includes the Sunol to Pleasanton Trail, with an alignment along Calaveras Road in the Project vicinity. The 1997 Master Plan document, which is currently being updated, does not identify whether this trail would be paved or unpaved. The physical and financial constraints to building this trail are considerable, given the grades, vegetation, and utilities in the corridor. In addition, the experienced bicyclists who typically use Calaveras Road would be unlikely to ride on a multi-use trail with pedestrians, based on typical route choices made by such riders throughout the Bay Area. Thus, this improvement would not meaningfully address any impact the Project has on long-distance recreational road cyclists currently using Calaveras Road. The trail would serve other user groups not identified, who prefer off-street trails.

County-Recommended Conditions of Approval

While the County finds that the Project does not have a significant impact on bicyclist safety, there are several actions that the Project can take to maximize bicyclist comfort and convenience. These are described below, and included in Conditions of Approval for the Project. The Project should commit to the following actions to benefit bicyclists using Calaveras Road between I-680 and the Quarry driveway:

1. The Permittee shall prepare and deliver a driver education program to employees and truck drivers, making them aware of the use of Calaveras Road by recreational bicyclists, the legal rights of bicyclists using the roadway, reminding them of the rules of the road prohibiting crossing the double yellow line to pass bicyclists, and required safe passing distance from bicyclists. Educational materials may include pamphlets handed to all truck drivers entering the site, signs posted near the exit driveway, and other potential measures that may be identified.
2. The Permittee shall sponsor a bicyclist education and outreach effort, potentially conducted through local recreational and racing clubs whose members regularly ride Calaveras Road. This effort may include, but is not limited to use of available educational curricula sponsored by the East Bay Bicycle Coalition and Silicon Valley Bicycle Coalition, reminding bicyclists how to operate legally and safely when operating in mixed traffic flow.
3. The Permittee shall work with Alameda County to develop and install signage improvements along Calaveras Road in accordance with the Alameda County Bicycle and Pedestrian Master Plan for Unincorporated Areas.
4. Consistent with current practice and requirements, the Permittee shall commit to clearing spilled debris and oil as needed, related to quarry truck movements on the section of Calaveras road between I-680 and the SMP-30 driveway(s).
5. The Permittee shall coordinate with the County and the SFPUC (as may be needed outside of the road right-of-way) to provide for trimming brush and tree limbs near the sides of the road, to maximize sight distance, and preserve maximum available roadway width and narrow shoulder width for bicyclists for the section of Calaveras Road between I-680 and the Project driveway(s).

Response D-3

This comment notes that the increased volume of truck traffic on Calaveras Road will greatly accelerate damage to the road surface, and notes that while the County has indicated that it will required the applicant post a $5,000 bond to repair roadway damage, this amount may be insufficient and suggests a substantially larger figure reflective of current costs and increased level of use.

This comment fails to note the additional provisions of the County's condition of approval regarding roadway repairs, which requires that the amount of the bond be renewed whenever the amount available for roadway repairs drops below $2,000. In this manner, the County believes that the amount of funds needed to implement necessary roadway repair costs will constantly be maintained at a sufficient level and no further mitigation or larger bond is required.

Response D-4

This comment indicates that spilled aggregate, concrete, asphalt, debris, oil and grease on the road will impact roadway safety, especially to bicycles but also to other motor vehicles. It suggests that the EIR should provide mitigation measures for this impact, including regular sweeping and debris collection on Calaveras Road.

Pursuant to the 1992 approval of the original SMP-30 project, the County imposed a condition of approval that required the operator of the quarry to develop a program to reduce truck speeds and accidental spillage from trucks leaving the quarry site. That program included a minor redesign of the existing access road to better ensure that trucks stop before turning onto Calaveras Road, and an on-going program to sweep and collect any debris if and when it may be spilled on the road. As part of this Project, the quarry operator will be required to continue and maintain this debris collection and sweeping program.

Response D-5

This comment lists several SFPUC construction projects (including the Water Supply Improvement Program, Calaveras Dam Replacement, Habitat Reserve Program, Sunol Valley Water Treatment Plant, Irvington Tunnel and San Antonio Tunnel), and suggests that, in combination with these other projects the Revised SMP-30 Project would cumulatively contribute to significant adverse effects to public safety and traffic levels of service.

As noted in the Draft EIR (beginning at page 14-33), traffic volumes for the cumulative conditions were developed using the latest version of the Alameda Countywide Travel Demand Model. Land use, employment and population projections in the model are based on ABAG Projections 2005. Outputs from the County-wide travel model were used to develop annual growth rates in traffic at study area intersections. Based upon these model outputs, annual growth rates of 0.5 percent and 1.0 percent were used for the AM and PM peak hours, respectively. Forecasts of weekday AM and PM peak hour traffic volumes under cumulative conditions were developed by applying these model-based growth rates to the existing AM and PM peak hour intersection turning movement counts. As shown in Table 14-13 of the Draft EIR, all intersections are projected to operate at acceptable levels of service during both the AM and PM peak hours under these cumulative conditions and the Project would have a less than significant cumulative effect.

The traffic from other SFPUC construction projects is specifically not included in the cumulative scenario because, once construction of these projects is complete, they will not generate any on-going increase in traffic.

Response D-6

This comment reiterates EBRPD's belief that the Project will have a significant individual and cumulative safety impact on bicyclists on Calaveras Road and suggests that the Draft EIR's recommendation to install "Share the Road" signs on Calaveras Road is useful but does not fully mitigate the effects of the Project. It suggests that in order to fully mitigate these impacts, the County must require dedication and acquisition of right of way and construction of a multi-use, grade separated trail along Calaveras Road or through SFPUC property. It further suggests that there is a nexus between the Project's impact and such a mitigation measure, and that such an improvement would be in "rough proportionality" to the individual and/or cumulative effects of the Project.

Please see Response to Comment D-2 above, indicating the County's disagreement that the Project creates a significant impact on bicycle safety, but identifying a number of measures that the Project will be required to take to maximize bicyclist comfort and convenience.

The County would also like to point out the potential discrepancy between EBRPD's recommendations for a multi-use, grade separated trail versus a potential striped bike lane on Calaveras Road. If and when the County may propose, conduct the necessary environmental review, approve and obtain funding for a striped bike lane project on Calaveras Road, such a project would not be a multi-use, grade separated trail.

Response D-7

This comment points out that the Sunol Valley is located within the viewshed of several regional parks, specifically noting views from Maguire Peaks, but also including a computer-generated view from Flag Hill. Both of these viewpoints are located in the Sunol Regional Wilderness). It notes that the Project will involve construction of new structures up to 100 feet tall, will discharge plumes of steam, increase lighting, remove vegetation, grade a 58-acre expansion area and may also require new electrical transmission lines and appurtenant structures. This comment states that, with the exception of views from Pleasanton Ridge, the Draft EIR provides no visual simulations from other regional parks to support its

conclusion that the proposed Project will not result in adverse effects to scenic vistas and should provide additional visual simulations to substantiate these conclusions.

The County recognizes that the Sunol Valley and the Project site are visible from many publically accessible vantage points surrounding the valley, especially from public trails that are within regional parks and open spaces throughout the surrounding ridgelines and hillsides. Because the site is visible from so many locations, the EIR preparers collaborated with County staff to identify a number of locations from which views of the site can be seen and that were considered representative of other similar views. The five viewpoints presented in the Draft EIR included one from the Pleasanton Ridge Regional Park, two from the I-680 scenic highway and two from the adjacent Calaveras Road.

The Draft EIR (beginning on page 6-10) recognized that the Project is located in an area visible in scenic vistas from a number of surrounding vantage points, and concluded that although implementation of the Project would change existing views of the Project site from these vantage points, the Project would not substantially adversely affect these scenic vistas. The Draft EIR used views from Pleasanton Ridge as an example of the types of views and scenic vistas of the Sunol Valley that can be seen from these vantage points. Specific to views from Pleasanton Ridge, the Draft EIR concluded that, "although public concern over the sensitivity of views from this vantage point may be high, the number of viewers that enjoy views from this relatively remote location is low. The distance from the vantage point to the Project site is great, indicating that viewer response to changes in this view as a result of the Project would not be significant. Furthermore, the change in views from this vantage point would not result in a vivid or memorable alteration of this view, would not substantially alter the visual integrity of the overall landscape due to new encroaching elements, and panoramic views of the Sunol Valley would remain visually coherent and in relative harmony with the existing landscape. The visual character of views from this vantage point would not be substantially altered by the Project as it would not introduce new forms, lines, colors or textures that would tend to dominate the appearance of the existing visual setting." The County believes that these conclusions are similarly true for views from other surrounding vantage points as well, including views from Maguire Peaks and Flag Hill.

Specific to Maguire Peak, the SFPUC published a Draft EIR for the San Antonio Backup Pipeline Project in January 2012. That Draft EIR included a photograph taken from the Maguire Peaks Loop Trail looking northwest, towards the Project site (see **Figure 3-1**). It concluded that, "The Maguire Peaks Loop Trail, located approximately 1.2 miles southeast of [that] project site and within the Sunol Regional Wilderness, is the nearest recreational trail to that project area [and similarly the nearest trail to the SMP-30 Project site]. The trail offers views of the Sunol Valley, including the southern portion of [that] project area and quarry pit F6 (the SMP-30 Project's South Basin, or main quarry pit). Although the quarry pits operated under SMP-30 are partially visible, the project area is largely obscured by intervening topography. Since views are relatively distant and intervening topography obstructs views of the project area, viewer sensitivity form the Sunol Regional Wilderness is considered low." The County concurs with this conclusion from the SFPUC's Draft EIR and believes that this conclusion further supports this EIR's conclusion that, although implementation of the Project would change existing views of the Project site from surrounding vantage points, the Project would not substantially adversely affect these scenic vistas.

Although no simulations have been prepared from Flag Hill, it is likely that views of the Project site from this location (although further away in distance) may be more direct and less obscured by intervening topography. Nevertheless, the number of viewers that may enjoy views from this relatively remote location is low. The distance from Flag Hill to the Project site is great, such that changes in this view would not be vivid or memorable, would not substantially alter the visual integrity of the overall landscape, and panoramic views of the Sunol Valley from this location would remain visually coherent and in relative harmony. As with other surrounding views, the Project would not substantially adversely affect this scenic vista.

Final EIR Figure 3-1
View of Sunol Valley from Maguire Peak Loop Trail

Source: SFPUC San Antonio Pipeline Project EIR

Responses to Oral Comments

Sunol Citizen's Advisory Committee

Sunol Glen Elementary School, May 16, 2012

Alameda County held a public hearing before the Sunol Citizen's Advisory Committee on May 16, 2012. During that hearing, comments on the Draft EIR were solicited and County staff and the EIR consultant were in attendance. During the hearing on this item, there were no comments questioning the adequacy or accuracy or completeness of information contained in the Draft EIR, although there was a discussion on the merits of the Project and a request that responses to comments on the Draft EIR be brought back to the committee for their review at a meeting scheduled for June 27, 2012.

Staff intends to provide the Committee with copies of all comment letters and responses prior to the scheduled June 27 meeting, but no CEQA responses to comments from the May 16 meeting are necessary or required.

4

Revisions to the Draft EIR

Errata

This chapter of the Final EIR presents changes to information contained in the Draft EIR that have been initiated by the County of Alameda (Lead Agency) staff, or which have been made in response to comments received on the Draft EIR. Such changes include corrections, revisions or clarifications to information presented in the Draft EIR.

Throughout this chapter of the Final EIR, newly added text is shown in single underline format, and deleted text is shown in ~~strikeout~~ format. To differentiate the text that is referenced in the changes, text from the Draft EIR is indicated in indented and aerial font. For any changes specifically initiated by comments received on the Draft EIR, an alpha-numeric designator referring to the specific comment on the Draft EIR is indicated in brackets. Changes are listed in the order in which they appeared in the Draft EIR document. A revised Summary Table of Impacts and Mitigation Measures, which shows the final text as may be modified from the Draft EIR, is also presented in Chapter 2, Executive Summary of this document.

As indicated in Chapter 1: Introduction, the entirety of the Final EIR consists of the Draft EIR and its Appendices and this Response to Comments document. Thus, the changes to the Draft EIR presented in this chapter incorporate and supersede the text of the Draft EIR.

Revisions to Chapter 1: Introduction

Page 1-4 [Response to Comment C-3]

> In 2010, the SFPUC executed a quarry lease agreement with Oliver de Silva, Inc. (ODS), the Project applicant. The lease includes the currently active quarry site of 323 acres permitted under Alameda County SMP-30. Subject to Project approval by Alameda County and lease approvals by the SFPUC, the lease will be amended to include an additional approximately 58-acre area along the southeast boundary of the current SMP-30 site. As the new leaseholder/operator of the Sunol Valley Aggregate Quarry, ODS has now applied to Alameda County for a Revised SMP-30 mining permit (i.e., the Project).

Revisions to Chapter 2: Executive Summary

Page 2-1 [Response to Comment C-3]

> The current lease holder is Oliver de Silva, Inc. (ODS, also the Project applicant), who executed their lease with the City and County of San Francisco in May of 2010. This lease includes the currently active quarry site of 323 acres permitted under Alameda County SMP-30. Subject to Project approval by Alameda County and lease approvals by the SFPUC, the lease will be amended to include an additional approximately 58-acre area along the southeast boundary of the current SMP-30 site. As the new leaseholder/operator of the Sunol Valley Aggregate Quarry, ODS has now applied to Alameda County for a Revised SMP-30 mining permit (i.e., the Project) as further described below.

Revisions to Chapter 3: Project Description

Page 3-1 and 3-2 [Response to Comment C-1]

The approximately 381-acre Project site is located at 6527 Calaveras Road, approximately one mile south of I-680 (Scotts Corner) in the Sunol Valley portion of unincorporated southern Alameda County. The site is bounded by San Antonio Creek to the north, Alameda Creek to the west and Calaveras Road frontage to the east (see Revised **Figure 3-1**). Another quarry operation (SMP-24/SMP-33) operated by Lehigh-Hanson Aggregates is across the creeks to the north and west.

Page 3-14 [Response to Comment C-3]

In 2006, the SFPUC put out a request for proposals to prospective quarry operators to lease and operate the quarry at SMP-30, and to potentially expand quarry operations at the site through a revision of SMP-30 permit. The SFPUC entered into an exclusive negotiating agreement with Oliver de Silva, Inc. (ODS), and ODS has now been issued a lease from the City and County of San Francisco for the Sunol Valley Aggregate Quarry Site. The lease includes the currently active quarry site of 323 acres permitted under Alameda County SMP-30. Subject to Project approval by Alameda County and lease approvals by the SFPUC, the lease will be amended to include an additional approximately 58-acre area along the southeast boundary of the current SMP-30 site (as previously shown in Figure 3-2). As the new leaseholder/operator of the Sunol Valley Aggregate Quarry, ODS has now applied to Alameda County for a Revised SMP-30 mining permit (i.e., the Project) as further described below.

Page 3-32 [Response to Comment C-6]

As a public agency landowner, the City and County of San Francisco and the SFPUC have retained some discretion with respect to modification of SMP-30, including the right to require certain modifications to the quarry lease as may be related to Project-required mitigation measures and the discretion to not approve the modified lease, even if the Revised SMP-30 mining permit is approved by Alameda County.

Revisions to Chapter 5: Land Use

Page 5-20 and 5-21 [Response to Comment C-2]

Pursuant to the AWMP, quarry activities only occur on secondary watershed lands. SFPUC permits quarrying on these secondary watershed lands through leases, which they enter into with quarry operators, and the SFPUC earns revenue from these leases to support other watershed programs. The Project site has been leased to several quarry operators and used for sand and gravel extraction for more than 50 years. The most current operator has been CEMEX, operating on a holdover basis after the term of that lease expired. On September 19, 2007, the SFPUC entered into an exclusive negotiating agreement with Oliver de Silva, Inc. (the Project applicant), which resulted in a quarry lease executed by the City and County of San Francisco on May 27, 2010. San Francisco also leases other SFPUC properties in the immediate vicinity for quarrying operations, including the Lehigh-Hansen Aggregate Quarry (SMP-24, -32 and -33) immediately adjacent to the Project site. Revised **Figure 5-3** shows permitted SFPUC mining leases in the Sunol Valley as of April 1996.

Revised Figure 3-1
Project Site Location

Aerial Source: October 2011

Revised Figure 5-3
Quarry lease Locations, Sunol Valley

Source: Alameda County 2012

Revisions to Chapter 6: Aesthetics

Page 6-35 [Response to Comment C-5]

MM Aesthetics-5: Calaveras Road Landscape Plan. The Project applicant and the County shall re-assess the Landscape Planting, Irrigation and Maintenance Plan required pursuant to the 1992 SMP-30 Conditions of Approval for the landscape buffers along Calaveras Road to determine ~~if~~ what additional plantings are necessary to achieve the condition's objectives of visually filtering and softening views of the site from Calaveras Road. ~~If additional tree plantings determined by the County to be necessary to adequately screen and soften views, t~~The Project applicant shall prepare, as a condition of approval of the Reclamation Plan, a detailed landscape and planting plan for the Calaveras Road landscape buffer which shall include provisions for additional tree plantings consistent with the ~~species types and sizes as originally required pursuant to SMP-30 Condition of Approval #21.~~ Following measures:

- The visual screen shall be dense enough to filter views from Calaveras Road;
- Trees shall be planted subject to the approval of the Community Development Director;
- There shall be a preference for native species. Different species or tree placement schemes may be used if approved in writing by the Community Development Director; if alternative species are selected, they shall be non-invasive.
- Trees shall not interfere with water or electrical transmission lines;
- A monitoring plan with an implementation schedule shall be prepared and submitted to the Community Development Director for approval within 180 days of approval of Revised SMP-30, including SFPUC lease approvals. The plan shall include the provision that the successful growth and health of trees shall be monitored by the Community Development Agency during their annual review and five year review, or as needed to ensure its success as a visual filter. If proved unsuccessful, then Permittee shall replant with the same or different species as approved by the Community Development Director.

Revisions to Chapter 7: Air Quality and Chapter 8: Climate Change

The Bay Area Air Quality Management District (BAAQMD) did not submit a formal comment letter on the Draft EIR. However, County staff has been engaged in on-going collaborative discussions with the Air District regarding implementation strategies for those air quality and climate change mitigation measures recommended in the Draft EIR (MM AQ-4, MM AQ-5, MM CC-1 and MM CC-2). As a result of these collaborative discussions, the mitigation measures have been further clarified and greater detail incorporated. The greater detail now included in these mitigation measures does not result in any new significant environmental impacts or a substantial increase in the severity of a previously identified environmental impact, and the revised and clarified mitigation language is not considerably different from that previously recommended in the Draft EIR.

Page 7-37 [Staff Initiated]

Mitigation Measure AQ-4: ~~CAP~~ NOx Emissions Monitoring and Reduction Plan. ~~Within one year of project approval,~~ Upon approval of the Project, the Permittee shall ~~prepare and implement~~ initiate implementation of a NOx Monitoring and Reduction Plan (NOx Plan).

a) ~~The CAP Plan shall include a complete inventory of Project-related CAP emissions to determine how the Project's emissions of ROG, NOx, PM10 and PM2.5 compare to the significance thresholds applicable at that time on an annual basis.~~ Throughout the first year of operation and then subsequently throughout each following year, the Permittee shall prepare an annual audit of the total aggregate, concrete and asphalt production from the Project. Based on that audit, the Permittee shall prepare a calculation of all Project-related NOx emissions from all Project sources including the aggregate plant, the concrete plant, the

asphalt plant, on-site off road equipment and mobile sources (i.e., haul trucks). This calculation shall be used to compare the Project's actual annual NOx emissions, as a net increase over the baseline emissions established in the EIR, to the applicable significance threshold.

1) Beginning in the first year (through June 2013), if the total annual aggregate production rate does not exceed 1.5 million tons, the threshold for NOx emissions is not expected to be exceeded and no further emission calculations or mitigation would be required for that year.
2) In subsequent years, new emission standards promulgated by the US EPA and California Air Resources Board are expected to result in a substantial reduction in NOx emissions from the on-road truck fleet. With implementation of ARB emission standards by year 2016, if the annual total annual aggregate production rate does not exceed 2.25 million tons, the threshold for NOx emissions are not expected to be exceeded and no further emission calculations or mitigation would be required for that year.
3) With implementation of ARB emission standards by year 2020, the thresholds for NOx emissions is not expected to be exceeded even at 3.0 million tons of total aggregate production per year (the Project maximum), and no further emission calculations or mitigation would be required.

b) If the Project's NOx emissions, measured as the net increase over the EIR-established baseline, exceed ~~any~~ the applicable threshold, the NOx Plan shall demonstrate how the Project will reduce or off-set ~~remaining, un-mitigated~~ those net emissions exceeding the threshold. Reductions may t~~ake the form of~~ be achieved by any combination of, but not limited to the following:

   1) replacing or retrofitting engines for on-site rolling stock or haul trucks,
   2) reducing overall production rates at the Project site so as to not exceed the threshold,
   3) providing off-site compensation by reducing NOx emissions elsewhere in the air basin as a "credit" against project emissions, and/or
   4) purchasing NOx offset credits. For example, the Permittee could off-set their emissions through the Bay Area Air Quality Management District's (Air District) Carl Moyer Memorial Air Quality Standards Attainment Program (CMP) or other Air District emission reduction incentive programs. Under this example, the Permittee would provide funding for the emission reduction projects in an amount up to the emission reduction project's cost-effectiveness limit set by the California Air Resources Board (ARB) for the CMP during the year that the emissions from material hauling are emitted, and the funding would be used to fund projects eligible for funding under the CMP guidelines or other Air District incentive programs meeting the same cost-effectiveness threshold that are real, surplus, quantifiable, and enforceable.

c) The NOx Plan will be submitted to the Alameda County Community Development Agency on an annual basis.

d) Upon County approval of the NOx Plan, the Permittee shall implement specified measures as necessary.

Page 7-39 [Staff Initiated]

Mitigation Measure AQ-5: TAC emissions Monitoring and Reduction Plan. ~~Within one year of project approval,~~ Upon initiation of Phase II of the Project's operations, the Permittee shall ~~prepare and implement~~ initiate implementation of a Toxic Air Contaminant Monitoring and Reduction Plan (TAC Plan).

a) ~~The TAC Plan shall include a complete inventory of Project-related TAC emissions to determine how the estimated excess cancer risks from Facility emissions compare to the significance thresholds on an annual basis.~~ Throughout the first year of Phase II operations and then subsequently throughout each following year, the Permittee shall prepare an annual

audit of the total aggregate, concrete and asphalt production from the Project. Based on that audit, the Permittee shall prepare a risk assessment for lifetime cancer risk for a lifetime resident from all Project sources including the aggregate harvesting operations, aggregate plant, the concrete plant, the asphalt plant, on-site off road equipment and mobile sources. This risk assessment calculation shall be used to compare the Project's actual incremental lifetime cancer risk, as a net increase over the baseline risk established in the EIR, to the applicable significance threshold.

b) If the ~~risk thresholds are exceeded,~~ assessment indicates that the Project's net increase in incremental health risk exceeds the applicable threshold, the TAC Plan shall demonstrate how the Project will reduce emissions to below the threshold level.~~, which may take the form of.~~ Reductions may be achieved by any combination of, but not limited to the following:

   1) replacement or retrofit of engines used in one of the two scrapers, such that they meet a minimum of US EPA Tier 4 interim emissions standard, or

   2) replacement or retrofit of engines used on other on-site rolling stock, such that they meet a minimum of US EPA Tier 4 interim emissions standard and result in maintaining risk levels below the applicable standards, or

   3) reducing overall production rates at the Project site so as to not exceed the threshold.

c) The TAC Plan shall be submitted to the Alameda County Community Development Agency on an annual basis.

d) Upon approval, the Permittee shall implement specified measures as necessary.

Page 8-33 [Staff Initiated]

MM CC-1: Stationary Source GHG Monitoring and Reduction Plan. ~~Within one year of Project approval~~ Upon approval of the Project, the Permittee shall ~~prepare and implement~~ initiate implementation of a Stationary Source GHG Monitoring and Reduction Plan (SS GHG Plan).

a) ~~The Plan shall include a complete inventory of Project-related stationary source GHG emissions to determine how the facility emissions compare to the significance thresholds on an annual basis.~~ Throughout the first year of operation and then subsequently throughout each following year, the Permittee shall prepare an annual audit of the total throughput of asphalt through the plant. Based on that audit, the Permittee shall prepare a calculation of all stationary source emissions of GHGs from the drum mixer and the hot asphalt oil heater. This calculation shall be used to compare the Project's actual annual stationary source GHG emissions to the applicable significance threshold.

   1) If the total annual throughput of asphalt does not exceed 750,000 tons per year, the threshold for stationary source GHG emissions is not expected to be exceeded and no further emission calculations or mitigation would be required for that year.

b) If the Project's stationary source GHG emissions, measured as the net increase over the EIR-established baseline, exceed the applicable threshold, then the SS GHG Plan must demonstrate how the facility will reduce or offset ~~remaining, un-mitigated~~ those net emissions exceeding the threshold. Reductions may be achieved by any combination of, but not limited to the following:

   1) limiting total asphalt production at the plant to levels that would not result in exceeding the threshold,

   2) achieving on-site reductions in emissions through such means as more energy-efficient equipment, production of on-site sustainable energy or use of cleaner burning (i.e., bio-diesel) fuels.

   3) providing off-site compensation by reducing GHG emissions elsewhere as a "credit" against project stationary source emissions, and/or

4) purchasing offsetting "carbon credits" as an off-site compensation. For example, the Permittee may be able to off-set their emissions through a Bay Area Air Quality Management District (Air District) grant program whereby the funding would be used to fund projects eligible for funding under the program's guidelines meeting the same cost-effectiveness threshold that are real, surplus, quantifiable, and enforceable.

c) The SS GHG Plan will be submitted to the Alameda County Community Development Agency on an annual basis.

d) Upon County approval of the SS GHG Plan, the Permittee shall implement specified measures as necessary.

Page 8-37 [Staff Initiated]

MM CC-1: Mobile Source GHG Monitoring and Reduction Plan. ~~Within one year of Project approval~~ Upon approval of the Project, the Permittee shall ~~prepare and implement~~ initiate implementation of a Mobile Source GHG Monitoring and Reduction Plan.

a) ~~The Plan shall include a complete inventory of Project-related GHG emissions to determine how the facility emissions compare to the significance thresholds on an annual basis.~~ Throughout the first year of operation and then subsequently throughout each following year, the Permittee shall prepare an annual audit of the total aggregate, concrete and asphalt production from the Project. Based on that audit, the Permittee shall prepare a calculation of all Project-related mobile source GHG emissions from all Project sources including the aggregate plant, the concrete plant, the asphalt plant, on-site off road equipment and mobile sources (i.e., haul trucks). This calculation shall be used to compare the Project's actual annual mobile source GHG emissions, as a net increase over the baseline emissions established in the EIR, to the applicable significance threshold.

b) If the Project's mobile source GHG emissions, measured as the net increase over the EIR-established baseline, exceed the applicable threshold, the Mobile Source GHG Plan shall demonstrate how the Project will reduce or offset those ~~remaining, un-mitigated~~ net GHG emissions exceeding the threshold. Reductions may t~~ake the form of~~ be achieved by any combination of, but not limited to the following:

1) ~~alternative fuel use or the installation of on-suite alternative energy generation facilities achieving~~ on-site reductions in emissions through such means as more energy-efficient equipment, production of on-site sustainable energy or use of cleaner burning (i.e., bio-diesel) fuels,

2) providing off-site compensation by reducing GHG emissions elsewhere as a "credit" against project mobile source GHG emissions, and/or

3) purchasing off-setting 'carbon credits" as an off-site compensation. For example, the Permittee may be able to off-set their emissions through a Bay Area Air Quality Management District (Air District) grant program whereby the funding would be used to fund projects eligible for funding under the program's guidelines meeting the same cost-effectiveness threshold that are real, surplus, quantifiable, and enforceable.

c) The Mobile Source GHG Plan shall be submitted to the Alameda County Community Development Agency on an annual basis.

d) Upon County approval of the Mobile Source GHG Plan, the Permittee shall implement specified measures as necessary.

Revisions to Chapter 9: Biology

Page 9-41 [Response to Comment C-10]

An ephemeral stream (ES-1) is located within the Project's proposed expansion area. This is the only federal water located within the Project area. This stream was verified as jurisdictional by the Corps as part of the wetland delineation for the SFPUC's SABPL project. The stream begins in the hills to the east of Calaveras Road and was channelized and culverted through the nursery that formerly occupied part of the Project's proposed expansion area, to a discharge point on the slopes of the South Basin. The stream is un-vegetated and lined with riprap and therefore does not support potential aquatic habitat for special status species. Within the survey area ES-1 is approximately 730 linear feet and 0.13 acre in area. As of October 26, 2011, approximately 460 linear feet of ES-1 within the Project area had been apparently culverted and backfilled in association with the SFPUC's NIT and Alameda Siphons projects. Since then, ~~It is assumed that~~ the impacted area has been ~~will be~~ restored to its original condition at the conclusion of those SFPUC projects.

Revisions to Chapter 10: Geology and Soils

Page 10-21 [Staff Initiated]

The Draft EIR (beginning on page 1-14) provided an analysis based on available geo-technical investigations that confirmed that the Project's proposed design measures (e.g., slope designs and setbacks) would eliminate or reduce hazards related to slope failure. However, the Draft EIR also recommended that further detailed engineering analyses in the form of an updated geotechnical study should be provided by the Project applicant to more fully address detailed design issues. The Draft EIR recommended Mitigation Measure Geo-3: Engineering Analysis to provide that additional design detail and recommendations.

Since publication of the Draft EIR in April 2012, the Project applicant has submitted to Alameda County and the Department of Conservation a detailed engineering analysis that complies with and fulfills the requirements of MM Geo-3 (Berlogar, 2012). As such, MM Geo-3 is no longer a required mitigation measure for the Project. However, the Berlogar 2012 report does include a number of technical recommendations to ensure slope stability and safety. Therefore, this Final EIR recognizes completion of MM Geo-3 as included in the Draft EIR by deleting this as a Project requirement, and replaces that mitigation measure with specific recommendations from the Berlogar 2012 report, as indicated below.

~~**MM Geo-3a: Engineering Analysis**. The Project applicant shall submit an updated detailed engineering analysis to demonstrate that proposed side slopes of all quarry pits, benches, engineered fill, roadway designs and material stockpiles will not exceed the critical gradient as determined by an engineering analysis of slope stability. Such report shall be prepared by a soils engineer or a civil engineer registered in the State of California or an engineering geologist registered and certified in the State of California.~~

~~a) In no event should the steepness of any slopes exceed the critical gradient as determined by the engineering analysis.~~

~~b) The engineering analysis shall also demonstrate that the proposed Reclamation Plan does not include any slope designs that would be incompatible with the intended future use as water storage, would not be hazardous to persons that may utilize the site post-reclamation, and would not reduce the effectiveness of revegetation and erosion control measures.~~

MM Geo-3a: Compliance with Geotechnical Recommendations. Recommendations contained in the Berlogar Stevens Associates' *Geotechnical Investigation, Amended Reclamation Plan for the Sunol Quarry (SMP-30), Calaveras Road, Sunol, California for Oliver De Silva, Inc*., dated May 25, 2012 (Berlogar, 2012) shall be incorporated into the Project, including but not limited to those recommendations summarized below:

a) Cut slopes for the quarry wall as high as 400 feet shall maintain a slope of not greater than 2:1 in homogeneous native material overlying impermeable bedrock.

b) If processed silt in the silt ponds on the north side of quarry are to be removed from the top of quarry cut slopes when the quarry is expanded to the north, a minimum of 30 feet of silt shall be removed laterally back from the top of quarry slopes.

c) For the engineered fill slope at the south end of the quarry (the long-term processing plant):

- The engineered fill should have an average minimum friction angle of 30 degrees and 500 psf cohesion.
- Groundwater levels during quarry operations shall be controlled by a drainage system to intercept groundwater that could be emanating from the south cut slope and the quarry floor. A drainage system consisting of a drainage blanket, a chimney drain, perforated pipes and permeable material is needed to intercept groundwater inflow and to reduce the potential for saturating the engineered fill during active mining.
- As homogeneous engineered fill slope 350 feet high with a 2:1 slope, setbacks for equipment and stockpiles should be maintained to protect against possible fill slope deformation, as more specifically presented in the Berlogar 2012 report. Alternatively, geo-grid reinforcing could be incorporated into the engineered fill slope (as more specifically recommended in the Berlogar 2012 report), which would reduce the size of recommended setbacks for equipment and stockpiles.

d) If Pond F5 (the East Basin) is to be backfilled, engineered fill shall be placed in the upper few feet. Silt in the ponds shall remain untouched for a few years in order for a dry crust to form by air drying. Once a crust has formed, a geo-grid layer (such as Tensar TX160) should be placed on the ground surface. A bulldozer should then spread approximately 2 feet of soil over the geo-grid, starting at the edges and push the fill towards the middle of the pond. The dried crust, geo-grid, and 2 foot layer of soil will act as a bridge over the softer silt. Engineered fill can then be placed in thin lifts and compacted as more fully described in the Berlogar 2012 report. A minimum thickness of compacted fill should be 3 feet.

Revision to Chapter 13: Noise

Page 3-12 [Response to Comment C-12]

Phase I

Figure 13-5 shows the output from the SoundPlan noise model for Phase I conditions during daytime operations, with all significant equipment operating at the facility. The most affected receiver locations include ~~is~~ the Garcia residence located about 2,000 feet south of the Project site, the watershed keepers' residence at Andrade Road west of the Project site near I-680, and the watershed keepers' residence at Calaveras Road about 1,000 feet southeast of the Project site. The daytime noise levels are ~~is~~ calculated to be 45 to 46 dBA L_{eq} at the Garcia residence, 44 dBA at the Andrade Road keepers' residence, and 49 dBA at the Calaveras Road keepers' residence. As previously noted, the L_{eq} average noise level is used in the analysis for comparison to the County noise limit of 50 dBA L_{50} during the daytime and 45 dBA L_{50} during the nighttime. The hourly L_{eq} is always equal to or greater than the hourly L_{50} so it provides a conservative estimate of the noise. The projected daytime noise level at the nearest sensitive receptor for Phase I operations (i.e., at the Calaveras Road keepers' residence) is ~~4 to 5 dBA~~ below the 50 dBA daytime limit.

Noise contours from Phase I operations at night are shown in Figure 13-6. The projected nighttime noise levels at ~~the most~~ affected receptor locations is less than 30 dBA at the Garcia residence, 34 dBA at the Andrade Road keepers' residence, and 37 dBA at the Calaveras Road keepers' residence, all of which are substantially below the 45 dBA nighttime noise level limit established by the County.

During Phase I operations, no adverse noise impacts are identified, and no mitigation measures are necessary.

Phase II

Noise contours calculated for Phase II operations at the Project site, including the relocated processing plant, are shown on Figure 13-7. At the ~~most~~ affected receptor locations, ~~(~~the Garcia residence~~)~~ would have a ~~the~~ projected noise level of 51 to 52 dBA L_{eq}, the Andrade keepers' residence would have a noise level of 44 dBA L_{eq}, and the keepers' residence at Calaveras Road would have a noise level of 58 dBA L_{eq} during the daytime. This projected noise level is 1 to 2 dBA above the 50 dBA daytime noise threshold at the Garcia residence, and approximately 8 dBA above the threshold level at the Calaveras Road keepers' residence.

Noise contours for Phase II operations at night are shown on Figure 13-8. The noise levels at the ~~most~~ affected receptors is calculated to be 40 to 41 dBA at the Garcia residence (or 4 to 5 dBA below the County's nighttime noise limit), 32 dBA at the Andrade keepers' residence, and 46 dBA at the Calaveras Road keepers' residence (1 dBA above the County's nighttime noise limit).

Noise levels would be lower at all other residences that have been identified in the study area to the north, west, and southwest of the Project site. The modeling results confirm that there would be no significant effect on noise levels at other receptor locations further away from the Project site.

The projected noise levels at the nearest affected receivers (the Garcia property and the Calaveras Road keepers' residence) from Phase II operations during the daytime are 1 to 2 dBA and 8 dBA respectively above the County daytime noise level limits, and 1 dBA above the County's nighttime noise limit at the Calaveras Road keepers' residence. This would be a significant impact.

Mitigation Measures

The most significant source of noise causing Phase II impacts would be the crushing and screening equipment, the asphalt plant and the concrete plant. Daytime noise levels are projected to exceed allowable levels by about 2 dBA at the ~~only affected receptor the~~ Garcia residence located to the south of the Project site, and by about 8 dBA at the Calaveras Road keepers' residence. Nighttime noise levels are projected to exceed allowable levels by about 1 dBA at the Calaveras Road keepers' residence. It is likely that in the intervening years prior to plant relocation (Phase II), some equipment at the Project site will change and there will be small changes in noise generation from the equipment. Because this operating scenario will not occur for several years and plant equipment noise levels will likely change, the following mitigation measures are recommended pursuant to implementation of Phase II of the Project:

MM Noise-1a: Noise Survey. A noise survey shall be conducted within 30 days after the plant site and its processing facilities have been moved to the south. At that time, with the final plant layout in place, a determination shall be made as to whether or not additional noise barriers or other noise control measures for the equipment are required to reduce noise levels at the most affected receptors to acceptable levels (i.e., to 50 dBA in the daytime and 45 dBA at nighttime), and the exact locations and types of noise control measures, as may be needed, shall be determined.

MM Noise-2b: Noise Barrier. The method to be used to mitigate Phase II noise impacts shall be noise barriers. Normally, noise barriers are located close to, or on the equipment itself. Typically, the barriers are wood, metal, or quilted noise control blankets. Sometimes, material stockpiles can also be used as a noise barrier when the stockpiles can be maintained at the necessary minimum height to block line of sight from the noise source to the receiver, but in this case the processing area would be below elevation of the surrounding ground, making stockpiles less effective.

Resulting Level of Significance

Because noise levels are ~~conservatively~~ projected to exceed the significance criteria by as much as 8 ~~up to 2~~ dBA, and noise barriers can reduce noise by as much as 15 dBA ~~5-15 dBA~~, noise barriers will be a reasonable and feasible noise abatement measure for this Project, and would reduce the noise impact to a less-than-significant level.