COUNTY OF TULARE

RESOURCE MANAGEMENT AGENCY

5961 South Mooney Boulevard
Visalia, CA 93277

Orosi Rock SMARA Permit Amendment

Final Environmental Impact Report

December, 2013

Prepared by

County of Tulare Resource Management Agency
Planning Branch
Environmental Planning Division

Table of Contents

Final Environmental Impact Report
Orosi Rock SMARA Permit Amendment

Executive Summary

Project Description..... page ES-2
Project Location..... page ES-2
Project Elements..... page ES-2
Summary of Elements..... page ES-2
Project Objectives & Benefits..... page ES-3
Summary of Chapters..... page ES-4
Summary of Potential Impacts & Mitigation Measures..... page ES-10
Summary of Alternatives..... page ES-13

Chapter 1 – Introduction & Response to Comments

Revisions Outlined In The Response To Comments..... page 1-1
Public Review Of The Draft Environmental Impact Report..... page 1-1
Relevant CEQA Sections..... page 1-2
Comment Letters Received On The Draft EIR..... page 1-4
Comprehensive List of Responses..... page 1-4
Project Summary..... page 1-10
Local Regulatory Context..... page 1-11
Scope and Methodology..... page 1-11
Identification of Potentially Significant Impacts..... page 1-12
Consideration of Significant Impacts..... page 1-13
Mitigation Measures..... page 1-14
Organization of the EIR..... page 1-15
Environmental Review Process..... page 1-17
Organization Consulted..... page 1-18

Chapter 2 - Project Description, Objectives, and Environmental Setting

Introduction..... page 2-1
Project Location..... page 2-1
Project Description..... page 2-1
Vicinity and Surrounding Land Use of Project Site..... page 2-2
Zoning and Land Use..... page 2-3
Current Operations..... page 2-3
Project Description..... page 2-6
Project Objectives..... page 2-7

References ..... page 2-9

Chapter 3 - Impact Analysis

Aesthetics (3.1) ..... page 3.1-1
Agricultural Land and Forestry Resources (3.2) ..... page 3.2-1
Air Quality (3.3) ..... page 3.3-1
Biological Resources (3.4) ..... page 3.4-1
Cultural Resources (3.5) ..... page 3.5-1
Geology and Soils (3.6) ..... page 3.6-1
Greenhouse Gas Emissions (3.7) ..... page 3.7-1
Hazards and Hazardous Materials (3.8) ..... page 3.8-1
Hydrology and Water Quality (3.9) ..... page 3.9-1
Land Use and Planning (3.10) ..... page 3.10-1
Mineral Resources (3.11) ..... page 3.11-1
Noise (3.12) ..... page 3.12-1
Population/Housing (3.13) ..... page 3.13-1
Public Services (3.14) ..... page 3.14-1
Recreation (3.15) ..... page 3.15-1
Transportation/Traffic (3.16) ..... page 3.16-1
Utilities/Service Systems (3.17) ..... page 3.17-1
Mandatory Findings of Significance (3.18) ..... page 3.18-1

Chapter 4 - Summary of Cumulative Impacts

Cumulative Impact Analysis under CEQA ..... page 4-1
Past, Present, Probable Future Projects ..... page 4-3
Summary of Cumulative Impacts ..... page 4-7
References ..... page 4-10

Chapter 5 - Alternatives

Introduction ..... page 5-1
Factors Considered in Analysis of Alternatives ..... page 5-4
Alternatives Analysis ..... page 5-5
Alternatives Not Considered ..... page 5-6
Alternatives Matrix ..... page 5-5
Alternatives Analyzed ..... page 5-7

Chapter 6 - Economic, Social, & Growth Inducing Effects

Introduction....page 6-1
Demographics....page 6-1
Economic Impacts....page 6-2
Social Effects....page 6-4
Growth Inducement....page 6-4

Chapter 7 - Unmitigable Impacts

No Environmental Effects That Cannot be Avoided....page 7-1
No Irreversible Impacts....page 7-1
No Statement of Overriding Considerations....page 7-2
Project Benefit Statements....page 7-2
References....page 7-4

Chapter 8 - Mitigation Monitoring and Reporting Program

Mitigation Monitoring Program....page 8-1

Chapter 9 - EIR Preparation

Figures

Figure 2-1	**Vicinity map**
Figure 2-2	**Zoning map**
Figure 3.1-1	**View of Southwest Corner from Road 144**
Figure 3.1-2	**View of Eastern Border from Road 144**
Figure 3.1-3	**View of northwest corner from Road 144**
Figure 3.1-4	**View of southeast corner from Avenue 420**
Figure 3.1-5	**View of southeast corner from Avenue 420**
Figure 3.1-6	**Scenic Highways and County Scenic Routes**
Figure 3.2-1	**Prime Farmland**
Figure 3.2-2	**Ag. Preserve Map**
Figure 3.3-1	**Sensitive Receptors**
Figure 3.9-1	**Watershed Map**
Figure 3.9-2	**Tulare Lake Hydrologic Region Water Balance**
Figure 3.11-1	**Mineral Resource Zones**
Figure 3.12-1	**Noise Receptor Locations**

Tables

Table ES-1	Mitigation Monitoring Reporting Program Summary
Table 3.2-1	2012 Tulare County Lands under Williamson Act or Farmland Security Zone Contracts
Table 3.3-1	Air Quality Monitoring Summary
Table 1.3-2	San Joaquin Valley Air Basin Attainment Status
Table 3.3-3	State & National Criteria Air Pollutant Standards, Effects, and Sources
Table 3.3-4	Operational Air Pollutant Emissions (Existing, 200,000 tons/year processing)
Table 3.3-5	Operational Air Pollutant Emissions (800,000 tons per year processing)
Table 3.3-6	Sensitive Receptors within 1000 feet from Project Boundary
Table 3.3-7	Cancer Risk from Project Operations
Table 3.3-8	Screening Levels for Potential Odor Sources
Table 3.7-1	Emissions by Sector in 2007
Table 3.7-2	Operational Greenhouse Gases
Table 3.7-3	Inapplicable Scoping Plan Reduction Measures
Table 3.8-1	Transport of Hazardous Waste
Table 3.9-1	Tulare Lake Hydrologic water balance for 1998-2005 (thousand acre-feet)
Table 3.9-2	Irrigation Districts in Tulare County
Table 3.9-3	Depth to Groundwater
Table 3.12-1	Land Use Compatibility for Community Noise Environments
Table 3.12-2	Field Data/Traffic Counts
Table 3.12-3	Existing Noise Levels
Table 3.12-4	Existing Noise Levels for Roadway Segments
Table 3.12-5	Traffic Noise Impacts for Existing Conditions
Table 3.12-6	Traffic Noise Impacts for Existing Plus Project Conditions
Table 3.12-7	Mining Operation Requirements
Table 3.12-8	Traffic Noise Impacts for Existing Plus Project Plus Cumulative and Cumulative Year 2040 Without and Plus Project Conditions
Table 3.12-9	Roadway Segment Noise Levels for Existing Plus Project, Existing Plus Project Plus Cumulative, and Cumulative Year 2040 Without and Plus Project Conditions
Table 3.13-1	Tulare County Population
Table 3.14-1	Recreational Areas in Tulare County
Table 3.14-2	Tulare County Libraries
Table 3.14-3	Fire Staffing and Reponses Time Standards
Table 3.15-1	National Park and Forest Facilities
Table 3.15-2	Recreational Areas in Tulare County
Table 3.16-1	Uninterrupted Traffic Flow Facilities LOS

Table 3.16-2	**Interrupted Traffic Flow Facilities LOS**
Table 3-16.3	**Existing Intersection Operations**
Table 4-1	**Regional Population Projections and Planning Efforts**
Table 4-2	**Checklist Items with Less than Significant Impacts with Mitigation**
Table 4-3	**Checklist Items with Less than Significant Impacts**
Table 5-1	**Alternatives Analysis Table**
Table 5-2	**Potential Impact Analysis**
Table 6-1	**Summary of Economic, Social and Growth Inducing Impacts**
Table 6-2	**Profile of General Population and Housing Characteristics, 2010**
Table 6-3	**Growth Impacts**
Table 8-1	**Mitigation Monitoring Reporting Program**

Appendices

Appendix A: Notice of Preparation and Agency Comment Letters

Notice of Preparation

Agency Comment Letters

- David Warner, San Joaquin Valley Air Pollution Control District, Central Region, (August 14, 2013 - District CEQA Ref. No. 20130661)
- David Deel, Department of Transportation, District 6, August 29, 2013
- Beth Hendrickson, Department of Conservation, August 13, 2013

Appendix B: U.S. Fish & Wildlife Service Letter

Peter A. Cross, Deputy Assistant Field Supervisor, US Fish & Wildlife, December 13, 2006

Appendix C: Archaeological Letter

Jay B. Lloyd, MA RPA, Senior Archaeologist, Applied Earthworks, memo, August 14, 2008

Celeste M. Thomson, Coordinator, CHRIS Report, RS# 13-416, October 15, 2013

Appendix D: Noise

VRPA Technologies, Noise Study Report, June 2013

Don Belden, Neil's Controlled Blasting, LP, Blast Report Letter, August 14, 2007

Jon Cornelsen, Drilling 7 Blasting, Inc, Blast Report Letter, December 4, 2013

Appendix E: Air Quality

Michael Brandman Associates, Air Quality, Greenhouse Gas, and Health Risk Assessment, December 6, 2012

Appendix F: Geology

Brett Lehman, PG, Brett Lehman Geologic, Evaluation Report, March 16, 2012

Jeff Short, Short & Associates, Rock Slope Stability Letter, November 12, 2011

Appendix G: Traffic

VRPA Technologies, Traffic Impact Study Report, May 2013

Appendix H: Site Engineering Plans

Lane Engineers, Mining and Reclamation Plan, June 30, 2011

Appendix I: Notice of Availability and Comments

Notice of Availability

Agency Comment Letters

- Beth Hendrickson, Department of Conservation, November 27, 2013

Adjacent Property Owners Comment Letters

- Robb Lewis, November 23, 2013

Executive Summary

This ~~Draft~~Final Environmental Impact Report (~~DEIR~~FEIR) concludes that the proposed expansion for the Orosi Rock Project ("Project or proposed Project") will result in a substantial adverse impact on the environment through the generation of noise related to vehicles (heavy-duty trucks). Therefore, a statement of overriding considerations has been prepared to address this one significant and unmitigable impact.

The EIR has been prepared consistent with the California Environmental Quality Act (CEQA). Its intent is to inform the public and the Tulare County Planning Commission of the potential environmental impacts the proposed Project would have on resources as specified in the CEQA Guidelines. This EIR, in its entirety, addresses and discloses potential environmental effects associated with construction and operation of the proposed Project, including direct, indirect, and cumulative impacts in the following resource areas:

Aesthetics
Air Quality
Cultural Resources
Greenhouse Gas Emissions
Hydrology and Water Quality
Mineral Resources
Population and Housing
Recreation
Utilities-and Service Systems
Agriculture and Forestry Resources
Biological Resources
Geology and Soils
Hazards and Hazardous Materials
Land Use and Planning
Noise
Public Services
Transportation/Traffic
Mandatory Findings of Significance

Although the Mandatory Findings of Significance is not a resource per se, it is required as it essentially provides a summary conclusion of the Project's potential on Long Term Impacts, Cumulative Impacts, and Impacts to Species, Impacts to Historical Resources, and Impacts on Human Beings. It is at this discussion where the EIR concludes that there are no significant adverse environmental impacts from this Project.

The California Environmental Quality Act (CEQA) requires that local government agencies, prior to taking action on projects over which they have discretionary approval authority, consider the environmental consequences of such projects. An Environmental Impact Report (EIR) is a public disclosure document designed to provide local and state governmental agency decision makers with an objective analysis of potential environmental consequences to support informed decision-making. This EIR (**State of California Clearinghouse #** 2013071074) has been prepared by Tulare County in accordance with CEQA Guidelines §15120 through §15131 and §15161 regulating EIRs to evaluate the environmental consequences of the Amendment to the Orosi Rock Mining Permit, to discuss alternatives to the proposed Project, and to propose mitigation measures that will offset, minimize or avoid identified significant environmental impacts. This document focuses on issues determined to be potentially significant as discussed in the Initial Study and the public scoping process completed for this project, as well as comments received on the Notice of Preparation (NOP) circulated by Tulare County in on July 29, 2013.

PROJECT DESCRIPTION

The Applicant currently operates a concrete recycling and surface mining operation on approximately 35.13 acres. The operation currently serves the entire region's concrete recycling needs. The applicant requests an amendment to the current permit conditions to increase the months of operation the mine is allowed to operate annually from 9 months to 12 months each year. Equipment for operations will be allowed to remain on site throughout the year. The amendment is also proposing to increase maximum annual mining allowed from 1.9 million tons of rock to 6.8 million tons of rock per year. The amended total of 8.7 million tons of rock per year will be combined with the existing annual maximum of 2.1 million tons of imported recycled asphalt and concrete. The maximum annual production of aggregate will be 10.8 million tons over the course of the existing 25 year period of the existing permit, which ends in 2030. The amendment will also increase excavating depth from 400' Mean Sea Level (MSL) to 350' MSL. The amendment will also increase aggregate shipments from 200,000 tons to 800,000 tons annually, and increase annual truck trips from 11,000 to 44,000 truck trips annually~~will increase aggregate production from the existing 6.8 million tons allowed by 1.9 million tons of rock and 2.1 million tons of imported recycled concrete. The total permitted production of aggregate will be 10.8 million tons over the course of the existing 25 year period of the existing permit (to 2030). The Applicant will be allowed to store no more than 10,000 tons of aggregate on the Project site. The Applicant will continue to require blasting to break up larger rocks that cannot be moved or broken up by mechanical equipment. All blasting will be conducted by a licensed blaster. The excavations requested by the Applicant will be to 350' Mean Sea Level (MSL) versus the 400' MSL previously approved~~.

~~The approximate 35.13 acre Project site is located near the northeast corner of Avenue 420 and Road 144 (approximately 3.5 miles west of Avenue 400 and SR 63) and encompasses Assessor Parcel Number (APN) 035-240-011. The proposed Project is in the Public Land Survey System of Section 10, Township 16 South, Range 25 East, M. D. B & M and can be found within the South Orange Cove United States Geological Survey (USGS) 7.5 minute topographic quadrangle.~~

PROJECT LOCATION

The Project site is located near the northeast corner of Road 144 and Avenue 420, one-half mile east of the unincorporated hamlet of East Orosi, in Tulare County, California. The Project site is approximately 3.5 miles west of Avenue 400 and SR 63, and encompasses Assessor Parcel Number (APN) 035-240-011. The proposed Project is in the Public Land Survey System of Section 10, Township 16 South, Range 25 East, M. D. B & M and can be found within the South Orange Cove United States Geological Survey (USGS) 7.5 minute topographic quadrangle.

PROJECT ELEMENTS

The current operation includes concrete recycling and surface mining operation on 35.13 acres where concrete from various construction projects around the region are delivered for recycling. ~~This is the only mining operation in Tulare County that has a cap on production~~

As noted earlier, the current operation is transporting between 100,000 to 200,000 tons of aggregate annually, and the Applicant is requesting an increase transporting up to 800,000 tons of aggregate annually. The proposed Project will include heavy-duty truck trips from the operation be increased on an annual basis to a maximum of 44,000 trips per year (from the currently permitted 11,000 trips per year). This will only impact the maximum annual truck trips and not the hourly or daily trips allowed. This will require 1 to 10 additional employees. The customer base from the Project is anticipated to remain mostly from within Tulare County.

The applicant is proposing to increase production of the existing mining permit, which currently allows a total amount of 6.8 million tons of rock. This amendment will ~~allow the~~ increase maximum annual mining allowed from 1.9 million tons of rock to 6.8 million tons of rock per year. The amended total of 8.7 million tons of rock per year will be combined with the existing annual maximum of 2.1 million tons of imported recycled asphalt and concrete. The maximum annual production of aggregate will be 10.8 million tons over the course of the existing 25 year period of the existing permit, which ends in 2030.~~increase of 1.9 million tons of rock and 2.1 million tons of imported recycled concrete. The total production of aggregate will be 10.8 million tons over the course of the existing 25 year period of the existing permit~~. This will also include excavating to 350' Mean Sea Level (MSL) versus the 400' MSL currently allowed under the existing permit. Proposed operation will continue blasting to break up larger rocks that cannot be moved or broken up by mechanical equipment. All blasting will be conducted by a licensed blaster.

PROJECT OBJECTIVES & BENEFITS

Project Objectives

The following objectives have been proposed by the Project developer, as presented in the "Project Description".

Objective 1: Increase Aggregate Production

Objective 2: Practice of Recycling Concrete

Objective 3: Reclamation of agricultural land and potential for groundwater reclamation

Objective 4: Operate Recycling and Surface Mining Operations in a financially feasible manner

Tulare County Objectives

Tulare County's General Plan Policies that are in line with the Project's purpose and objectives are as stated below:

Key General Plan Policies

ERM-2.1 Conserve Mineral Deposits
The County will encourage the conservation of identified and/or potential mineral deposits, recognizing the need for identifying, permitting, and maintaining a 50 year supply of locally available PCC grade aggregate.

ERM-2.2 Recognize Mineral Deposits
The County will recognize as a part of the General Plan those areas of identified and/or potential mineral deposits.

ERM-2.5 Resources Development
The County will promote the responsible development of identified and/or potential mineral deposits.

ERM-2.8 Minimize Hazards and Nuisances
The County will minimize the hazards and nuisances to persons and properties in the area during extraction, processing, and reclamation operations.

ERM-2.10 Incompatible Development
Proposed incompatible land uses in the County shall not be on lands containing or adjacent to identified mineral deposits, or along key access roads, unless adequate mitigation measures are adopted or a statement of overriding considerations stating public benefits and overriding reasons for permitting the proposed use are adopted.

ERM-2.13 SMARA Requirements
All surface mines in the County, unless otherwise exempted, shall be subject to reclamation plans that meet SMARA requirements. Reclamation procedures shall restore the site for future beneficial use of the land consistent with the Tulare County General Plan, subsequent to the completion of surface mining activities. Mine reclamation costs shall be borne by the mine operator, and guaranteed by financial assurances set aside for restoration procedures.

Project Benefits Statement

The Project will provide the following public and private benefits to Tulare County:

1) Divert, Recycle, and Reuse: The Project will increase the diversion of concrete
2) Business: Additional Sales Tax Revenue.
3) Reduction of Greenhouse Gas Emissions through Concrete Diversion
4) Increase granite and concrete aggregate construction
5) Increase roadway concrete asphalt production

SUMMARY OF CHAPTERS

Chapter 1 Introduction

The County of Tulare is processing the Orosi Rock Project application as an amendment to Surface Mining Permit and Reclamation Plan (PMR) No. 05001 (Orosi Rock) to permit expanded operations at this site. The Applicant requests modifications of the current permit

conditions to allow i) year-round operations, instead of seasonal operations, ii) mining equipment to remain on-site throughout the year, iii) an increase in the excavation depth (see Figure 6 for Project Profiles), and iv) an increase in the maximum annual shipment and truck trips. The Project site is located in Section 10 Township 16S Range 25E MDB&M and includes Assessor Parcel Number 035-240-011. The site is zoned AE-20 (Exclusive Agriculture, 20 acre minimum), which allows surface mining with the approval of a surface mining permit and reclamation plan. The Project site is located on Williamson Act-contracted land (Agricultural Preserve No. 292, Contract No. 2866); however, the Applicant will non-renew the Williamson Act Contract as a condition of this PMR.

Local Regulatory Context: The Tulare County General Plan Update 2030 was adopted on August 28, 2012. As part of the General Plan an EIR and background report were prepared. The General Plan background report contained contextual environmental analysis for the General Plan. The Housing Element for 2009-2014 was adopted on May 8, 2012, and certified by State of California Department of Housing and Community Development on June 1, 2012.

Identification of Potentially Significant Impacts: Indicates that the EIR must identify potentially significant impacts consistent with CEQA Guidelines Section 15002 (h).

Consideration of Significant Impacts: Indicates that the EIR must consider significant impacts consistent with CEQA Guidelines Section 15126.2.

Mitigation Measures: Indicates that the EIR is required to contain mitigation measures consistent with CEQA Guidelines Section 15126.4.

Environmental Review Process: Summarizes steps taken prior to release of the ~~draft~~Final EIR such as the Notice of Preparation, Scoping Meeting, and comments received from persons and/or agencies in response to the Notice of Preparation.

Chapter 2 Project Description, Objectives, and Environmental Setting

The Applicant, Orosi Rock LLC, requests modification of the current permit conditions to include year-round instead of seasonal operations (currently from March-November) and to allow mining equipment to remain on-site throughout the year. The Applicant also requests increasing the excavation depth, increasing annual maximum shipment, and increasing annual truck trips. The site is zoned AE-20 (Exclusive Agriculture, 20 acre minimum), which allows surface mining with the approval of a surface mining permit and reclamation plan (see Figure 8). The Project site is located on Williamson Act-contracted land (Agricultural Preserve No. 292, Contract No. 2866); however, the Applicant will non-renew the Williamson Act Contract as a condition of this PMR.

In summary, Chapter 2 contains the following:

- Project Location: Northeast corner of Road 144 and Avenue 420, one-half mile east of the unincorporated hamlet of East Orosi, in Tulare County, California. The Project site is

approximately 3.5 miles west of Avenue 400 and SR 63, and encompasses Assessor Parcel Number (APN) 035-240-011.

- Vicinity of Project Site: northeast Tulare County, as shown in Figure 2-1.
- Surrounding Land Uses: Predominantly Agriculture.
- Project Setting: Describes the proposed use, summary of facilities of the Project, construction at the site, operational parameters, and a detailed description of the Project.
- Regulatory Setting: Applicable statutes, rules, regulations, standards, policies, etc. of the County of Tulare, local or special districts, utilities, and State and Federal governments.
- Project Objectives: (See page ES-3 and Chapter 2, pages 2-1 and 2-2)

***Chapter 3 Impact Analysis** of Resources*

The CEQA Guidelines include a Checklist of resources that must be addressed in an EIR. These resources are listed on page ES-1. There are 17 specific Resources and Mandatory Findings of Significance discussed in detail in Chapter 3. The Resources are discussed in separate sections of Chapter 3 and each section is structured as follows:

- Summary of Findings;
- Introduction, including Thresholds of Significance;
- Environmental Settings;
- Regulatory Settings such as applicable Federal, State, and Local laws, statutes, rules, regulations, and policies;
- Impact Evaluation including Project Impacts, Cumulative Impacts, Mitigation Measures, and Conclusion;
- Definitions and Acronyms; and
- References.

Some resources required expertise to evaluate the Project's potential for impacts. As such, qualified experts prepared studies, evaluations, assessments, modeling, etc. (studies) to quantify and/or qualify potential resource impacts. The studies are contained in Appendices "A" through "H". Among the studies were air quality, biological, cultural (archaeological, historical, cultural), noise, and traffic.

Chapter 4 Summary of Cumulative Impacts

A critically important component of an EIR is the Cumulative Impacts discussion. Chapter 4 discusses a Cumulative Impact Analysis under CEQA. Including Past, Present, Probable Future Projects; and a Summary of Cumulative Impacts. Whereas a project in and of itself may not result in an adverse environmental impact, its cumulative effects may. Therefore the CEQA Guidelines require a discussion of cumulative impacts per Section 15130. The Discussion of Cumulative Impacts defines cumulative impacts per Section 15355 - "Cumulative impacts" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.

With the exception of Air Quality, Greenhouse Gas Emissions, Biological, and Hydrological Resources, Chapter 4 defines Tulare County as the geographic extent of the impact analysis. The geographic area is considered the appropriate extent because:

1) The proposed Project is geographically located in Tulare County and the County of Tulare is the Lead Agency; and
2) Tulare County General Plan policies apply to the proposed Project.

The basis for the other Resource-specific cumulative impact analyses includes:

- Land Use Impacts are based on the County of Tulare 2030 General Plan;
- Air Quality and Green House Gas Emissions are based on the San Joaquin Valley Air Basin;
- Mandatory Findings of Significance are based on the San Joaquin Valley, the State California, and the Western United States;
- Biological Resources are based on the San Joaquin Valley, the State of California, and the Western United States; and
- Hydrology is based on the Tulare County, the Tulare Lake Basin, and, the Tule Lake Sub-basin aquifer.

The Summary of Cumulative Impacts section discusses mitigable and immitigable impacts. Checklist item criteria that would result in no impacts or less than significant impacts are discussed in the Chapter 3 and are not reiterated in Chapter 4. As noted in Chapter 4, there are no Significant and Unavoidable Impacts; and Less than Significant Impacts with Mitigation are summarized in Table 4-3 (Checklist Items with Less than Significant with Mitigation). There are a number of cumulative impacts that do not need mitigation; these impacts are listed in Table 4-4 (Checklist Items with Less than Significant Impacts). Chapter 8 contains a complete list of Mitigation Measures to be implemented as part of the proposed Project. Chapter 4 also contains a No Impacts summary in Table 4-5 (Checklist Items with No Impacts).

Chapter 5 Alternatives

CEQA Guidelines Section 15126.6 requires that a reasonable range of Alternatives to the proposed Project be discussed in the EIR. The proposed Project site is the superior location. The conclusion contained in Chapter 5 is based on the criteria established for the site, an evaluation of a reasonable potential site, and the four reasonable Alternatives. The four Alternatives evaluated are:

Alternative 1:	No Project
Alternative 2:	Alternative Site (Project located on another parcel)
Alternative 3:	Reduced Yearly Tonnage
Alternative 4:	Reduced Depth

The proposed Alternatives were analyzed based on five evaluation criteria which include each of the objectives of the Project and the assessment of the potential environmental impacts. Each Alternative considered did not meet all the evaluation criteria, as identified in Table 5-4

(Alternatives Evaluation), contained in Chapter 5. The following is a summary of the Alternatives:

Alternative 1: No Project

This Alternative by definition would not meet the objectives of the proposed Project.

Alternative 2: Alternative Site (Project located on another parcel)

An Alternative Site would have to be similar in quality and quantity of rock material. It would also entail acquisition of an Alternative Site. An Alternative Site has the potential to create the same or more impacts (for example aesthetics, conversion of agricultural land, air quality, biological, cultural, traffic, etc.) at another site which would subsequently be converted into an active mining operation. The Applicant would have to (i) initiate a new County of Tulare entitlement process (i.e., Special Use Permit and SMARA Permit), (ii) re-initiate the environmental review process, (iii) receive new permits from other local agencies (i.e. Valley Air District or Water Quality Control Board), (iv) obtain new mining and reclamation permits from the state Department of Conservation and Division of Mines, and (v) obtain site control. Lastly, an Alternative Site may not comply with the Tulare County General Plan Policies outlined in Chapter 3.11 Mineral Resources.

Alternative 3: Reduced Yearly Tonnage

One potential alternative is to allow a Reduced Yearly Tonnage increase. This Alternative would increase the amount of time required to mine the site to the proposed depth. Reclamation would occur later than proposed. Also, the availability of construction material derived from the operation would be reduced resulting in (i) potential shortages of material needed to complete construction-related projects, (ii) increased construction-related costs due to delays in delivering material, and (iii) delays in completing construction-related projects.

Alternative 4: Reduced Depth

One potential alternative is a Reduced Depth of the proposed Project. This alternative would result in a lower total amount of material mined at the site. Reduced Depth would also be compounded by reduced yearly tonnage and the potential impacts described in Alternative 3.

As discussed in Alternatives 1 through 5, each of the Alternatives could result in more adverse environmental impacts as specified on the CEQA resources checklist. Therefore, the proposed Project is the environmentally superior alternative.

Chapter 6 Economic, Social, & Growth Inducing Impacts

This Chapter discusses the Economic, Social, and Growth Inducing effects of the Project. It contains Table 6-1 which provides the CEQA requirements and a summary of the impact analysis as follows:

- Economic Effects - The proposed Project will not result in negative impacts to the region. It may result in an increase in economic benefits to the region since the Project consists of the quarrying of aggregates for road base and concrete mixing. That will meet demand.

- Social Effects - The Project will not result in a disproportionate effect on minority populations, low income populations, or Native Americans. The proposed Project would not create nor pose any adverse environmental justice issues.

- Growth Inducing Effects - The Project will not result in significant growth inducing impacts, as it will not result in significant new permanent jobs. Therefore, the Project does not need to rely on the available housing stock to accommodate permanent employees associated with the Project. The Project will not result in new housing; therefore growth inducing impacts will be less than significant.

The overall conclusion contained in Chapter 6 is implementation of the proposed Project will result in less than significant environmental impacts, either individually or cumulatively, caused by either economic, social, or growth inducing effects.

Chapter 7 Unmitigable Impacts

This discussion provides determinations consistent with CEQA Guidelines Sections 15126.2 (b) Environmental Effects That Cannot Be Avoided, 15126.2 (c) Irreversible Impacts, and Statement of Overriding Considerations.

This Project will not result in significant and unavoidable impacts. All impacts have been found to be less than significant, or have been mitigated to a level considered less than significant. Further, the resources committed to the Project are standard resources necessary for the operation of the proposed increase to total annual tonnage and associated heavy-duty truck trips of the existing operation. Lastly, based on the analysis contained in the No Environmental Impacts That Cannot Be Avoided and the No Irreversible Impact sections contained in Chapter 7, a Statement of Overriding Considerations is not necessary. The Project's merits and objectives are discussed in the Project Description and are found to be consistent with the intent of the County of Tulare and its 2030 General Plan. Thus, the Project's benefits would outweigh any unavoidable and unmitigable impacts to warrant a Statement of Overriding Considerations.

Chapter 8 Mitigation Monitoring and Reporting Program

A summary of the Mitigation Monitoring and Reporting Program is contained at the end of this Executive Summary and in its entirety in Chapter 8. CEQA Section 21081.6 requires adoption of a reporting or monitoring program for those measures placed on a project to mitigate or avoid adverse effects on the environment. The mitigation monitoring and reporting program is required to ensure compliance during a project's implementation. Consistent with CEQA requirements,

the Mitigation Monitoring and Reporting Program contained in this EIR include the following elements:

- **Action and Procedure.** The mitigation measures are recorded with the action and procedure necessary to ensure compliance. In some instances, one action may be used to verify implementation of several mitigation measures.

- **Compliance and Verification.** A procedure for compliance and verification has been outlined for each action necessary. This procedure designates who will take action, what action will be taken and when, and to whom and when compliance will be reported.

- **Flexibility.** The program has been designed to be flexible. As monitoring progresses, changes to compliance procedures may be necessary based upon recommendations by those responsible for the Mitigation Monitoring and Reporting Program. As changes are made, new monitoring compliance procedures and records will be developed and incorporated into the program.

Chapter 9 EIR Preparation

Key persons from the County of Tulare and the consulting firms that contributed to preparation of the ~~Draft~~Final Environmental Impact Report (~~Draft~~Final EIR) are identified.

The sitting Tulare County Planning Commission, Tulare County Resource Management Agency Director (Jake Raper, Jr., AICP), Planning Branch Director (Michael C. Spata), Chief Environmental Planner (Hector Guerra), and Environmental Planning Division staff (Aaron Bock, Planner IV; Sung H. Kwon, AICP, Planner IV; Henry Dong, Planner II) are noted.

This EIR could not have been accomplished without the expertise of the consulting firm Carbon Solutions/Michael Brandman Associates that prepared technical studies to support the analyses contained herein. Carbon Solutions/Michael Brandman Associates provided Air Quality, Greenhouse Gas, Biological, Noise, and Historic resources studies.

SUMMARY OF POTENTIAL IMPACTS & MITIGATION MEASURES

Table ES-1
Mitigation Monitoring Reporting Program Summary

Mitigation Measure #	Mitigation Measure	Timing of Compliance
Aesthetics		
1-1	**The Project site has an existing berm and shall continue to have and maintain an 8-foot berm along the entire edge of the project site (not including location of the driveway).**	Ongoing monitoring during operations
1-2	**All exterior lighting shall be angled downward and adjusted to deflect and/or shield direct rays away from public roadways and adjacent properties.**	Ongoing Monitoring
Air Quality		
3-1	**During operation of the Project, off-road equipment used on the Project site (e.g., loaders, excavators, backhoes, dozers, etc.) shall be**	~~Approval of permit amendment~~Ongoing

Mitigation Measure #	Mitigation Measure	Timing of Compliance
	U.S. Environmental Protection Agency Tier 3-certified or higher, with the exception of a maximum total of 1,000 hours per year allowed for Tier 2 equipment	monitoring
Cultural Resources		
5-1	**In the event that archaeological or paleontological resources are discovered during site excavation, the County shall require that grading and construction work on the project site be suspended until the significance of the features can be determined by a qualified archaeologist or paleontologist. In this event, the property owner shall retain a qualified archaeologist/ paleontologist to make recommendations for measures necessary to protect any site determined to contain or constitute an historical resource, a unique archaeological resource, or a unique paleontological resource or to undertake data recover, excavation analysis, and curation of archaeological or paleontological materials. County staff shall consider such recommendations and implement them where they are feasible in light of project design as previously approved by the County.**	Ongoing monitoring during subsurface excavation
5-2	**The property owner shall avoid and minimize impacts to paleontological resources. If a potentially significant paleontological resource is encountered during ground disturbing activities, all construction within a 100-foot radius of the find shall immediately cease until a qualified paleontologist determines whether the resources requires further study. The owner shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. The paleontologist shall notify the Tulare County Resource Management Agency and the project proponent of the procedures that must be followed before construction is allowed to resume at the location of the find. If the find is determined to be significant and the Tulare County Resource Management Agency determines avoidance is not feasible, the paleontologist shall design and implement a data recovery plan consistent with applicable standards. The plan shall be submitted to the Tulare County Resource Management Agency for review and approval. Upon approval, the plan shall be incorporated into the project.**	Ongoing monitoring during subsurface excavation
5-3	**Consistent with Section 7050.5 of the California Health and Safety Code and (CEQA Guidelines) Section 15064.5, if human remains of Native American origin are discovered during project construction, it is necessary to comply with State laws relating to the disposition of Native American burials, which fall within the jurisdiction of the Native American Heritage Commission (Public Resources Code Sec. 5097). In the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps should be taken:** **1. There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:** **a. The Tulare County Coroner/Sheriff must be contacted to determine that no investigation of the cause of death is required; and** **b. If the coroner determines the remains to be Native American:** **i. The coroner shall contact the Native American Heritage Commission within 24 hours.** **ii. The Native American Heritage Commission shall identify the person or persons it believes to be the**	Ongoing monitoring during subsurface excavation

Mitigation Measure #	Mitigation Measure	Timing of Compliance
	most likely descended from the deceased Native American. iii. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code section 5097.98, or 2. Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance. a. The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission. b. The descendant fails to make a recommendation; or c. The landowner or his authorized representative rejects the recommendation of the descendent.	
Greenhouse Gas Emissions		
7-1	During operation of the project, permitted equipment shall be electric.	~~At time of operation~~Ongoing monitoring
Noise		
12-1	Provide all hearing protection measures outlined in MSHA's Noise Standard Actions required by Mine Operators.	Ongoing monitoring
12-2	If the applicant amends the SMARA Contract for renewal in 2030, the applicant shall conduct another noise study at receptor #6. If it found that the Project's noise impacts exceed the General Plan's threshold of 60 leq(h) the Project shall pay its fair share of Design and Planting costs for dense trees and shrubs in order to reduce the noise impact to receptor #6 to a level less than the General Plan threshold of 60 leq(h).	~~Prior to Issuance of Permit Renewal~~Ongoing
Transportation/Traffic		
16-1	At the time of permit expiration in 2030, should the applicant choose to amend the permit to extend the life of the proposed surface mining permit, the applicant shall have a traffic study conducted at that time and pay the pro-rata share fee outlined by Caltrans for the impacts found to occur at that time. In the year 2035, if the Project is still in operation, the project shall pay for its fair share of the following improvements. <u>SR 201 at SR 63</u> • Install traffic signal. • Widen the eastbound approach to 1 left turn lane and 1 through/right-turn lane (adding 1 dedicated left turn lane). • Widen the westbound approach to 1 left turn lane and 1 through/right-turn lane (adding 1 dedicated left turn lane). • Widen the northbound approach to 1 left turn lane, 1	Prior to Issuance of Permit Renewal

Mitigation Measure #	Mitigation Measure	Timing of Compliance
	through lane, and 1 through/right-turn lane (adding 1 through lane). • **Widen the southbound approach to 1 left turn lane, 1 through lane, and 1 through/right-turn lane (adding 1 through lane).** **Avenue 416 (El Monte Way) at SR 63** • **Widen the eastbound approach to 1 left turn lane, 1 through lane, and 1 through/right-turn lane (adding 1 dedicated left turn lane).** • **Widen the westbound approach to 1 left turn lane, 1 through lane, and 1 through/right-turn lane (adding 1 dedicated left turn lane).** • **Widen the northbound approach to 1 left turn lane, 1 through lane, and 1 through/right-turn lane (adding 1 dedicated left turn lane).** • **Widen the southbound approach to 1 left turn lane, 1 through lane and 1 through/right-turn lane (adding 1 dedicated left turn lane).** **Avenue 416 (El Monte Way) at SR 63** **Widen the eastbound approach to 1 left turn lane, 2 through lanes, and 1 right-turn lane (adding 1 dedicated right-turn lane).**	

SUMMARY OF ALTERNATIVES

In the Alternatives Analysis, this ~~Draft~~Final EIR identified and assessed 5 Alternatives to the proposed Project. These Alternatives are listed below:

Alternative 1: **No Project**
Alternative 2: **Alternative Site (Project located on another parcel)**
Alternative 3: **Reduced Yearly Tonnage**
Alternative 4: **Reduced Depth**

INTRODUCTION & RESPONSE TO COMMENTS Chapter 1

The Draft Environmental Impact Report (Draft EIR or EIR) for the Orosi Rock Project was made available for public review and comment for a period of 45 days from October 18 through December 3, 2013. The purpose of this document is to present public comments and responses to comments received on the Orosi Rock Draft Environmental Impact Report (SCH # 2013071074).

Individual responses to each of the comment letters received regarding the Draft EIR are included in this chapter. Comments that do not directly relate to the analysis in this document (i.e., that are outside the scope of this document) will be considered.

In some instances, multiple comments were received with respect to several planning and/or environmental issues raised in the Draft EIR. In order to provide commenters with a complete understanding of the comment raised, the County of Tulare Resource Management Agency (RMA), Planning Branch staff prepared a comprehensive response regarding particular subjects. These comprehensive responses provide some background regarding an issue, identify how the comment was addressed in the Draft EIR, and provide clarification/explanation/elaboration while responding to a comment. In some instances, these comprehensive responses have also been prepared to address specific land use or planning issues associated with the proposed Project, but unrelated to the EIR or environmental issues associated with the proposed Project.

Comments received that present opinions regarding the Project that are not associated with environmental issues or raise issues that are not directly associated with the substance of the EIR are noted without a detailed response.

REVISIONS OUTLINED IN THE RESPONSE TO COMMENTS

Revisions and clarifications to the EIR made in response to comments and information received on the Draft EIR are indicated by strikeout text (e.g., ~~strikeout~~), indicating deletions, and underline text (e.g., <u>underline</u>), indicating additions. Corrections of typographical errors have been made throughout the document and are not indicated by ~~strikeout~~ or <u>underline</u> text. Revisions and clarifications are included as Errata pages within this document.

PUBLIC REVIEW OF THE DRAFT ENVIRONMENTAL IMPACT REPORT

Consistent with the California Environmental Quality Act (CEQA), the potential environmental effects of the Orosi Rock Project (SCH # 2013071074) have been analyzed in a Draft Environmental Impact Report (DEIR) dated October, 2013. Consistent with Section 15205 of the

State CEQA Guidelines, the DEIR for the Orosi Rock Project is subject to a public review period. Section 21091(a) of the Public Resource Code specifies a 30-day public review period; however, if a Draft EIR is submitted to the State Clearinghouse for review, the review period shall be a minimum of 45-days. The County of Tulare provided a 45-day review period.

The Orosi Rock Project Draft EIR was distributed to the above responsible and trustee agencies, other affected agencies/departments/branches within the RMA, interested parties, and all parties who requested a copy of the Draft EIR in accordance with Section 21092 of the *California Public Resources Code*. (See **Attachment 1**). The Draft EIR's Notice of Availability (NOA) was also published in the *Visalia Times Delta*, a newspaper of general circulation, on October 18, 2013, as required by CEQA. Per County of Tulare General Plan Policy PFS-5.2 Notification (Solid Waste, Notification), the County provided notice to all 7 properties within 300 ft of the Project site.

During the 45-day review period, the DEIR and the technical appendices were also made available at the following locations:

Tulare County Resource Management Agency
5961 South Mooney Boulevard
Visalia, CA 93277
(559) 624-7000

Orosi Branch Library
12646 Avenue 416
Orosi, CA 93647

In addition, the Orosi Rock DEIR was posted on the Tulare County website at:
http://www.tularecounty.ca.gov/rma/index.cfm/documents-and-forms/planning-documents/environmental-planning/environmental-impact-reports/orosi-rock/

RELEVANT CEQA SECTIONS
[See Complete Sections in CEQA Guidelines Sections 15088 to 15384, et seq.]

Section 15088. Evaluation of and Response to Comments.

(a) The lead agency shall evaluate comments on environmental issues received from persons who reviewed the draft EIR and shall prepare a written response…

(b) The lead agency shall provide… response to a public agency on comments made … at least 10 days prior to certifying.

(c) The written response shall describe the disposition of significant environmental issues raised. In particular, the major environmental issues raised when the lead agency's position is at variance with recommendations, and objections raised in the comments must be addressed in detail

Section 15088.5. Recirculation of an EIR Prior to Certification.

(a) A lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of the draft EIR for public review under Section 15087 but before certification.
(b) Recirculation is not required where the new information merely clarifies or amplifies or makes insignificant modifications in an adequate EIR.
(e) A decision not to recirculate an EIR must be supported by substantial evidence in the administrative record.

Section 15089. Preparation of Final EIR.
(a) The lead agency shall prepare a final EIR before approving the project. The contents of a final EIR are specified in Section 15132 of these guidelines.

Section 15090. Certification of the Final EIR.
(a) Prior to approving a project the lead agency shall certify that:
(1) The final EIR has been completed in compliance with CEQA;
(2) The final EIR was presented to the decision making body…and the decision making body reviewed and considered the information contained in the final EIR prior to approving the project; and
(3) The final EIR reflects the lead agency's independent judgment and analysis.

Section 15091. Findings.
(a) No public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding.… (a) shall be supported by substantial evidence in the record.

Section 15092. Approval.
(b) A public agency shall not decide to approve or carry out a project for which an EIR was prepared unless:
(2) The agency… (B) Determined that any remaining significant effects on the environment found to be unavoidable under Section 15091 are acceptable due to overriding concerns as described in Section 15093.

Section 15093. Statement of Overriding Considerations.

Section 15095. Disposition of a Final EIR.

Section 15151. Standards for Adequacy of an EIR.

Section 15364. Feasible. "Feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, and environmental, legal, social, and technological factors.

Section 15384. Substantial Evidence. "Substantial evidence"… means enough relevant information and reasonable inferences that a fair argument can be made to support a conclusion,

even though other conclusions might also be reached. Argument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, or evidence of social or economic impacts which do not contribute to or are not caused by physical impacts on the environment does not constitute substantial evidence.

COMMENT LETTERS RECEIVED ON THE DRAFT EIR

The County of Tulare received three comment letters on the Draft EIR during the designated comment period (between October 18 and December 3, 2013). In addition, correspondence or conversations regarding comments from the public are also provided in this document. Each comment letter is also numbered. For example, comment letter "1" is from the Office of Mine Reclamation, November 27, 2013.

Consistent with Section 15132 of the CEQA Guidelines, the following is a list of persons, organizations, and public agencies that submitted comments regarding the Draft EIR received as of close of the public review period on December 3, 2013.

Oral comments were received from or conversations occurred with the following individuals:

No oral comments were received

Comments from Federal, State, or County Agencies:

Comment Letter 1 – Office of Mine Reclamation, November 27, 2013

Comment Letter 4 – Department of Transportation, December 11, 2013

Comments from adjacent property owner's:

Comment Letter 2 – Robb Lewis Letter, November 23, 2013

Comment Letter 3 – Allstate Insurance Company, November 5, 2013, December 5, 2013

Comments from supporters of the proposed Project:

None received

COMPREHENSIVE LIST OF RESPONSES

Comment Letter 1 – Office of Mine Reclamation, November 27, 2013

Comment Subject: Proposed Amended Reclamation Plan

Comment: "*The Revised Reclamation Plan for Orosi Rock should be titled 'Amended Reclamation Plan for Orosi Rock and should either include all pertinent information from the 2005 plan or expressly reference the parts of the 2005 plan which remain in effect.*"

Response: Staff agrees with the Office of Mine Reclamation's (OMR) comment letter that the title of the Reclamation Plan should be revised to state the word "Amended." However, the comment does not address CEQA-related issues of the DEIR. Staff also agrees that the Reclamation Plan for Orosi Rock should reference or include all pertinent information from the 2005 Reclamation Plan. Staff has updated the proposed Amended Reclamation Plan accordingly.

Comment: "*SMARA section 2772(c)(5) requires reclamation plans to include a map with topographic details of the site. The engineered drawings included with the reclamation plan do not provide elevation data on the proposed slopes. These drawings should be revised to include elevation data on the proposed final contour lines.*"

Response: Staff has reviewed the Office of Mine Reclamation's comment letter that elevation data should be included on the engineering drawings for the proposed project. Elevation does exist on the engineering drawings, however, OMR is recommending additional elevation data be included. The comment does not address CEQA-related issues of the DEIR. A Condition of Approval #82 has been included in the Surface Mining Permit and Reclamation Plan (Permit) that requires the applicant to revise the engineering drawings to include the additional elevation information prior to proceeding with the mining operations approved by this amendment.

Comment: "*Additionally, the cross-sections provided with the reclamation plan are drawn with an inter-ramp angle of 2H:1V (horizontal:vertical); however, the overall angle, as drawn, is approximately 1.6H:1V. The reclamation plan text states that the final slopes be no steeper than 2H:1V. The cross-sections and proposed final topography should be revised to depict slopes that have an overall slope of 2H:1V to be consistent with the text of the reclamation plan.*"

Response: Staff has reviewed OMR's comment that the engineering drawings should show an overall slope of 2H:1V. A Condition of Approval #83 has been established that requires the final reclamation slopes have an overall slope of 2H:1V. The comment does not address CEQA-related issues of the DEIR. Language has been added to the condition to require the applicant to make necessary adjustments to meet the required slope angle. Additionally, Condition of Approval #82 has been included in the Permit that requires the applicant to revise the engineering drawings to include the overall slope corrections prior to proceeding with the mining operations approved by this amendment.

Comment: "*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...*"

Response: Staff has reviewed OMR's comment that equipment, supplies, and other material should be stored in a designated area and shown on the Reclamation Plan. However, the comment does not address CEQA-related issues of the DEIR. There are no structures or equipment that will remain on the site during the reclamation phase of the project. The Orosi Rock Reclamation Plan states that "no structures will remain inside the project site after the cessation of mining." The Plan also states that "the reclamation of topsoil for the "plant" area (location of equipment and structures) will not occur until all equipment and structures have been removed."

Comment: "*…that waste is disposed of according to the state and local health and safety ordinances.*"

Response: Staff agrees with OMR's comment to require that waste is disposed of according to state and local health and safety ordinances. The comment does not address CEQA-related issues of the DEIR. Condition of Approval #84 has been established that will require the applicant to meet all State and local regulations.

Comment: "*The plan states that after the entire site is excavated, an unspecified volume of topsoil is to be imported from 'onsite sources and/or imported from elsewhere' and placed on the floor of the mine at a depth of five feet. More detail needs to be added to the reclamation plan to describe the quantity and types of material that will be used to accomplish this end use, whether adequate topsoil and overburden is available from the current mining operation or how much will need to be imported, and financial assurance must be adequate to cover the cost of importing the volume of specified materials should the material not be available from on-site sources. The placement and compaction of the fill should also be discussed*"

Response: Staff reviewed OMR's comment to include more detail on the amount of topsoil and overburden that will need to be imported to the Project site. However, the comment does not address CEQA-related issues of the DEIR. The Reclamation Plan states that the proposal has an adequate amount of topsoil and overburden onsite for reclamation of the floor of the mine at a depth of five feet. Discussion on the placement and compaction of the fill has been added to the Reclamation Plan. The fill will be spread evenly across the floor of the mine. The soil will not be compacted but graded and tilled to the consistency of agricultural lands.

Comment: *"On page 15 of the 2005 Reclamation Plan for Whiterock Sand and Gravel [now the Orosi Rock Mine], it states that per conditions of approval (COAs)*

for the surface mining permit, transportation or reseeding of Ewan's larkspur (Delphinium hansenii ssp. Ewanianum) shall occur. This refers to COA #71 which states:

'The applicant shall attempt to transplant any Ewan Larkspur plant located within the excavation area to locations on the periphery. Should transplantation prove infeasible, reseeding/replanting of the species will be suitable. The applicant shall consult with the California Fish and Game or California Native Plant Society for more advice, if needed.'

More details need to be added to the reclamation plan as to whether this has already been done or how this will be accomplished, including monitoring with quantitative performance standards"

Response: Staff reviewed OMR's comment to include more detail on the current status of the Ewan's Larkspur in the Reclamation Plan. The Ewan's Larkspur is not a state or federal listed threatened or endangered species. The Reclamation Plan has been updated to provide more details of the current status of the plant. Staff spoke with Joan Stewart of the California Native Plant Society on December 4, 2013, who confirmed the Ewan's Larkspur is not listed as a state or federal endangered species. She advised that the species is considered a List 4 plant, and that there are no current performance standards. The operation should first try to avoid damaging the species first and foremost. If that is not possible, then transplanting is recommended, and reseeding is recommended as the last resort. COA #71 will be enforced during the new operations and the applicant will be required to consult with the California Department of Fish and Wildlife or the California Native Plant Society prior to reclamation to confirm if performance standards for the species have been established.

Comment: "*CCR Section 3711 establishes mandatory standards for topsoil salvage, maintenance, and redistribution. There is no discussion of topsoil in the reclamation plan other than the filling of the basin with five feet of topsoil for final reclamation. OMR recommends that the reclamation plan be revised to address the following:*

- *The top 6-12 inches of topsoil shall be salvaged and stockpiled separately from other mined materials.*
- *The location of the topsoil stockpile(s) shall be depicted on the site map(s).*
- *The topsoil stockpiles shall be clearly signed in the field to prevent inadvertent use.*
- *The stockpiles shall be protected from wind and water erosion by planting with an erosion control mix.*
- *Topsoil shall be redistributed in a stable, consistent thickness."*

Response: Staff agrees with OMR's comment and has incorporated the recommended measures into the Orosi Rock Amended Reclamation Plan. The comment does not address CEQA-related issues of the DEIR.

Comment: "*No information on revegetation is included in the reclamation plan. However, this information can be found on pages 15-16 of the 2005 Reclamation Plan for Whiterock Sand and Gravel [now Orosi Rock]. This section needs to be copied into the amended reclamation plan for the Orosi Rock Mine or included by reference.*"

Response: Staff agrees with OMR's comment and the Orosi Rock amended Reclamation Plan has been updated to incorporate the revegetation information from the 2005 Reclamation Plan for Whiterock Sand and Gravel. The comment does not address CEQA-related issues of the DEIR.

Comment: "*The seed mix on page 15 of the 2005 Reclamation Plan for Whiterock Sand and Gravel should be replaced with the alternate seed mix in COA #80 when this section is added to the amended reclamation plan for the Orosi Rock Mine.*"

Response: Staff agrees with OMR's comment and the Orosi Rock amended Reclamation Plan has been updated to incorporate the revegetation information from Condition of Approval #80 of the existing surface mining permit. The comment does not address CEQA-related issues of the DEIR.

Comment: "*CCR Section 3705(m) requires that the reclamation plan include success criteria that can be quantified by cover, density, and species richness. There is a performance standard for cover in the revegetation section of the 2005 Reclamation Plan for Whiterock Sand and Gravel. A density standard is not necessary for grasslands. OMR recommends adding a species richness performance standard for 3 species from the seed mix.*"

Response: Staff agrees with OMR's comment and the Orosi Rock amended Reclamation Plan has been updated to incorporate a species richness performance standard of 3 species from the seed mix. The comment does not address CEQA-related issues of the DEIR.

Comment Letter 2 – Robb Lewis Letter, November 23, 2013

Comment Subject: Air and Noise

Comment: The commenter states that the truck route for access to the Orosi Rock Mine is required to travel on Road 150 and Avenue 420. The trucks are traveling by the commenter's house on Road 144 and turning onto Avenue 420.

Response: Condition #32 of the existing Surface Mining Permit No. PMR 05-001 states, "unless contracted for jobs in the immediate vicinity of the plant site, trucks leaving the facility shall access Highway 63 utilizing the following route: West on Ave 420 to Road 144; thence South on Road 144 to Avenue 416; thence West on Ave 416 to SR 63."

Comment: The commenter states that trucks are using their "Jake Brakes" in front of his home which is causing noise disruptions. The commenter's home is located on the corner of Road 144 and Avenue 420.

Response: A Noise Study Report was conducted by VRPA Technologies, Inc. for the Orosi Rock project. The noise study monitored noise levels from the existing conditions at the location of 10 sensitive receptors including the commenter's home, which is identified as Receptor I.D. No. 1. The Existing Noise Level results from the study for Receptor I.D. No. 1 shows an Leq(h) dBA level of 45.0. The threshold of significance established by the Tulare County Noise Standard is a dBA ldn level of 75. The Orosi Rock applicant advises that there are a several operations in the area that utilize heavy-duty trucks. The applicant states that if the commenter can provide identification information including the truck number of the vehicle using "Jake Brakes" he will determine if the truck is associated with Orosi Rock, and require the driver not to use "Jake Brakes" on the Road 144/Avenue 420 intersection.

Comment: The commenter states that the existing Orosi Rock operation is producing dust from the operations.

Response: An Air Quality Analysis was conducted by Michael Brandman Associates on December 6, 2012 for the proposed Orosi Rock project. The Air Analysis analyzed the existing and potential impacts of Particulate Matter from the project. The results state "*the net increase in ozone precursor emissions (ROG, NOx, PM10, and PM2.5 are less than the District's significance thresholds. There would be localized onsite emissions of those pollutants; however, it is not anticipated that emissions would cause or contribute to an exceedance of the ambient air quality standards. Emissions are less than significant.*" Condition of Approval #67 requires the applicant to "*control fugitive dust generation by watering down all on-site haul roads, excavation areas, processing areas, and product stockpiles on a regular basis using a water truck or other similar equipment to minimize dust generation.*"

Comment: The commenter states that the existing Orosi Rock operation is producing excessive noise from the operations.

Response: As previously stated a Noise Study Report was conducted by VRPA Technologies, Inc. for the Orosi Rock project. The Noise Study Report monitored noise levels from the existing conditions. The noise impacts from

the Orosi Rock project was determined to be less than significant as it does not exceed County noise thresholds. Please refer to Section 3.12 of the FEIR for the Noise Impact Analysis. Please also refer to Appendix "D" for the Noise Study.

Comment: The commenter states that the existing Orosi Rock operation is producing ground vibration from the blasting occurring on the site. The commenter states that the ground vibration is causing damage to the foundation of his house and well.

Response: As previously stated a Noise Study Report was conducted by VRPA Technologies, Inc. for the Orosi Rock project. The Noise Study Report states, *"Condition 43 of the existing Conditions of Approval required the Project monitor the vibration impacts from blasting operations. Vibration monitoring has previously been performed and all data has been provided to Tulare County. Neil's Controlled Blasting, L.P. conducted seismic and noise monitoring during the occurrence of blast on August 1, 2007. Three seismographs were used concurrently to monitor the blast. The two seismographs located at the south and west property lines recorded vibration readings below 0.15 in/sec, which is well below the US Bureau of Mines recommendation of 2 in/sec. The noise level readings taken at the time of the blast recorded a measurement below 70 dB limit at 12Hz which is not detectable to the human ear. Therefore, it has been determined that vibrations from rock blasting at the Project's site are considered insignificant and no further study or mitigation is required."* A letter received from Drilling 7 Blasting, Inc. on December 4, 2013 summarizes the results of blasting reports from five blasting operations conducted between February and September 2013. The results find that the "highest reading of 28 Dba" is "well below the 70 Dba limit" noise standard. The letter also indicated that the "highest vibration rate of 0.505 in/sec" is well within the "Industry standards" which "require that vibration is not to exceed 2.0 in/sec."

Comment: The commenter states that the existing Orosi Rock operation does not notify him prior to blasting.

Response: Condition #44 of the existing surface mining permit requires the applicant to "*inform Tulare County RMA staff and surrounding property owners situated where blasting would be perceptible to inhabitants (as determined by the formal study conducted as per Condition No. 43) 24 – 48 hours prior to every blasting event. The notification may be via mail, telephone or home visit.*" The noise level readings from the August 14, 2007 Blasting Report conducted by Neil's Controlled Blasting, L.P. states, "Noise level readings were recorded below 70 dB limit at 12 Hz which is not detectable to the human ear." The results of the Blasting Report conclude the blasting would not be perceptible to surround inhabitants. The applicant has advised they will send notification

to the commenter prior to a blasting event if the commenter provides contact information.

Comment Letter 3 – Allstate Insurance Company, November 5, 2013, December 5, 2013

Comment Subject: Noise

Comment: The commenter concludes in a letter dated November 5, 2013, that blasting from the Orosi Rock quarry is resulting in damage to Mr. Robb Lewis' home, located at 14387 Avenue 420, Orosi, CA. The commenter submitted an engineering report on December 5, 2013, from Bausley & Associates, Inc. in regards to Mr. Lewis' house. The report summarizes the findings of the structural assessment of the crack damage and shifting foundation of the insured's house at 14387 Avenue 420 in Orosi, California, reportedly as a result of blasting at a nearby rock quarry (Orosi Rock). The site assessment involved a field visit by an engineer (from Bausley & Associates, Inc) observing the damaged areas on November 5, 2013. Based on observations and interviews, Bausley & Associates determined, in their professional opinion, that the damage to Mr. Lewis' house was not caused by an earthquake, but in all probability, was the direct result of accumulated effects of periodic blasting activities that occurred at the Orosi Rock quarry. The crack damage to the concrete driveway and water well head concrete pad originated as cracks due to shrinkage and temperature induced expansion and contraction, and that these pre-existing cracks have been exacerbated by ground vibration induced settlement resulting from accumulated effects of periodic blasting activities that occurred at the Orosi Rock quarry.

Response: A Noise Study Report was conducted by VRPA Technologies, Inc. for the Orosi Rock project. The Noise Study Report states, *"Condition 43 of the existing Conditions of Approval required the Project monitor the vibration impacts from blasting operations. Vibration monitoring has previously been performed and all data has been provided to Tulare County. Neil's Controlled Blasting, L.P. conducted seismic and noise monitoring during the occurrence of blast on August 1, 2007. Three seismographs were used concurrently to monitor the blast. The two seismographs located at the south and west property lines recorded vibration readings below 0.15 in/sec, which is well below the US Bureau of Mines recommendation of 2 in/sec. The noise level readings taken at the time of the blast recorded a measurement below 70 dB limit at 12Hz which is not detectable to the human ear. Therefore, it has been determined that vibrations from rock blasting at the Project's site are considered insignificant and no further study or mitigation is required."* To provide more recent readings, a letter received from Drilling 7 Blasting, Inc. on December 4, 2013 summarizes the results of blasting reports from five blasting operations conducted at the Orosi Rock mine between February and September 2013. The results find that the *"highest reading of 28 Dba" is "well below the 70 Dba limit"* noise standard. The letter also indicated that

the *"highest vibration rate of 0.505 in/sec"* is well within the *"Industry standards"* which *"require that vibration is not to exceed 2.0 in/sec."* The results of the seismographs in the blasting reports show recorded readings below 0.15 in/sec and a highest vibration rate of 0.505 in/sec. The readings equal 25% or less of the "Industry standard" maximum reading, which requires vibration not exceed 2.0 in/sec. Based on the analysis from the Noise Study Report and the seismograph readings from the blasting reports, the impacts to ground vibration from the Orosi Rock operation is less than significant. Dennis Lehman, Tulare County Building and Housing Manager, inspected Mr. Lewis' house on Thursday, December 19, 2013. The dwelling was relocated to the site in 1999, received all required inspections, and was issued a certificate of occupancy. In reviewing the site, it appears water has been allowed to run under the dwelling through the crawl space. Mr. Lehman states he has seen damage, soil cracking, foundation shifting, and flat work cracks caused by expansive soil. The lower foothills of the Sierra Nevada range have extensive areas of expansive soil. The recent editions of the California Building codes have added additional requirements for testing and mitigating the effects of expansive soil.

Comment Letter 4 – California Department of Transportation, December 11, 2013

Comment Subject: Traffic

Comment: The commenter finds the Draft Environmental Impact Report and Traffic Impact Study for the Orosi Rock Amendment satisfactory. The Commenter agrees with mitigation measure 16-1 as outlined in the DEIR. Caltrans recommends the County continue to enforce Condition #28 from the existing permit.

Response: Staff agrees with Caltrans the comments and will continue to enforce the condition as Condition #30 in the proposed Orosi Rock Amendment resolution.

PROJECT SUMMARY

The County of Tulare is proposing the Orosi Rock Project application (PMR 11-003) ~~is~~ for an amendment to Surface Mining Permit and Reclamation Plan (PMR) No. 05-001 (Orosi Rock) to allow for expanded operations at this site. The Applicant requests modification of the current permit conditions to include year-round instead of seasonal operations and to allow mining equipment to remain onsite throughout the year. The Applicant also requests increasing the excavation depth, increasing annual maximum shipment, and increasing annual truck trips. The Project site is located in Section 10 Township 16S Range 25E MDB&M and includes Assessor Parcel Number 035-240-011. The site is zoned AE-20 (Exclusive Agriculture, 20 acre minimum), which allows surface mining with the approval of a surface mining permit and reclamation plan). The Project site is located on Williamson Act-contracted land (Agricultural

Preserve No. 292, Contract No. 2866); however, the Applicant will non-renew the Williamson Act Contract as a condition of this PMR.

LOCAL REGULATORY CONTEXT

The Tulare County General Plan Update 2030 was adopted on August 28, 2012. As part of the General Plan an EIR was prepared as was a background report. The General Plan background report contained contextual environmental analysis for the General Plan. The Housing Element for 2009-2014 was adopted on May 8, 2012, and certified by State of California Department of Housing and Community Development on June 1, 2012.

SCOPE AND METHODOLOGY

The County of Tulare has determined that a project level EIR fulfills the requirements of CEQA and is the appropriate level evaluation to address the potential environmental impacts of the proposed project. A project level EIR is described in Section 15161 of the State CEQA Guidelines as one that examines the environmental impacts of a specific development project. A project level EIR must examine all phases of the project, including planning, construction, and operation.

This document addresses environmental impacts to the level that they can be assessed without undue speculation (CEQA Guidelines Section 15145). This ~~*Draft*~~*Final Environmental Impact Report (~~DEIR~~FEIR)* acknowledges this uncertainty and incorporates these realities into the methodology to evaluate the environmental effects of the Plan, given its long term planning horizon. The degree of specificity in an EIR corresponds to the degree of specificity of the underlying activity being evaluated (CEQA Guidelines Section 15146). Also, the adequacy of an EIR is determined in terms of what is reasonably feasible, in light of factors such as the magnitude of the project at issue, the severity of its likely environmental impacts, and the geographic scope of the project (CEQA Guidelines Sections 15151 and 15204(a)).

CEQA Guidelines Section 15002 (a) specifies that, "[t]he basic purposes of CEQA are to:

(1) Inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities.
(2) Identify ways that environmental damage can be avoided or significantly reduced.
(3) Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
(4) Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved."[1]

CEQA Guidelines Section 15002 (f) specifies that, "[a]n environmental impact report (EIR) is the public document used by the governmental agency to analyze the significant environmental effects of a proposed project, to identify alternatives, and to disclose possible ways to reduce or

[1] 2013 CEQA Guidelines, Section 15002 (a)

avoid the possible environmental damage… An EIR is prepared when the public agency finds substantial evidence that the project may have a significant effect on the environment… When the agency finds that there is no substantial evidence that a project may have a significant environmental effect, the agency will prepare a "Negative Declaration" instead of an EIR..."[2]

Pursuant to CEQA Guidelines Section 15021 Duty to Minimize Environmental Damage and Balance Competing Public Objectives:

"(a) CEQA establishes a duty for public agencies to avoid or minimize environmental damage where feasible.
  (1) In regulating public or private activities, agencies are required to give major consideration to preventing environmental damage.
  (2) A public agency should not approve a project as proposed if there are feasible alternatives or mitigation measures available that would substantially lessen any significant effects that the project would have on the environment.

(b) In deciding whether changes in a project are feasible, an agency may consider specific economic, environmental, legal, social, and technological factors.

(c) The duty to prevent or minimize environmental damage is implemented through the findings required by Section 15091.

(d) CEQA recognizes that in determining whether and how a project should be approved, a public agency has an obligation to balance a variety of public objectives, including economic, environmental, and social factors and in particular the goal of providing a decent home and satisfying living environment for every Californian. An agency shall prepare a statement of overriding considerations as described in Section 15093 to reflect the ultimate balancing of competing public objectives when the agency decides to approve a project that will cause one or more significant effects on the environment."[3]

IDENTIFICATION OF POTENTIALLY SIGNIFICANT IMPACTS

CEQA Guidelines Section 15002 (h) addresses potentially significant impacts, to wit, "CEQA requires more than merely preparing environmental documents. The EIR by itself does not control the way in which a project can be built or carried out. Rather, when an EIR shows that a project could cause substantial adverse changes in the environment, the governmental agency must respond to the information by one or more of the following methods:

(1) Changing a proposed project;
(2) Imposing conditions on the approval of the project;
(3) Adopting plans or ordinances to control a broader class of projects to avoid the adverse changes;
(4) Choosing an alternative way of meeting the same need;
(5) Disapproving the project;
(6) Finding that changes in, or alterations, the project are not feasible.
(7) Finding that the unavoidable, significant environmental damage is acceptable as provided in Section 15093."[4] (See Chapter 7)

[2] 2013 CEQA Guidelines, Section 15002 (f)
[3] Ibid., Section 15021
[4] 2013 CEQA Guidelines, Section 15002 (h)

This ~~*Draft*~~*Final EIR* identifies potentially significant impacts that would be anticipated to result from implementation of the proposed Project. Significant impacts are defined as a "substantial or potentially substantial, adverse change in the environment" (Public Resources Code Section 21068). Significant impacts must be determined by applying explicit significance criteria to compare the future Plan conditions to the existing environmental setting (CEQA Guidelines Section 15126.2(a)).

The existing setting is described in detail in each resource section of Chapter 3 of this document and represents the most recent, reliable, and representative data to describe current regional conditions. The criteria for determining significance are also included in each resource section in Chapter 3 of this document.

CONSIDERATION OF SIGNIFICANT IMPACTS

Pursuant to CEQA Guidelines Section 15126.2, "[a]n EIR shall identify and focus on the significant environmental effects of the proposed project. In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced. Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, the human use of the land (including commercial and residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services. The EIR shall also analyze any significant environmental effects the project might cause by bringing development and people into the area affected. For example, an EIR on a subdivision astride an active fault line should identify as a significant effect the seismic hazard to future occupants of the subdivision. The subdivision would have the effect of attracting people to the location and exposing them to the hazards found there. Similarly, the EIR should evaluate any potentially significant impacts of locating development in other areas susceptible to hazardous conditions (e.g., floodplains, coastlines, wildfire risk areas) as identified in authoritative hazard maps, risk assessments or in land use plans addressing such hazards areas."[5]

MITIGATION MEASURES

CEQA Guidelines Section 15126.4 specifies that:

"(1) An EIR shall describe feasible measures which could minimize significant adverse impacts, including where relevant, inefficient and unnecessary consumption of energy.

(A) The discussion of mitigation measures shall distinguish between the measures which are proposed by project proponents to be included in the project and other

[5] Ibid., Section 15126.2

measures proposed by the lead, responsible or trustee agency or other persons which are not included but the lead agency determines could reasonably be expected to reduce adverse impacts if required as conditions of approving the project. This discussion shall identify mitigation measures for each significant environmental effect identified in the EIR.

(B) Where several measures are available to mitigate an impact, each should be discussed and the basis for selecting a particular measure should be identified. Formulation of mitigation measures should not be deferred until some future time. However, measures may specify performance standards which would mitigate the significant effect of the project and which may be accomplished in more than one specified way.

(C) Energy conservation measures, as well as other appropriate mitigation measures, shall be discussed when relevant. Examples of energy conservation measures are provided in Appendix F.

(D) If a mitigation measure would cause one or more significant effects in addition to those that would be caused by the project as proposed, the effects of the mitigation measure shall be discussed but in less detail than the significant effects of the project as proposed. (*Stevens v. City of Glendale* (1981) 125 Cal.App.3d 986.)

(2) Mitigation measures must be fully enforceable through permit conditions, agreements, or other legally-binding instruments. In the case of the adoption of a plan, policy, regulation, or other public project, mitigation measures can be incorporated into the plan, policy, regulation, or project design.

(3) Mitigation measures are not required for effects which are not found to be significant.

(4) Mitigation measures must be consistent with all applicable constitutional requirements, including the following:

(A) There must be an essential nexus (i.e. connection) between the mitigation measure and a legitimate governmental interest. *Nollan v. California Coastal Commission*, 483 U.S. 825 (1987); and

(B) The mitigation measure must be "roughly proportional" to the impacts of the project. *Dolan v. City of Tigard*, 512 U.S. 374 (1994). Where the mitigation measure is an ad hoc exaction, it must be "roughly proportional" to the impacts of the project. *Ehrlich v. City of Culver City* (1996) 12 Cal.4th 854.

(5) If the lead agency determines that a mitigation measure cannot be legally imposed, the measure need not be proposed or analyzed. Instead, the EIR may simply reference that fact and briefly explain the reasons underlying the lead agency's determination."[6]

ORGANIZATION OF THE EIR

Executive Summary

The Executive Summary Chapter summarizes the analysis in this ~~Draft~~Final Environmental Impact Report.

[6] 2013 CEQA Guidelines, Section 15126.4

CHAPTER 1

Provides a brief introduction to the Environmental Analysis required by the California Environmental Quality Act (CEQA) and Response to Comments received on the Draft EIR.

CHAPTER 2

Describes the proposed Project. The chapter also includes the objectives of the proposed Project. The environmental setting is described and the regulatory context within which the proposed Project is evaluated is outlined.

CHAPTER 3

Includes the Environmental Analysis in response to each Checklist item. Within each analysis the following is included:

Summary of Findings

Each chapter notes a summary of findings.

Introduction

Each chapter will begin with a summary of impacts, pertinent CEQA requirements, applicable definitions and/or acronyms, and thresholds of significance.

Environmental Setting

Each environmental factor analysis in Chapter 3 will outline the environmental setting for each environmental factor. In addition, methodology is explained when complex analysis is required.

Regulatory Setting

Each environmental factor analysis in Chapter 3 will outline the regulatory setting for that resource.

Project Impact Analysis

Each evaluation criteria will be reviewed for potential Project-specific impacts.

Cumulative Impact Analysis

Each evaluation criteria will be reviewed for potential cumulative impacts.

Mitigation Measures

Mitigation Measures will be proposed as deemed applicable.

Conclusion

Each conclusion will outline whether recommended mitigation measures will, based on the impact evaluation criteria, substantially reduce or eliminate potentially significant environmental impacts. If impacts cannot be mitigated, unavoidable significant impacts will be identified.

Definitions/Acronyms

Some sub-chapters of Chapter 3 will have appropriate definitions and/or acronyms.

References

Reference documents used in each chapter are listed at the end of each sub-chapter.

CHAPTER 4

Summarizes the cumulative impacts addressed in Chapter 3.

CHAPTER 5

Describes and evaluates alternatives to the proposed Project. The proposed Project is compared to each alternative, and the potential environmental impacts of each are analyzed.

CHAPTER 6

Evaluates or describes CEQA-required subject areas: Economic Effects, Social Effects, and Growth Inducement.

CHAPTER 7

Evaluates or describes CEQA-required subject areas: Environmental Effects That Cannot be Avoided, Irreversible Impacts, and Statement of Overriding Considerations.

CHAPTER 8

Provides a Mitigation Monitoring and Reporting Program that summarizes the environmental issues, the significant mitigation measures, and the agency or agencies responsible for monitoring and reporting on the implementation of the mitigation measures.

CHAPTER 9

Outlines persons preparing the EIR and sources utilized in the Analysis.

APPENDICES

Following the text of this ~~Draft~~*Final EIR*, several appendices and technical studies have been included as reference material.

ENVIRONMENTAL REVIEW PROCESS

Pursuant to CEQA Guidelines §15082, the Notice of Preparation (NOP) for the Proposed Project was circulated for review and comment on July 22, 2013 and circulated for a 30-day comment period ending August 21, 2013. Tulare County RMA received the following 2 comments on the NOP. Comments were received from the following agencies, individuals, and/or organizations:

- Department of Conservation, Office of Mine Reclamation, August 13, 2013
- San Joaquin Valley Air Pollution Control District, August 14, 2013
- David Deel, Department of Transportation, District 6, August 29, 2013

A copy of the NOP is included in **Appendix A,** along with copies of letters received in response to the NOP.

Consistent with CEQA Guidelines Section 15103, "Responsible and Trustee Agencies, and the Office of Planning and Research shall provide a response to a Notice of Preparation to the Lead Agency within 30 days after receipt of the notice. If they fail to reply within the 30 days with either a response or a well justified request for additional time, the lead agency may assume that none of those entitles have a response to make and may ignore a late response."[7]

A scoping meeting was duly noticed in a newspaper of general circulation (Visalia Times-Delta) and held on August 8, 2013. No comments were received during this meeting.

Section 15093 of the State CEQA Guidelines requires decision-makers to balance the benefits of a proposed project against any unavoidable adverse environmental effects of the project. If the benefits of the project outweigh the unavoidable adverse environmental effects, then the decision-makers may adopt a statement of overriding considerations, finding that the environmental effects are acceptable in light of the project's benefits to the public.

As noted in CEQA Guidelines § 15105 (a), a Draft EIR that is submitted to the State Clearinghouse shall have a minimum review period of 45 days. This *Draft EIR* was circulated publicly for comment beginning on October 16, 2013. Following completion of the 45-day public review period ending on November 29, 2013, staff will prepare responses to comments and a *Final EIR* will be prepared. The *Final EIR* will then be forwarded to the County of Tulare Planning Commission for consideration of certification. Notwithstanding an appeal to the County of Tulare Board of Supervisors, a Notice of Determination will then be filed with the County Tulare County Clerk and also forwarded to the State of California, Office of Planning and Research.

[7] 2013 CEQA Guidelines, Section 15103

ORGANIZATIONS CONSULTED

1) California Air Resources Board (ARB)
2) California Department of Conservation, Division of Land Resource Protection, Office of Mine Reclamation
3) California Department of Fish and Wildlife Services - Region #4
4) California Department of Transportation (Caltrans) District 6
5) California Department of Toxic Substances Control
6) California Department of Food & Agriculture
7) California Department of General Services
8) California Natural Resources Agency
9) Native American Heritage Commission
10) Public Utilities Commission
11) State Water Resources Control Board: Water Quality
12) U.S. Fish & Wildlife Service
13) Central Valley Regional Water Quality Control Board – Region #5
14) San Joaquin Valley Unified Air Pollution Control District
15) Tulare County Resource Management Agency: Planning Branch (Environmental Planning, Project Review, Building and Housing Divisions) and Public Works Branch
16) Tulare County Environmental Health and Human Services Agency, Environmental Health Division
17) Tulare County Flood Control
18) Tulare County Fire

Project Description & Objectives
Chapter 2

INTRODUCTION

In accordance with the California Environmental Quality Act (CEQA) (Pub. Resources Code, Section 21000 et seq.), the County of Tulare Resource Management Agency (RMA) is preparing this Environmental Impact Report (EIR) to evaluate the environmental effects associated with an amendment to Surface Mining Permit and Reclamation Plan (PMR) No. 05001 (Orosi Rock) to allow for expanded operations at this site. The proposed modifications include year-round (instead of seasonal operations) and to allow mining equipment to remain onsite throughout the year. The proposed Project also includes increasing the excavation depth, increasing annual maximum shipment, and increasing annual truck trips.

PROJECT LOCATION

The Project site is located near the northeast corner of Road 144 and Avenue 420, one-half mile east of the unincorporated hamlet of East Orosi, in Tulare County, California. The Project site is approximately 3.5 miles west of Avenue 400 and SR 63, and encompasses Assessor Parcel Number (APN) 035-240-011. The proposed Project is in the Public Land Survey System of Section 10, Township 16 South, Range 25 East, M. D. B & M and can be found within the South Orange Cove United States Geological Survey (USGS) 7.5 minute topographic quadrangle.
The coordinates of the Project site are:

Latitude: N 36° 33' 14.0873"
Longitude: W 119° 14' 54.0674"

~~PROJECT DESCRIPTION~~

~~The Applicant, Orosi Rock LLC, requests modification of the current permit conditions to include year-round instead of seasonal operations (currently from March-November) and to allow mining equipment to remain onsite throughout the year. The Applicant also requests increasing the excavation depth (see Figure 6 for Project Profiles), increasing annual maximum shipment, and increasing annual truck trips. The site is zoned AE-20 (Exclusive Agriculture, 20 acre minimum), which allows surface mining with the approval of a surface mining permit and reclamation plan (see Figure 8). The Project site is located on Williamson Act contracted land (Agricultural Preserve No. 292, Contract No. 2866); however, the Applicant will non-renew the Williamson Act Contract as a condition of this PMR.~~

~~The surface mining portion of this Project will occur in the following two phases. In Phase One, mining will take place primarily with mobile excavators, dozers, and drills. In Phase Two, haul~~

~~trucks will transport the material to the processing plant on site for blending with recycled concrete. The applicant will be allowed to store no more than 10,000 tons of aggregate on the Project site. A Revised Reclamation Plan based on proposed changes has been prepared and has been submitted to The California Department of Conservation, Office of Mine Reclamation (OMR) for review. As a condition of the permit, and since the Project is in the AE-20 (Exclusive Agricultural – 20 acre minimum parcel size) zone, reclamation of the site will result in the property being reclaimed to grazing/open space standards for eventual agricultural re-use.~~

~~As noted earlier, the current operation is transporting between 100,000 to 200,000 tons of aggregate annually, and the Applicant is requesting to increase its transporting to 800,000 tons of aggregate annually. The proposed Project will include heavy-duty truck trips from the operation be increased to a maximum of 44,000 trips per year (from the currently permitted 11,000 trips per year). There will be no change to the daily or annual trips. This will require 1 to 10 additional employees. The customer base from the Project is anticipated to remain mostly from within Tulare County.~~

~~The applicant is proposing to increase production of the existing mining permit by 4 million tons of concrete and granite aggregate. The total production of aggregate will be 10.8 million tons over the course of the existing 25 year period of the existing permit. This will also include excavating to 350' Mean Sea Level (MSL) versus the 400' MSL currently allowed under the existing permit. Proposed operation will continue blasting to break up larger rocks that cannot be moved or broken up by mechanical equipment. All blasting will be conducted by a licensed blaster.~~

[TC1]

VICINITY AND SURROUNDING LAND USE OF PROJECT SITE

The land uses surrounding the property are primarily agricultural. Adjacent properties to the north, west and east of the site are irrigated crops, including orange groves. The property to the south has a rural residence and vacant agricultural land. The Project site and most adjacent properties, except the one immediately to the east of the mine site, are under Williamson Act contracts.

There are two single-family rural residences located near the Project site near the southwest and southeast intersection of Avenue 420 and Road 144. The nearest residence (41980 Road 144) is approximately 2,000 feet from the mine site access road entrance on Avenue 420 and is approximately 1,500 feet away from the production area where the aggregate is crushed, blended, and loaded. Additional rural residences are within one-half mile of the property to the west and north. The Town and Country Christian School is located approximately one-half mile south of the Project site.

Adjacent Zoning Land Uses		
North	AE-20	Orchards
East	AE-20	Orchards

South	AE-20	Orchards, Dry Pasture, Residence
West	AE-20	Orchards

ZONING AND LAND USE

The Project site is zoned AE-20 (Exclusive Agriculture, 20 acre minimum). The AE-20 zone allows surface mining with the approval of a surface mining permit and reclamation plan, in accordance with Chapter 25 of Part VII of the Ordinance Code of Tulare County.

Under the 1972 Open Space Plan of the Environmental Resources Management Element (ERME), the Project site is designated as Intensive Agriculture. Surface Mining and its associated uses are considered to be compatible with agricultural land use designations and are allowed per Tulare County Ordinance Code No. 3133, as amended. The mining operations currently and temporarily displace potential agricultural activities on 43% of the property suitable for cultivation. However, upon completion of the mining operations, 74% of the property will be suitable for potential cultivation. As a result of the proposed use and subsequent reclamation plan, the County of Tulare Resource Management Agency determined that the site does not conflict with policies contained in the ERME and PMR 05-001 was approved.

The land use element of the General Plan that is applicable to the site is the Rural Valley Lands Plan (RVLP). Although the RVLP designates the site for Agriculture, PMR 05-001 was granted because the applicant's proposal temporarily displaces marginal agricultural uses. However, this temporary impact will be mitigated through the reclamation plan, which will restore the land to agricultural use. The mine site is located outside of any designated development corridor or urban growth boundary.

CURRENT OPERATIONS

The current operation includes concrete recycling and surface mining operation on 35.13 acres where concrete from various construction projects around the region are delivered for recycling.

Figure 2-1
Vicinity Map

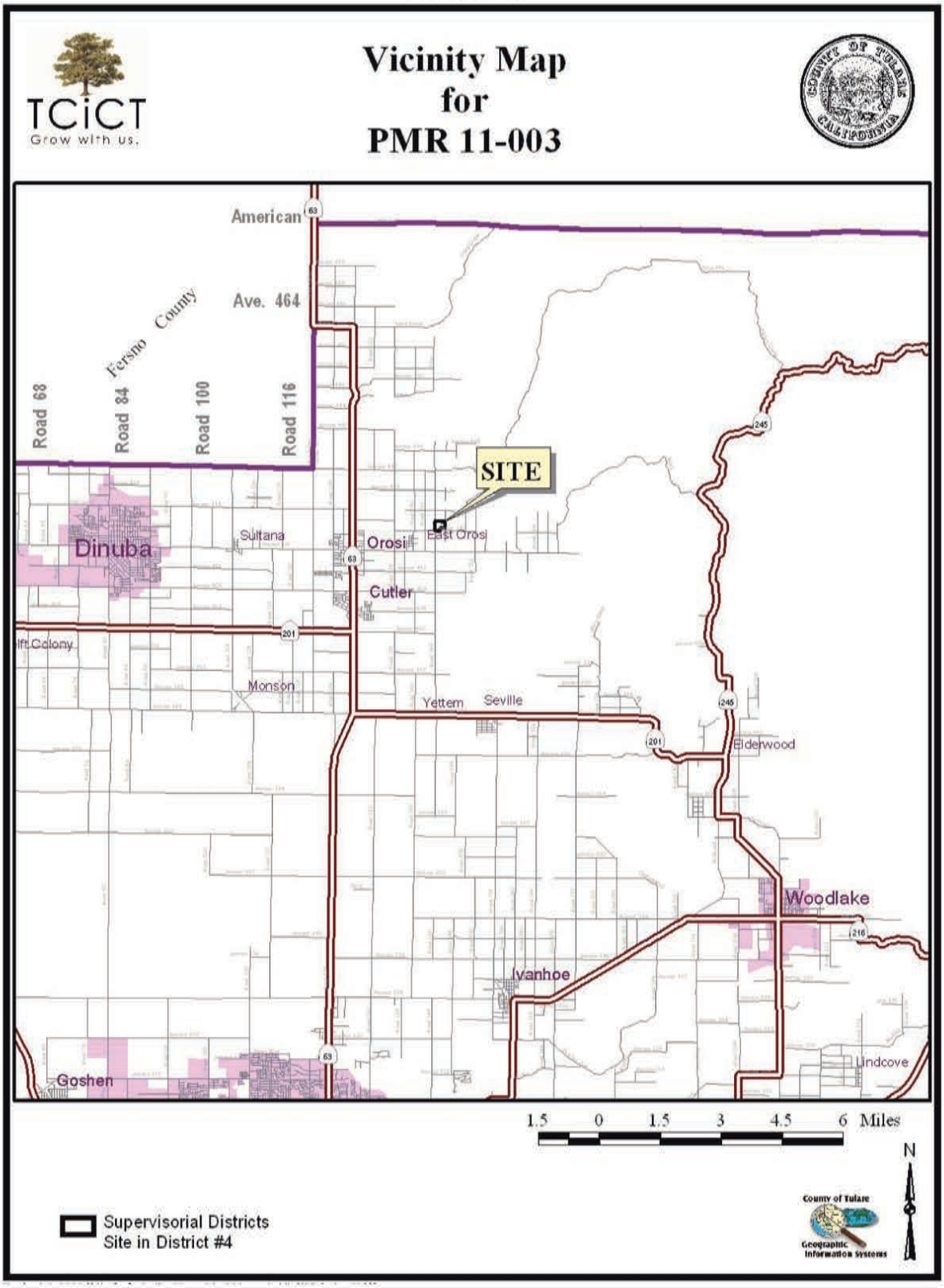
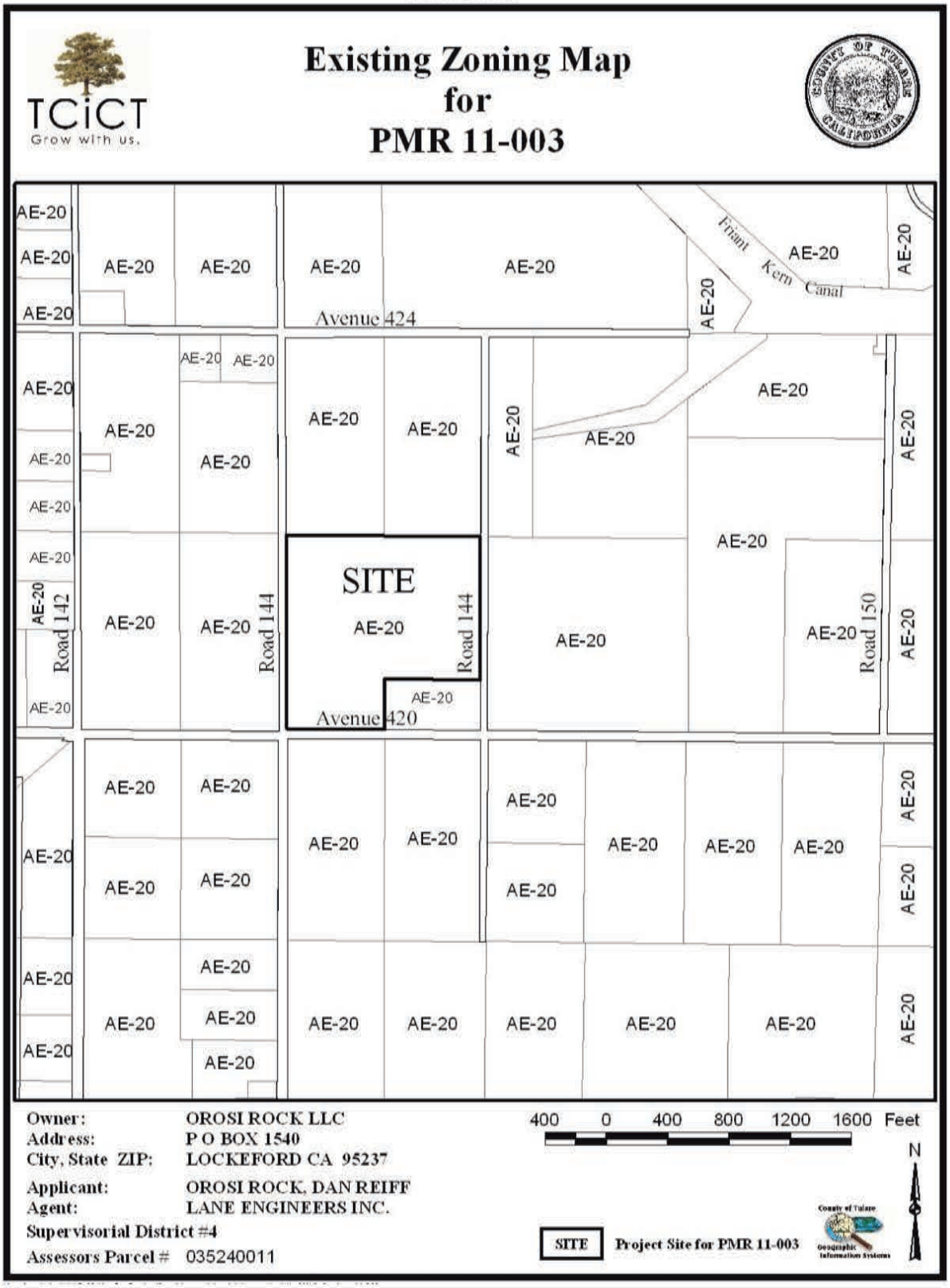


Figure 2-2
Zoning Map



PROJECT DESCRIPTION

The Applicant, Orosi Rock LLC, requests modification of the current permit conditions to include year-round instead of seasonal operations and to allow mining equipment to remain onsite throughout the year. The Applicant also requests increasing the excavation depth (see Figure 6 for Project Profiles), increasing annual maximum shipment, and increasing annual truck trips. As previously stated, the Project site is located in Section 10 Township 16S Range 25E MDB&M, and includes Assessor Parcel Number 035-240-011 (see Figure 9). The site is zoned AE-20 (Exclusive Agriculture, 20 acre minimum), which allows surface mining with the approval of a surface mining permit and reclamation plan (see Figure 8). The Project site is located on Williamson Act-contracted land (Agricultural Preserve No. 292, Contract No. 2866); however, the Applicant will non-renew the Williamson Act Contract as a condition of this PMR.

The Applicant currently operates a concrete recycling and surface mining operation on 35.13 acres, where concrete from various construction projects around the region are delivered for recycling. The Project site has an existing approved Reclamation Plan for PMR 05-001 (CA Mine I.D. No. 91-54-0035).

The surface mining portion of this Project will occur in the following two phases. In Phase One, mining will take place primarily with mobile excavators, dozers, and drills. In Phase Two, haul trucks will transport the material to the processing plant on site for blending with recycled concrete. The applicant will be allowed to store no more than 10,000 tons of aggregate on the Project site. A Revised Reclamation Plan based on proposed changes has been prepared and has been submitted to The California Department of Conservation, Office of Mine Reclamation (OMR) for review. As a condition of the permit, and since the Project is in the AE-20 (Exclusive Agricultural – 20 acre minimum parcel size) zone, reclamation of the site will result in the property being reclaimed to grazing/open space standards for eventual agricultural re-use.

In addition, the current operation is transporting between 100,000 to 200,000 tons of aggregate annually, and will increase its transporting to 800,000 tons of aggregate annually. This will require 1 to 10 additional employees. The proposed Project will include heavy-duty truck trips from the operation be increased from the currently permitted 11,000 trips per year to a maximum of 44,000 trips per year. The customer base from the Project is mostly from within Tulare County.

The applicant is proposing to increase ~~production of the existing mining permit, which currently allows a total amount of 6.8 million tons of rock. This amendment will allow the increase of~~ maximum annual ~~maxiumummaximum~~mining allowed ~~of~~from 1.9 million tons of rock ~~allowed by~~to 6.8 million tons of rock per year. The ~~annual~~amended total ~~maxiumum~~maximum of 8.7 million tons of rock per year will be combined with the existing ~~and~~ annual maximum of 2.1 million tons of imported recycled asphalt and concrete. ~~-~~The maximum~~total~~ annual production of aggregate will be 10.8 million tons over the course of the existing 25 year period of the existing permit, which ends in 2030. This will also include excavating to 350' Mean Sea Level (MSL) versus the 400' MSL currently allowed under the existing permit. Proposed operation will

continue blasting to break up larger rocks that cannot be moved or broken up by mechanical equipment. All blasting will be conducted by a licensed blaster.

PROJECT OBJECTIVES

Objective 1: Increase Aggregate Production

According to the Department of Conservation, Office of Mine Reclamations, the existing demand for aggregates in Tulare County "is sufficient to meet the demands for the next 11 to 20 years in the northern portion of the County and 21 to 30 years in the southern portions of the County. However, ideally there would be a minimum of 50 years of supply available in order to meet the projected County population according to the Department of Finance.[1] Currently, as a reference, Fresno County has less than a 10 year supply.

"The factors [concerning aggregate supply] include universal need, increasing demand, the economic and environmental costs of transportation, and multiple land-use pressures mak[ing]… availability and demand for aggregate[s] valuable to land-use planners and decision makers charged with planning for a sustainable future for California's citizens."[2]

Given the aggregate demands and only an 11 to 20 year supply for Tulare County over the next 50 years, the existing supply in the northern portion of the County will only be met with all the existing facilities and/or their expansions. The Applicant's objective of expanding its operations helps Tulare County and the State of California meet this demand in a more locally beneficial and efficient way. Any expansion will help meet the demand, but even with this expansion, the northern portion of the County can only meet its demand for the next 20 years, before other sources of aggregate must be found.

Objective 2: Practice of Recycling Concrete

According to Cal Recycle in their 2008 survey, Composition of California's Overall Disposal Waste Stream, concrete makes up about 1.2% of all waste material in the State of California. By the end of FY 2005, the goal was to ensure that the diversion rate for nonhazardous solid waste is greater than 40 percent. Requirements for reducing the generation of solid waste are contained in Executive Order 13101.[3] "The Legislature and Governor Brown set an ambitious goal of 75 percent recycling, composting or source reduction of solid waste by 2020."[4] For recycling and waste prevention, each agency is required to establish a goal for diversion of solid waste from landfilling or incineration. Although not one of the most prevalent forms of waste, it does carry potential hazardous pollutants in lye, fly ash, and other inert materials, and any waters that mix with recycled or mixed concrete batches requires treatment prior to discharge.[5] In addition there is the added cost for disposing concrete that results in

[1] Aggregate Sustainability in California, California Geologic Survey (2012 Update), page 5-6
[2] Ibid. page 1
[3] USACE, Methods for Reduction, Reuse, and Recycling of Demolition Waste, (2002), page 1-2
[4] http://www.calrecycle.ca.gov/75percent/
[5] See Title 27, California Water Code

greater tipping fees. The air pollutants from concrete mixing are also of special concern to the US EPA.[6] Therefore, the Project's reuse of recycled concrete material is a benefit.

Objective 3: Reclamation of Agricultural Land and Potential Water Basin Recharge

The Tulare County General Plan (TCGP) focuses on reclamation opportunities, in order to restore some of the agricultural land and depleted ground water table. In the TCGP, under Environmental Conditions for Water, Principle 3, it states the goal of Tulare County is to identify and encourage the development of locations where water recharge systems can be developed to replenish water supplies.

Under **HS-5.4 Multi-Purpose Flood Control Measures,** The County shall encourage multipurpose flood control projects that incorporate recreation, resource conservation, preservation of natural riparian habitat, and scenic values of the County's streams, creeks, and lakes. Where appropriate, the County shall also encourage the use of flood and/or stormwater retention facilities for use as groundwater recharge facilities *[New policy based on ERME IV-C; Public Safety; Recommendation 4; Pg. 116].*[7]

WR-1.5 Expand Use of Reclaimed Wastewater To augment groundwater supplies and to conserve potable water for domestic purposes, the County shall seek opportunities to expand groundwater recharge efforts *[Revised Existing Water Resources Policy 2.2].* [8]

The Project will reclaim the land to an open space condition with 2:1 slopes that will continue to capture and percolate water into the ground for ground water recharge purposes in fulfillment of the Tulare County Goals.

[6] See EPA Guideline 427/09, Concrete Batching
[7] See TCGP Goals and Poly Report, 2008
[8] Ibid.

REFERENCES

Tulare County General Plan Update 2030, adopted August 28, 2012

Tulare County General Plan Background Report, December 2007

Aesthetics
Chapter 3.1

SUMMARY OF FINDINGS

The proposed Project will not have any significant impacts related to Aesthetics with mitigation. A detailed review of potential impacts is provided in the following analysis.

INTRODUCTION

California Environmental Quality Act (CEQA) Requirements

CEQA requires that significant impacts on the environment be identified and, where possible, measures be added to minimize or eliminate impacts (CEQA Guidelines Section 15382). A "[s]ignificant effect on the environment" means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project…" (CEQA Guidelines Section 15382). With respect to aesthetics, potentially significant CEQA impacts include visual impacts to scenic highways, the visual character of the site, and impacts from lighting.

This section describes the existing visual environment in the vicinity of the Project area using accepted methodology to evaluate aesthetic/visual landscape quality and light/glare. Aesthetic considerations tend to be subjective. The methodologies used to evaluate aesthetic impacts to visual character are qualitative in nature, and are based on photographic documentation of the site and surrounding area.

The proposed Project site is located in the agricultural (Valley) portion of Tulare County. The Environmental Setting section describes scenic and aesthetic resources in the region, with special emphasis on the proposed Project site and vicinity. The Regulatory setting provides a description of applicable State and local regulatory policies. A description of the potential impacts of the proposed Project is also provided and includes the identification of feasible mitigation to avoid or lessen the impacts.

The analyses of the existing visual setting and potential visual impacts resulting from the proposed Project are based primarily on information provided by the Project applicant.

Thresholds of Significance:

- Impact on a scenic vista
- Impact on a scenic highway
- Impact on visual quality
- Creation of glare or impacts on nighttime views

ENVIRONMENTAL SETTING

Visual Character of the Region

Tulare County is located in a predominately agricultural region of central California. The terrain in the County varies. The western portion of the County includes a portion of the San Joaquin Valley (Valley), and is generally flat, with large agricultural areas with generally compact towns interspersed. In the eastern portion of the County are foothills and the Sierra Nevada mountain range. The project site is located on the Valley floor, which is very fertile and has been intensively cultivated for many decades. Agriculture and related industries such as agricultural packing and shipping operations and small and medium sized manufacturing plants make up the economic base of the Valley region. Many communities are small and rural, surrounded by agricultural uses such as row crops, orchards, and dairies. From several locations on major roads and highways through out the County, electric towers and telephone poles are noticeable. Mature trees, residential, commercial, and industrial development, utility structures, and other vertical forms are highly visible in the region because of the flat terrain. Where such vertical elements are absent, views are expansive. Most structures are small; usually one story in height, through occasionally two story structures can be seen commercial or industrial agricultural complexes. The County provides a wide range of views from both mobile and stationary locations… [1]

Existing Visual Conditions

Land uses in the Project vicinity are predominantly agricultural, with scattered rural residences. Surrounding agricultural lands consisting of citrus orchards, row crops, and other farmed lands. Natural drainage features such as creeks, ponds, and vernal pools were absent from the project site or vicinity.

[1] Tulare County 2030 General Plan: Recirculated Draft EIR (RDEIR), page 3.1-11

Figure 3.1-1
View of southwest corner from Road 144

Figure 3.1-2
View of eastern border from Road 144

Figure 3.1-3
View of northwest corner from Road 144

Figure 3.1-4
View of southeast corner from Avenue 420

REGULATORY SETTING

Federal Agencies & Regulations

None that apply to the proposed Project.

State Agencies & Regulations

Title 24 Outdoor Lighting Standards

Title 24 Outdoor Lighting Standards were adopted by the State of California Energy Commission (Commission) (Title 24, Parts 1 and 6, Building Energy Efficiency Standards (Standards) on November 5, 2003 and went into effect on October 1, 2005. The changes included new requirements for outdoor lighting, which vary according to which "lighting Zone" the equipment is in. The Commission defines rural areas as Lighting Zone 2. Existing outdoor lighting systems are not required to meet these lighting allowances.

Scenic Highway Program

The California Scenic Highway Program was established by the state Legislature in 1963 for the purpose of protecting and enhancing the natural scenic beauty of California highways and adjacent corridors through special conservation treatment. The State Scenic Highway System includes a list of highways that are either eligible for designation as scenic highways or have been officially designated. The state laws governing the scenic highways program are found in The Streets and Highways Code Sections 260-263. In Tulare County, portions of State Routes 190,198, and 180 are eligible for state scenic highway designation.[2]

Local Policy & Regulations

"The scenic landscapes in Tulare County will continue to be one of the County's most visible assets. The Tulare County General Plan emphasizes the enhancement and preservation of these resources as critical to the future of the County. The County will continue to assess the recreational, tourism, quality of life, and economic benefits that scenic landscapes provide and implement programs that preserve and use this resource to the fullest extent."[3]

County Scenic Roadways

"Tulare County's existing General Plan identifies State designated scenic highways and County designated eligible highways. There are three highway segments designated as eligible by the State. These include State Route 198 from Visalia to Three Rivers, State Route 190 from Porterville to Ponderosa, and State Route 180 extending through Federal land in the northern portion of Tulare County. State Route 198 closely follows around Lake Kaweah and the Kaweah River, while State Route 190 follows around Lake Success and the Tule River. Both Scenic Highways travel through agricultural areas of the valley floor to the foothills and the Sierra

[2] Tulare County 2030 General Plan, Goals and Policies Report Part 1, page 7-5
[3] TCGPU Goals and Policies Report, p. A-2

Nevada Range… Additionally, the General Plan Update identifies preserving the rural agricultural character of SR 99 and SR 65 as valuable to the County and communities."[4] (See Figure 3.1-6)

Tulare County General Plan Policies

The Tulare County General Plan has a number of policies that apply to projects within the County of Tulare. General Plan policies that relate to the proposed Project are listed below.

SL-1.1 Natural Landscapes

During review of discretionary approvals, including parcel and subdivision maps, the County shall as appropriate, require new development to not significantly impact or block views of Tulare County's natural landscapes. To this end, the County may require new development to:

1. Be sited to minimize obstruction of views from public lands and rights-of- ways,
2. Be designed to reduce visual prominence by keeping development below ridge lines, using regionally familiar architectural forms, materials, and colors that blend structures into the landscape,
3. Screen parking areas from view,
4. Include landscaping that screens the development,
5. Limit the impact of new roadways and grading on natural settings, and
6. Include signage that is compatible and in character with the location and building design

SL-1.2 Working Landscapes

The County shall require that new non-agricultural structures and infrastructure located in or adjacent to croplands, orchards, vineyards, and open rangelands be sited so as to not obstruct important viewsheds and to be designed to reflect unique relationships with the landscape by:

1. Referencing traditional agricultural building forms and materials,
2. Screening and breaking up parking and paving with landscaping, and
3. Minimizing light pollution and bright signage.

LU-7.14 Contextual and Compatible Design

The County shall ensure that new development respects Tulare County's heritage by requiring that development respond to its context, be compatible with the traditions and character of each community, and develop in an orderly fashion which is compatible with the scale of surrounding structures.

SL-2.1 Designated Scenic Routes and Highways

The County shall protect views of natural and working landscapes along the County's highways and roads by maintaining a designated system of County scenic routes and State scenic highways by:

1. Requiring development within existing eligible State scenic highway corridors to adhere to land use and design standards and guidelines required by the State Scenic Highway Program,
2. Supporting and encouraging citizen initiatives working for formal designation of eligible segments of State Highway 198 and State Highway 190 as State scenic highways,

[4] Tulare County 2030 General Plan, Goals and Policies Report, page 7-2

3. Formalizing a system of County scenic routes throughout the County …, and
4. Requiring development located within County scenic route corridors to adhere to local design guidelines and standards.

LU-5.3 Storage Screening
The County shall require adequate landscaping and screening of industrial storage areas to minimize visual impacts and enhance the quality of the environment.

LU-5.6 Industrial Use Buffer
Unless mitigated, the County shall prohibit new heavy industrial uses to a minimum of 500 feet from schools, hospitals, or populated residential areas (more than 10 dwelling units within a quarter mile diameter area). The buffer area may be used for activities not creating impacts to adjoining sensitive land uses for uses accessory to the heavy industrial use. The establishment of a buffer may not be required when mitigated or may not apply to industrial uses that do not impact adjoining uses identified herein. The buffer area shall be landscaped and maintained.

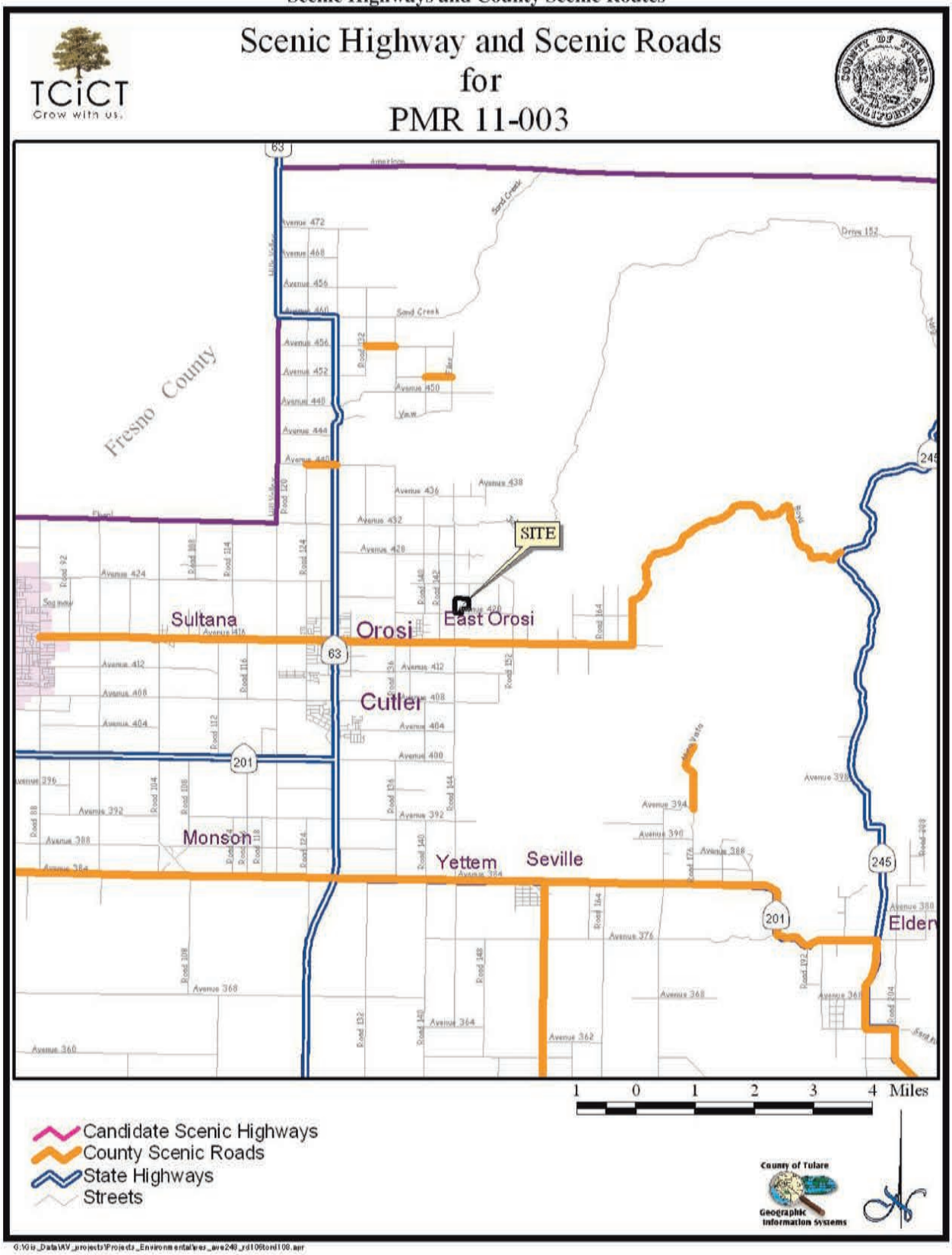
LU-7.6 Screening
The County shall require landscaping to adequately screen new industrial uses to minimize visual impacts.

LU-7.19 Minimize Lighting Impacts
The County shall ensure that lighting in residential areas and along County roadways shall be designed to prevent artificial lighting from reflecting into adjacent natural or open space areas unless required for public safety.

ERM-5.19 Night Sky Protection
Upon demonstrated interest by a community, mountain service center, or hamlet, the County will determine the best means by which to protect the visibility of the night sky.

ERM-1.15 Minimize Lighting Impacts
The County shall ensure that lighting associated with new development or facilities (including street lighting, recreational facilities, and parking) shall be designed to prevent artificial lighting from illuminating adjacent natural areas at a level greater than one foot candle above ambient conditions.

Figure 3.1-7
Scenic Highways and County Scenic Routes



IMPACT EVALUATION

Would the project:

a) Have a substantial adverse effect on a scenic vista?

Project Impact Analysis: ***No Impact***

The Project site is located in the Valley portion of the County. There are no scenic vistas on the Project site or in the vicinity. The proposed Project will have ***No Project-Specific Impacts*** related to this Checklist item.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County.

There are no scenic vistas on or near the Project site, there will be ***No Cumulative Impacts*** related to this Checklist item.

Mitigation Measure(s):

None Required.

Conclusion: ***No Impact***

As noted earlier, there are ***No Project-specific or Cumulative Impacts*** related to this Checklist item.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Project Impact Analysis: ***No Impact***

The existing mining facility is located on this Project site because of the availability of rocks. The former rock outcropping has been mined. The proposed Project includes the mining of additional tonnage of rocks below the surface. The proposed Project will not impact any additional rock outcroppings beyond those already addressed in the environmental analysis for the current use.

There are no designated state scenic highways in the Project vicinity or in Tulare County. The Tulare County 2030 General Plan also lists a series of Scenic County Routes, several of which are located in agricultural areas. The nearest Scenic County Route is El Monte Avenue (located more than 2,500 feet south of the Project site) which will not be visually impacted by the Project.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County.

There will be ***No Cumulative Impacts*** because the proposed Project will not create visual impacts to State Scenic Highways or Scenic County Routes.

Mitigation Measure(s):

None required.

Conclusion: ***No Impact***

As noted earlier, ***No Project-specific or Cumulative Impacts*** related to this Checklist item will occur.

c) Substantially degrade the existing visual character or quality of the site and its surroundings

Project Impact Analysis: ***Less than Significant Impact with Mitigation***

The proposed Project includes mining/crushing equipment and a large pit. To reduce visual impacts, a berm has been constructed and will be maintained to continue to screen the pit and equipment from the road and neighboring properties. See Mitigation Measure 1-1. With mitigation, the Project-specific impacts to the visual character of the site and its surroundings will be ***Less Than Significant.***

Cumulative Impact Analysis: ***Less than Significant Impact with Mitigation***

The geographic area of this cumulative analysis is Tulare County.

Due to the limited amount of physical changes to the Project site, the proposed Project could have a limited visual impact on the existing industrial. With mitigation; however, ***Less Than Significant Cumulative Impacts*** on visual character will occur.

Mitigation Measure(s):

1-1 The Project site has an existing berm and shall continue to have and maintain an 8-foot berm along the entire edge of the project site (not including location of the driveway).

Conclusion: ***Less than Significant Impact with Mitigation***

With mitigation, the proposed Project will have ***Less Than Significant Project-specific and Cumulative Impacts*** related to this Checklist item.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Project Impact Analysis: ***Less than Significant Impact with Mitigation***

Lighting impacts from the Project are associated with the use of artificial light during the evening and nighttime hours. Impacts can include light emanating from building interiors (seen through windows) and light from exterior sources, including building or parking lot lighting, security lighting, street lighting, etc. Glare is typically a daytime occurrence caused by light reflecting off highly polished surfaces such as window glass. The most common impacts from glare are impacts to nearby moving vehicles.

The proposed Project will not create a new source of light or glare from the existing buildings, nor will it operate during night-time hours.

Any new exterior lighting associated with a project that requires a Special Use Permits is conditioned to ensure that new lighting be directed downward and away from public roadways and adjacent properties. This standard condition is noted as Mitigation Measure 3-1.

It is anticipated that the new structures will not result in substantial glare, since the structures will not have highly reflective surfaces. These new structures will be set back from the existing roads and are unlikely to impact motorists or residents beyond the plant site itself. No mitigation measures are required to address glare.

With mitigation, ***Less Than Significant Project-specific Impacts*** related to this Checklist item will occur.

Cumulative Impact Analysis: ***Less than Significant Impact with Mitigation***

The geographic area of this cumulative analysis is Tulare County.

The proposed Project, as mitigated, will result in no significant impacts related to light and glare. As such, ***Less Than Significant Cumulative Impacts*** related to this Checklist item will occur.

Mitigation Measure(s):

1-2 All exterior lighting shall be angled downward and adjusted to deflect and/or shield direct rays away from public roadways and adjacent properties.

Conclusion: ***Less than Significant Impact with Mitigation***

As noted earlier, ***Less Than Significant Project-specific and Cumulative Impacts*** related to this Checklist item will occur with mitigation.

DEFINITIONS

Scenic landscapes - Landscapes that include agricultural lands, woodlands, forestlands, watercourses, mountains, meadows, structures, communities, and other types of scenery that contribute to the visual beauty of Tulare County.

Natural Landscapes - An expanse of naturally-formed scenery that contribute to the visual beauty of Tulare County.

Working Landscapes - These are landscapes shaped by human activities that produce economic commodities such as agricultural lands, ranch lands, and timber lands. They may also include picturesque commercial districts in communities, crops, orchards, agricultural structures, stands of timber, and canals."

Viewshed - An area of land, water, or other environmental features that is visible from a fixed vantage point. Viewsheds tend to be areas of particular scenic or historic value that are deemed worthy of preservation against development or other change. The preservation of viewsheds is typically the goal in the designation of open space areas, green belts, and urban separators.

REFERENCES

Caltrans, California Scenic Highway Program: "Frequently Asked Questions," http://www.dot.ca.gov/hq/LandArch/scenic/faq.htm

Caltrans, "Visual and Aesthetics Review," in Standard Environmental Reference, Chapter 27, http://www.dot.ca.gov/ser/vol1/sec3/community/ ch27via/chap27via.htm

State of California, Governor's Office of Planning and Research, "Thresholds of Significance: Criteria for Defining Environmental Significance," *CEQA Technical Advice Series* http://ceres.ca.gov/ceqa/more/tas/Threshold.html

Tulare County 2030 General Plan, August 2012

Tulare County 2030 General Plan: Recirculated Draft EIR (RDEIR), February 2010

2013 CEQA Guidelines

Agricultural Land and Forestry Resources Chapter 3.2

SUMMARY OF FINDINGS

The proposed Project will result in less than significant impacts to Agricultural Land and Forestry Resources. No mitigation measures will be required. A detailed review of potential impacts is provided in the following analysis.

INTRODUCTION

California Environmental Quality Act (CEQA) Requirements

This section of the ~~Draft~~ Final Environmental Impact Report (~~DEIR~~FEIR) addresses potential impacts to Agricultural Land and Forestry Resources. As required in CEQA Guidelines Section 15126, all phases of the proposed Project will be considered as part of the potential environmental impact.

As noted in Section 15126.2 (a), "[a]n EIR shall identify and focus on the significant environmental effects of the proposed project. In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced. Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, the human use of the land (including commercial and residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services. The EIR shall also analyze any significant environmental effects the project might cause by bringing development and people into the area affected. For example, an EIR on a subdivision astride an active fault line should identify as a significant effect the seismic hazard to future occupants of the subdivision. The subdivision would have the effect of attracting people to the location and exposing them to the hazards found there. Similarly, the EIR should evaluate any potentially significant impacts of locating development in other areas susceptible to hazardous conditions (e.g., floodplains, coastlines, wildfire risk areas) as identified in authoritative hazard maps, risk assessments or in land use plans addressing such hazards areas."[1]

[1] 2013 CEQA Guidelines, Section 15126.2 (a)

The environmental setting provides a description of the Agricultural Lands and Forestry Resources in the County. The regulatory setting provides a description of applicable Federal, State and Local regulatory policies that were developed in part from information contained in the Tulare County 2030 General Plan, Tulare County General Plan Background Report, and/or Tulare County 2030 General Plan EIR, incorporated by reference and summarized below. Additional documents utilized are noted as appropriate. A description of the potential impacts of the proposed Project is provided and includes the identification of feasible mitigation measures (if necessary and feasible) to avoid or lessen the impacts.

Thresholds of Significance

The Department of Conservation identifies the location of prime Agricultural Land resource areas and Williamson Act Contract lands. Thresholds of potential significance will include the following:

- Conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance
- Conflict with Williamson Act Contracts
- Convert Forest Land

ENVIRONMENTAL SETTING

"Tulare County exhibits a diverse ecosystems landscape created through the extensive amount of topographic relief (elevations range from approximately 200 to 14,000 feet above sea level). The County is essentially divided into three eco-regions. The majority of the western portion of the County comprises the Great Valley Section, the majority of the eastern portion of the County is in the Sierra Nevada Section, and a small section between these two sections comprises the Sierra Nevada Foothill Area.[2]

Agricultural Productivity

The Project site is located in the San Joaquin Valley portion of Tulare County. This area is characterized by rich, highly productive farmland. Agriculture is the most important sector in Tulare County's economy, and agriculture and related industries make Tulare County one of the two most productive agricultural counties in the United States, according to Tulare County Farm Bureau statistics.[34] Agricultural lands (crop and commodity production and grazing) also provide the County's most visible source of open space lands. As such, the protection of agricultural lands and continued growth and production of agriculture industries is essential to all County residents."[5]

[2] Tulare County 2030 General Plan RDEIR, page 3.11-5
[3] Tulare County Farm Bureau, "Agricultural Facts," http://www.tulcofb.org/index.php?page=agfacts
[4] Tulare County Agricultural Commissioner, 2011 Tulare County Agricultural Crop and Livestock Report, http://agcomm.co.tulare.ca.us/default/index.cfm/standards-and-quarantine/crop-reports1/
[5] Tulare County 2030 General Plan, page 3-4

The *2011 Tulare County Annual Crop and Livestock Report* listed Tulare County's total gross production value for 2011 as $5,629,396,000. Milk was the leading agricultural commodity in Tulare County in 2011, representing 37% of the total crop and livestock value. The 2011 report listed over 120 different commodities, forty-three of which had a gross value greater than $1 million. The top agricultural commodities in the County in 2011, based on total/gross value were milk, oranges, cattle, grapes, corn – grain silage, and alfalfa (source: 2011 Tulare County Annual Crop and Livestock Report prepared by the office of the Tulare County Agricultural Commissioner/Sealer, published June 2012).

The California Department of Conservation Farmland Mapping and Monitoring Program (FMMP, 2010) indicates that agricultural lands in Tulare County included 859,991 acres of important farmland (designated as FMMP Prime, Farmland of Statewide Importance, Unique Farmland, or Farmland of Local Importance) and 440,042 acres of grazing land, for a total of 1,300,033 acres of agricultural land.

The Tulare County Subvention Report (November 21, 2012) notes that 1,069,299 acres of farmland with Tulare County is under California Land Conservation Act (Williamson Act) contracts; a program designed to prevent premature conversion of farmland to residential or other urban uses. As of January 1, 2012, there were 1,096,299 acres of farmland under Williamson Act or Farmland Security Zone contracts in Tulare County divided by the following categories: 571,904 acres of Williamson Act prime, 513,243 acres nonprime, and 11,152 acres of Farmland Security Zone lands (The acreage totals also include 6,040 acres of Williamson Act prime contract land in nonrenewal and 7,513 acres of Williamson Act of nonprime contract land in nonrenewal.)

Table 3.2-1
2012 Tulare County Lands under Williamson Act or Farmland Security Zone Contracts

Acres	Category
571,904	*Total prime = Prime active + NR Prime
513,243	*Total Nonprime = Nonprime active + NR Prime
11,152	Farmland Security Zone
1,096,299	TOTAL ACRES in Williamson Act and Farmland Security Zone contracts

**Prime total includes 6,039.75 acres in nonrenewal; Nonprime total includes 7,512.56 acres in nonrenewal*
Source: Data compiled from 2012 Tulare County Subvention Report

Important Farmland Trends

Using data collected by the FMMP, farmland acreage has been consistently decreasing for each two-year period since 1998. In the 2010 FMMP analysis, Tulare County lost 17,502 acres of important farmland, and 17,748 acres of total farmland between 2008 and 2010.[6]

"For Tulare County and the surrounding region, the reported major cause of this conversion is the downgrading of important farmlands to other agricultural uses (e.g., such as expanded or

[6] California Department of Conservation, Division of Land Resource Protection, FMMP, "Tulare County 2008-2010 Land Use Conversion" Report, Table A-44

new livestock facilities, replacing irrigated farmland with non-irrigated crops, or land that has been fallow for six years or longer)."[7]

[7] Tulare County 2030 General Plan RDEIR, page 3.10 to 3.13

Figure 3.2-1
Prime Farmland

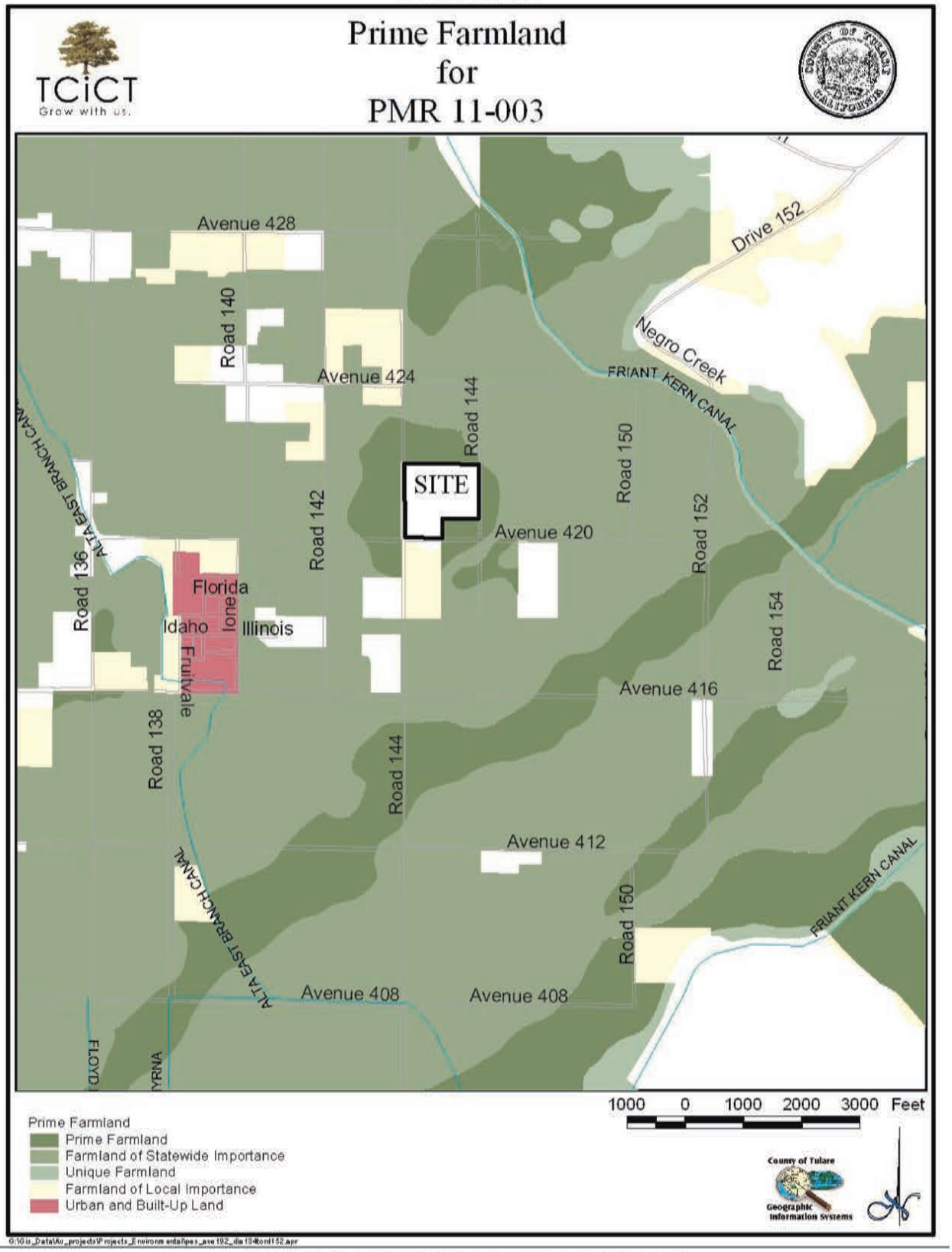
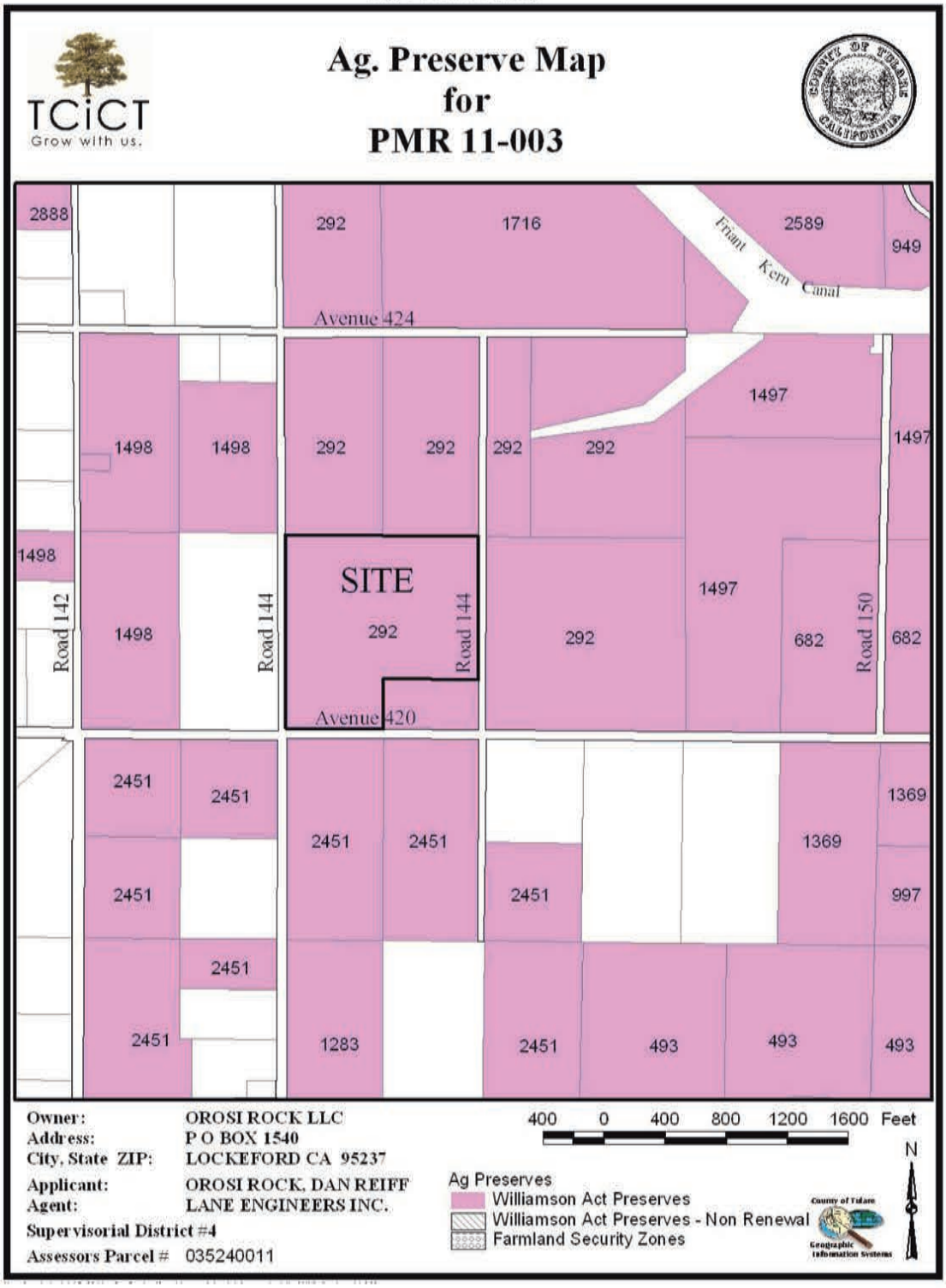


Figure 3.2-2
Ag. Preserve Map



Forest Lands

"Timberlands that are available for harvesting are located in the eastern portion of Tulare County in the Sequoia National Forest. Hardwoods found in the Sequoia National Forest are occasionally harvested for fuel wood, in addition to use for timber production. Since most of the timberlands are located in Sequoia National Forest, the U.S. Forest Service has principal jurisdiction, which encompasses over 3 million acres. The U.S. Forest Service leases these federal lands for timber harvests."[8]

REGULATORY SETTING

Federal Agencies & Regulations

Federal Farmland Protection Act (FFPA)

"The FPPA is intended to minimize the impact Federal programs have on the unnecessary and irreversible conversion of farmland to nonagricultural uses. It assures that to the extent possible federal programs are administered to be compatible with state, local units of government, and private programs and policies to protect farmland… Projects are subject to FPPA requirements if they may irreversibly convert farmland (directly or indirectly) to nonagricultural use and are completed by a Federal agency or with assistance from a Federal agency."[9]

US Forest Service

"The U.S. Department of Agriculture Forest Service is a Federal agency that manages public lands in national forests and grasslands. The Forest Service is also the largest forestry research organization in the world, and provides technical and financial assistance to state and private forestry agencies. Gifford Pinchot, the first Chief of the Forest Service, summed up the purpose of the Forest Service—"to provide the greatest amount of good for the greatest amount of people in the long run.""[10]

State Agencies & Regulations

California Department of Conservation: Farmland Mapping and Monitoring Program

"The California Department of Conservation (DOC), under the Division of Land Resource Protection, has developed the Farmland Mapping and Monitoring Program (FMMP), which monitors the conversion of the state's farmland to and from agricultural use. Data is collected at the county level to produce a series of maps identifying eight land use classifications using a minimum mapping unit of 10 acres. The program also produces a biannual report on the amount of land converted from agricultural to non-agricultural use. The program maintains an inventory

[8] General Plan Background Report, page 4-17
[9] Federal Farmland Protection Act, http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/alphabetical/fppa
[10] US Forest Service Description, http://www.fs.fed.us/aboutus/meetfs.shtml

of state agricultural land and updates the "Important Farmland Series Maps" every two years (Department of Conservation, 2000)."[11]

Williamson Act: California Land Conservation Act of 1965

"The California Land Conservation Act (CLCA) of 1965, Sections 51200 et seq. of the California Government Code, commonly referred to as the "Williamson Act", enables local governments to restrict the use of specific parcels of land to agricultural or related open space use. Landowners enter into contracts with participating cities and counties and agree to restrict their land to agriculture or open space use for a minimum of ten years. In return, landowners receive property tax assessments that are much lower than normal because they are based upon farming and open space uses as opposed to full market (speculative) value. Local governments receive an annual subvention of forgone property tax revenues from the state via the Open Space Subvention Act of 1971."[12]

California Department of Forestry and Fire Protection (CAL FIRE)

"CAL FIRE manages eight Demonstration State Forests that provide for commercial timber production, public recreation, and research and demonstration of good forest management practices. CAL FIRE foresters can be found in urban areas working to increase the number of trees planted in our cities, or preventing the spread of disease by identifying and removing infected trees. A Native American burial ground in the path of a logging operation or fire may be verified and saved due to a CAL FIRE archaeologist's review of the area. And, an improved strain of trees, resistant to disease and pests, may be nurtured and introduced by a CAL FIRE forester."[13]

Local Policy & Regulations

Tulare County General Plan Policies

The Tulare County General Plan has a number of policies that apply to projects within County of Tulare. General Plan policies that relate to the proposed Project are listed below.

AG-1.1 Primary Land Use
The County shall maintain agriculture as the primary land use in the valley region of the County, not only in recognition of the economic importance of agriculture, but also in terms of agriculture's real contribution to the conservation of open space and natural resources.

AG-1.3 Williamson Act
The County should promote the use of the California Land Conservation Act (Williamson Act) on all agricultural lands throughout the County located outside established UDBs. However, this policy carries with it a caveat that support for the Williamson Act as a tax reduction component

[11] General Plan Background Report, Page 4-12
[12] General Plan Background Report, Page 4-13
[13] California Department of Forestry and Fire Protection, http://www.fire.ca.gov/about/about.php

is premised on continued funding of the State subvention program that offsets the loss of property taxes.

AG-1.4 Williamson Act in UDBs and HDBs

The County shall support non-renewal or cancellation processes that meet State law for lands within UDBs and HDBs.

AG-1.5 Substandard Williamson Act Parcels

The County may work to remove parcels that are less than 10 acres in Prime Farmland and less than 40 Acres in Non-Prime Farmland from Williamson Act Contracts (Williamson Act key term for Prime/Non-Prime).

AG-1.6 Conservation Easements

The County shall consider developing an Agricultural Conservation Easement Program (ACEP) to help protect and preserve agricultural lands (including "Important Farmlands"), as defined in this Element. This program may require payment of an in-lieu fee sufficient to purchase a farmland conservation easement, farmland deed restriction, or other farmland conservation mechanism as a condition of approval for conservation of important agricultural land to non-agricultural use. If available, the ACEP shall be used for replacement lands determined to be of statewide significance (Prime or other Important Farmlands), or sensitive and necessary for the preservation of agricultural land, including land that may be a part of a community separator as part of a comprehensive program to establish community separators. The in-lieu fee or other conservation mechanism shall recognize the importance of land value and shall require equivalent mitigation.

AG-1.7 Preservation of Agricultural Lands

The County shall promote the preservation of its agricultural economic base and open space resources through the implementation of resource management programs such as the Williamson Act, Rural Valley Lands Plan, Foothill Growth Management Plan or similar types of strategies and the identification of growth boundaries for all urban areas located in the County.

AG-1.8 Agriculture within Urban Boundaries

The County shall not approve applications for preserves or regular Williamson Act contracts on lands located within a UDB and/or HDB unless it is demonstrated that the restriction of such land will not detrimentally affect the growth of the community involved for the succeeding 10 years, that the property in question has special public values for open space, conservation, other comparable uses, or that the contract is consistent with the publicly desirable future use and control of the land in question. If proposed within a UDB of an incorporated city, the County shall give written notice to the affected city pursuant to Government Code §51233.

AG-1.9 Agricultural Preserves Outside Urban Boundaries

The County shall grant approval of individual applications for agricultural preserves located outside a UDB provided that the property involved meets the requirements of the Williamson Act and the regulations of Tulare County.

AG-1.10 Extension of Infrastructure into Agricultural Areas
The County shall oppose extension of urban services, such as sewer lines, water lines, or other urban infrastructure, into areas designated for agriculture use unless necessary to resolve a public health situation. Where necessary to address a public health issue, services should be located in public rights-of-way in order to prevent interference with agricultural operations and to provide ease of access for operation and maintenance. Service capacity and length of lines should be designed to prevent the conversion of agricultural lands into urban/suburban uses.

AG-1.11 Agricultural Buffers
The County shall examine the feasibility of employing agricultural buffers between agricultural and non-agricultural uses, and along the edges of UDBs and HDBs. Considering factors include the type of operation and chemicals used for spraying, building orientation, planting of trees for screening, location of existing and future rights-of-way (roads, railroads, canals, power lines, etc.), and unique site conditions.

LU-2.6 Industrial Development
Other than provided in Policy LU-2.5: Agricultural Support Facilities, the County shall, and the cities should, through their industrial development policies, approve only those agriculturally-oriented or related industries and uses that can demonstrate, whether by location and/or controlled methods of operation, that they will not adversely affect agricultural production or the County's natural resources. These uses should be located inside UDBs, HDBs, PCAs and regional growth corridors unless necessary for the support of agricultural operations or as provided in Policy LU-2.5: Agricultural Support Facilities.

IMPACT EVALUATION

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the FMMP of the California Resources Agency, to non-agricultural uses?

Project Impact Analysis: ***No Impact***

According to the FMMP map, the Project site is noted as vacant or disturbed. The proposed Project does not include the expansion of site area. As such, ***No Project-specific Impacts*** to this Checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is the entire State of California. This cumulative analysis is based on the Statewide FMMP map provided by the California Department of Conservation.

The Project site is not located on Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The Project site is located adjacent to prime farmland; however, the proposed expansion will not result in the conversion of these adjacent parcels or induce the conversion of these adjacent parcels to a non-agricultural use. ***No Cumulative Impacts*** related to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***No Impact***

As noted earlier, ***No Project-specific or Cumulative Impacts*** to this Checklist item will occur.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

Project Impact Analysis: ***Less than Significant Impact***

The Project site is located in AE-20 agricultural zone. The existing operation was allowed via PMR 05-001. The proposed Project is modification of this use permit. No variances are requested under the proposed Project.

The Project site has a current Williamson Act – Open Space contract. This contract type is specifically for non-prime farmland. The existing operation was allowed under this contract as the mining operation had a limited duration. In addition, the production was limited to cease for 90 days each year. The proposed Project includes the elimination of this limitation in order to allow mining operations throughout the year. As part of the proposed Project, the applicant is requesting a Williamson Act Contract non-renewal. With the non-renewal, the proposed Project will not conflict with a Williamson Act Contract. As such, Project-specific impacts to this Checklist item will be considered ***Less Than Significant***.

Cumulative Impact Analysis: ***Less than Significant Impact***

The geographic area of this cumulative analysis is the entire State of California. This cumulative analysis is based on the Statewide FMMP map provided by the California Department of Conservation.

The Project site includes a Williamson Act Contract. The existing use has not caused the adjacent agricultural uses to be converted into a non-agricultural use. The expansion of the existing use will not induce other agricultural uses to be converted. Cumulative impacts to this Checklist item will be ***Less Than Significant***.

Mitigation Measure(s):

None Required.

Conclusion: ***Less than Significant Impact***

As noted earlier, ***Less Than Significant Project-specific and Cumulative Impacts*** to this Checklist item will occur.

c) Conflict with existing zoning for, or cause rezoning of forest land (as defined in Public Resources Code § 12220(q), timberland (as defined by Public Resources Code § 4526), or timberland zoned Timberland Production (as defined by Government Code § 51104(g))?

Project Impact Analysis: ***No Impact***

The Project site and surrounding areas contain no lands zoned or identified as forest land or timberland. The site is currently zoned as AE-20 (Exclusive Agricultural Zone – 20 Acre Minimum). The proposed Project includes an expansion of an existing use, which will not cause the rezoning of designated forestland. As such, ***No Project-specific Impacts*** to this Checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

The proposed Project is not located within a forestland zone or will not require the change of a forestland zone. As such ***No Cumulative Impacts*** to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***No Impact***

As noted earlier, no Project-specific or cumulative impacts to this Checklist item will occur.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

Project Impact Analysis: ***No Impact***

As noted earlier, the proposed Project is not located within a forest land zone or will not require the change of a forest land zone. As such, ***No Project-specific Impacts*** to this Checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

As noted earlier, the proposed Project is not located within a forest land zone or will not require the change of a forest land zone. As such, ***No Cumulative Impacts*** to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***No Impact***

As noted earlier, ***No Project-specific or Cumulative Impacts*** to this Checklist item will occur.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of agricultural use or conversion of forest land to non-forest use?

Project Impact Analysis: ***No Impact***

The proposed Project is an expansion of an existing Mining Facility within the existing parcel. The nature of the proposed Project would not induce housing or commercial growth in the adjacent area. The Project site is located in a rural area and is not located within forestland. ***No Project-specific Impacts*** related to this Checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

The Project site is located in a rural area and is not located within forestland. The existing operation has not caused the conversion of adjacent agricultural uses. ***No Cumulative Impacts*** related to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***No Impact***

As noted earlier, ***No Project-specific or Cumulative Impacts*** to this Checklist item will occur.

DEFINITIONS/ACRONYMS

Definitions

"The California Department of Conservation, Division of Land Resource Protection, maintains the Farmland Mapping and Monitoring Program (FMMP), which monitors the conversion of the state's farmland to and from agricultural use. The map series identifies eight classifications (discussed below) and uses a minimum mapping unit size of 10 acres. The program also produces a biannual report on the amount of land converted from agricultural to non-agricultural use. The program maintains an inventory of state agricultural land and updates its "Important Farmland Series Maps" every two years. Although the program monitors a wide variety of farmland types (more fully described below), Important Farmland consists of lands classified as Prime Farmland, Farmland of Statewide Importance, and Unique Farmland."[14]

Prime Farmland (P) - "Prime Farmland is farmland with the best combination of physical and chemical features to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date."[15]

Farmland of Statewide Importance (S) - "Farmland of Statewide Importance is similar to Prime Farmland but has minor shortcomings, such as greater slopes or a lesser ability to store soil

[14] General Plan Update RDEIR, page 3.10-4
[15] Ibid.

moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date."[16]

Unique Farmland (U) - "Unique Farmland has lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated, but may include nonirrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date."[17]

Farmland of Local Importance (L) - "Farmland of Local Importance is land important to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee."[18]

Grazing Land (G) - "Grazing Land is land on which the vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen's Association, the University of California Cooperative Extension, and other groups interested in the extent of grazing activities. The minimum mapping unit for Grazing Land is 40 acres."[19]

Urban and Built-Up Land (D) - "Urban and Built-Up Land is land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. This land is used for residential, industrial, commercial, construction, institutional, public administration, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes."[20]

Other Land (X) - "Other Land is land not included in any other mapping category. Common examples include low-density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry, or aquaculture facilities; strip mines and borrow pits; and water bodies smaller than 40 acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land."[21]

Water (W) - "Water is defined as perennial water bodies with an extent of at least 40 acres. While the number of agricultural lands classified as Important Farmlands (i.e., Prime Farmland, Farmland of Statewide Importance, and Unique Farmland) have been decreasing over the past several years, the total acreage for all categories of farmland (including grazing land) remained relatively stable between the years 1998 and 2006 (see Table 3.10-4). The locations of these farmland types are identified in Figure 3.10-1. The farmlands are concentrated in the Rural Valley/Foothill Planning areas. No important farmlands are located in the Mountain Area."[22]

Acronyms

[16] Ibid.
[17] Ibid.
[18] Ibid.
[19] Ibid.
[20] Ibid. pages 3.10-4 and 3.10-5
[21] Ibid. page 3.10-5
[22] Ibid.

(CLCA)	California Land Conservation Act (Williamson Act)
(FFPA)	Federal Farmland Protection Act
(FMMP)	Farmland Mapping and Monitoring Program

REFERENCES

Tulare County 2030 General Plan, August 2012

California Department of Conservation (DOC), Division of Land Resource Protection (DLRP), California Land Conservation, "Williamson Act Status Report (2010)" downloaded from "Williamson Act Reports and Statistics"
http://www.conservation.ca.gov/dlrp/lca/stats_reports/Pages/index.aspx

Department of Conservation, Division of Land Resources Protection, Farmland Mapping and Monitoring Program, http://www.conservation.ca.gov/dlrp/fmmp/Pages/Index.aspx

Tulare County Farm Bureau, "Agricultural Facts," Tulare County Farm Bureau, "Agricultural Facts," http://www.tulcofb.org/index.php?page=agfacts

Tulare County 2030 General Plan Background Report, February 2010

Tulare County 2030 General Plan, Recirculated Draft Environmental Impact Report (RDEIR), February 2010

Tulare County Agricultural Commissioner, "2011 Tulare County Annual Crop and Livestock Report", June 2012, http://agcomm.co.tulare.ca.us/default/index.cfm/standards-and-quarantine/crop-reports1/

Tulare County Agricultural Commissioner, 2011 Tulare County Agricultural Crop and Livestock Report, http://agcomm.co.tulare.ca.us/default/index.cfm/standards-and-quarantine/crop-reports

Tulare County Resource Management Agency, Tulare County Subvention Report for Fiscal Year 2012-2013 (submitted to Department of Conservation, November 2012)

Tulare County Zoning Ordinance and Related State and Local Land Use Regulations (Ordinance 352, as amended) (Revised September 2005), http://www.tularecounty.ca.gov/rma/index.cfm/documents-and-forms/planning-documents/tulare-county-zoning-ordinance/

California Department of Forestry and Fire Protection, http://www.fire.ca.gov/about/about.php

Federal Farmland Protection Act,
http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/alphabetical/fppa

US Forest Service, "About Us – Meet the Forest Service",
http://www.fs.fed.us/aboutus/meetfs.shtml

2013 CEQA Guidelines

Air Quality
Chapter 3.3

SUMMARY OF FINDINGS

The proposed Project will result in less than significant impacts to Air Quality with mitigation. The Air Quality Impact Report prepared by consultant Michael Brandman Associates is included as Appendix E of this document which is used as the basis for determining this Project will result in less than significant impacts. (See Appendix E). A detailed review of potential impacts is provided in the following analysis.

INTRODUCTION

California Environmental Quality Act (CEQA) Requirements

This section of the ~~Draft~~ Final Environmental Impact Report (~~DEIR~~FEIR) addresses potential impacts to Air Quality. As required in Section 15126, all phases of the proposed Project will be considered as part of the potential environmental impact.

As noted in Section 15126.2 (a), "[a]n EIR shall identify and focus on the significant environmental effects of the proposed project. In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced. Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, the human use of the land (including commercial and residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services. The EIR shall also analyze any significant environmental effects the project might cause by bringing development and people into the area affected. For example, an EIR on a subdivision astride an active fault line should identify as a significant effect the seismic hazard to future occupants of the subdivision. The subdivision would have the effect of attracting people to the location and exposing them to the hazards found there. Similarly, the EIR should evaluate any potentially significant impacts of locating development in other areas susceptible to hazardous conditions (e.g., floodplains, coastlines, wildfire risk areas) as identified in authoritative hazard maps, risk assessments or in land use plans addressing such hazards areas."[1]

[1] 2013 CEQA Guidelines, Section 15126.2 (a)

The environmental setting provides a description of the Air Quality in the County. The regulatory setting provides a description of applicable Federal, State and Local regulatory policies that were developed in part from information contained in the Tulare County 2030 General Plan, Tulare County General Plan Background Report, and/or Tulare County 2030 General Plan EIR incorporated by reference and summarized below. Additional documents utilized are noted as appropriate. A description of the potential impacts of the proposed Project is provided and includes the identification of feasible mitigation measures (if necessary and feasible) to avoid or lessen the impacts.

Thresholds of Significance

The thresholds of significance for this section are established by the CEQA Checklist item questions. The following are potential thresholds for significance.

- Result in an exceedence of criteria pollutants as established in the 1990 Clean Air Act amendments.
- Result in an exceedence of San Joaquin Valley Unified Air Pollution Control District criteria pollutant threshold.
- Result in nuisance odors.
- Result in emissions of toxic air contaminants (TAC).
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.

ENVIRONMENTAL SETTING

"Tulare County falls within the southern portion of the San Joaquin Valley Air Basin (SJVAB), which is bordered on the east by the Sierra Nevada range, on the west by the Coast Ranges, and on the south by the Tehachapi Mountains. These features restrict air movement through and out of the SJVAB.

The topography of Tulare County significantly varies in elevation from its eastern to western borders, which results in large climatic variations that ultimately affect air quality. The western portion of the County is within the low-lying areas of the SJVAB. This portion of the County is much dryer in comparison to the eastern portion that is located on the slopes of the Sierra Nevada Mountains. The higher elevation contributes to both increased precipitation and a cooler climate.

Wind direction and velocity in the eastern section varies significantly from the western portion of the County. The western side receives northwesterly winds. The eastern side of the County exhibits more variable wind patterns, but the wind direction is typically up-slope during the day and down-slope in the evening. Generally, the wind direction in the eastern portion of the County is westerly; however terrain differences can create moderate directional changes.

The SJVAB is highly susceptible to pollutant accumulation over time due to the transport of pollutants into the SJVAB from upwind sources. Stationary emission sources in the County include the use of cleaning and surface coatings and industrial processes, road dust, local burning, construction/demolition activities, and fuel combustion. Mobile emissions are primarily generated from the operation of vehicles. According to air quality monitoring data, the SJVAB has been in violation for exceeding ozone and PM10 emission standards for many years."[2]

Local Air Quality

"Cutler and Orosi are within the San Joaquin Valley Air Basin. It comprises the southern half of the Central Valley which is bounded on the west by the Coastal Range, on the east by the Sierra Nevada Mountains, on the south by the Tehachapi Mountains, and on the north by the Sacramento Valley Air Basin.

Topography and climate are unusually favorable for the development of air pollution, especially in the southern portion of the air basin where pollutants build up against the Tehachapi Mountains. Due to the air basin's light wind patterns, long periods of warm and sunny days, and surrounding mountains, air quality problems can occur at any time of the year.

The nearest State of California Air Resources monitoring station is located in Visalia, 15 miles south. Based on air quality data from this station, two measured air pollutants have generally exceeded state air quality standards. Ozone, the major ingredient of photochemical smog, exceeded the state one-hour standard of .10 parts per million (ppm) 46 days during 1983, 46 days in 1984, 38 days in 1985, 95 days in 1986, and 90 days in 1987. The state 24-hour standard for particulate matter, airborne particles of dust and smoke, is 50 ug/m3. In the years 1985, 1986, and 1987, the arithmetic mean for this standard was 68, 59, and 60 ug/m3, respectively."[3]

"The local air quality can be evaluated by reviewing relevant air pollution concentrations near the project area. **Table [3.3-1]** summarizes 2009 through 2011 published monitoring data, which is the most recent 3-year period available. The data shows that during the past few years, the project area has exceeded the ozone, PM_{10}, and $PM_{2.5}$ standards."[4]

Table 3.3-1
Air Quality Monitoring Summary

Air Pollutant	Averaging Time	Item	2009	2010	2011
Ozone	1 Hour	Max 1 Hour (ppm)	0.120	0.122	0.119
		Days > State Standard (0.09 ppm)	23	15	9
	8 Hour	Max 8 Hour (ppm)	0.093	0.104	0.084
		Days > State Standard (0.07 ppm)	68	57	33
		Days > National Standard (0.075 ppm)	48	34	17

[2] Tulare County 2030 General Plan RDEIR, page 3.3-9
[3] Cutler-Orosi Community Plan, page 27
[4] Orosi Rock Air Quality, Greenhouse Gas, and Health Risk Assessment Gravel Mine Expansion, page 17

Air Pollutant	Averaging Time	Item	2009	2010	2011
Carbon monoxide	8 Hour	Max 8 Hour (ppm)	2.07	2.03	2.29
		Days > State/National Standard (9 ppm)	0	0	0
Nitrogen dioxide (NO_2)	Annual	Annual Average (ppm)	0.015	0.013	0.012
	1 Hour	Max 1 Hour (ppm)	0.068	0.077	0.058
		Days > State Standard (0.18 ppm)	0	0	0
Sulfur dioxide	Annual	Annual Average (ppm)	0.001	<0.001	<0.001
	24 Hour	Max 24 Hour (ppm)	0.005	0.004	0.004
		Days > State Standard (0.04 ppm)	0	0	0
Inhalable coarse particles (PM_{10})	Annual	Annual Average ($\mu g/m^3$)	41.8	34.0	34.0
	24 hour	24 Hour ($\mu g/m^3$)	93.2	90.8	78.1
		Est. Days > State Standard (50 $\mu g/m^3$)	121	59	69
		Days > National Standard (150 $\mu g/m^3$)	0	0	0
Fine particulate matter ($PM_{2.5}$)	Annual	Annual Average ($\mu g/m^3$)	16.6	13.6	16.1
	24 Hour	24 Hour ($\mu g/m^3$)	74.5	61.6	73.2
		Est. Days > National Standard (35 $\mu g/m^3$)	24	9	28

Notes and Abbreviations:
> = exceed ppm = parts per million g/m^3 = micrograms per cubic meter max = maximum
Est. = estimated State Standard = California Ambient Air Quality Standard
National Standard = National Ambient Air Quality Standard
Source: California Air Resources Board 2012b – ozone, $PM_{2.5}$, PM_{10}, and nitrogen dioxide are from the Visalia (N Church Street) station; sulfur dioxide and carbon monoxide from Fresno (1st Street) station

Attainment Status

"The Environmental Protection Agency (EPA) and the ARB designate air basins where ambient air quality standards are exceeded as "nonattainment" areas. If standards are met, the area is designated as an "attainment" area. If there is inadequate or inconclusive data to make a definitive attainment designation, they are considered "unclassified." National nonattainment areas are further designated as marginal, moderate, serious, severe, or extreme as a function of deviation from standards. Each standard has a different definition, or "form" of what constitutes attainment, based on specific air quality statistics. For example, the federal 8-hour CO standard is not to be exceeded more than once per year; therefore, an area is in attainment of the CO standard if no more than one 8-hour ambient air monitoring values exceeds the threshold per year. In contrast, the federal annual $PM_{2.5}$ standard is met if the 3-year average of the annual average $PM_{2.5}$ concentration is less than or equal to the standard. The current attainment designations for the basin are shown in **Table 1~~Table 1~~.3-2]**."[5]

[5] Orosi Rock Air Quality, Greenhouse Gas, and Health Risk Assessment Gravel Mine Expansion, page 18

Table 1.3-2
San Joaquin Valley Air Basin Attainment Status

Pollutant	Designation	
	Federal	State
Ozone –1-hour	No Federal Standard	Nonattainment/Severe
Ozone – 8-hour	Nonattainment/Extreme	Nonattainment
PM_{10}	Attainment	Nonattainment
$PM_{2.5}$	Nonattainment	Nonattainment
Carbon monoxide	Project area is in attainment and not in maintenance area	Merced, Madera, and Kings County are unclassified; others in Attainment
Nitrogen dioxide	Attainment/Unclassified	Attainment
Sulfur dioxide	Attainment/Unclassified	Attainment
Lead	No Designation/Classification	Attainment
Hydrogen sulfide	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Visibility-reducing particles	No Federal Standard	Unclassified
Vinyl chloride	No Federal Standard	Attainment

Source of state status: California Air Resources Board 2011a.
Source of national status: U.S. Environmental Protection Agency 2012.

Asbestos

"Asbestos is the name given to a number of naturally occurring fibrous silicate minerals that have been mined for their useful properties such as thermal insulation, chemical and thermal stability, and high tensile strength. The three most common types of asbestos are chrysotile, amosite, and crocidolite. Chrysotile, also known as white asbestos, is the most common type of asbestos found in buildings. Chrysotile makes up approximately 90 to 95 percent of all asbestos contained in buildings in the United States.

Construction sometimes requires the demolition of existing buildings where construction occurs. Buildings often include materials containing asbestos, but no demolition is associated with this project. However, asbestos is also found in a natural state, known as naturally occurring asbestos. Exposure and disturbance of rock and soil that naturally contain asbestos can result in the release of fibers into the air and consequent exposure to the public. Asbestos most commonly occurs in ultramafic rock that has undergone partial or complete alteration to serpentine rock (serpentinite) and often contains chrysotile asbestos. In addition, another form of asbestos, tremolite, can be found associated with ultramafic rock, particularly near faults. Sources of asbestos emissions include unpaved roads or driveways surfaced with ultramafic rock, construction activities in ultramafic rock deposits, or rock quarrying activities where ultramafic rock is present.

Exposure to asbestos is a health threat; exposure to asbestos fibers may result in health issues such as lung cancer, mesothelioma (a rare cancer of the thin membranes lining the lungs, chest, and abdominal cavity), and asbestosis (a non-cancerous lung disease that causes scarring of the lungs).

The ARB has an Air Toxics Control Measure for construction, grading, quarrying, and surface mining operations requiring the implementation of mitigation measures to minimize emissions of asbestos-laden dust. The measure applies to road construction and maintenance, construction and grading operations, and quarries and surface mines when the activity occurs in an area where naturally occurring asbestos is likely to be found. Areas are subject to the regulation if they are identified on maps published by the Department of Conservation as ultramafic rock units or if the Air Pollution Control Officer or owner/operator has knowledge of the presence of ultramafic rock, serpentine, or naturally occurring asbestos on the site. The measure also applies if ultramafic rock, serpentine, or asbestos is discovered during any operation or activity."[6]

Toxic Air Contaminants

"A toxic air contaminant (TAC) is defined as an air pollutant that may cause or contribute to an increase in mortality or serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations. The California Almanac of Emissions and Air Quality presents the relevant concentration and cancer risk data for the ten TACs that pose the most substantial health risk in California based on available data. The ten TACs are acetaldehyde, benzene, 1.3-butadiene, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, perchloroethylene, and diesel particulate matter (diesel PM).

Some studies indicate that diesel PM poses the greatest health risk among the TACs listed above. A 10-year research program (California Air Resources Board 1998) demonstrated that diesel PM from diesel-fueled engines is a human carcinogen and that chronic (long-term) inhalation exposure to diesel PM poses a chronic health risk. In addition to increasing the risk of lung cancer, exposure to diesel exhaust can have other health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. Diesel exhaust is a major source of fine particulate pollution as well, and studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems.

Diesel PM differs from other TACs in that it is not a single substance but a complex mixture of hundreds of substances. Although diesel PM is emitted by diesel-fueled, internal combustion engines, the composition of the emissions varies, depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emission control system is present. Unlike the other TACs, however, no ambient monitoring data are available for diesel PM because no routine measurement method currently exists. The ARB has made preliminary concentration estimates based on a diesel PM exposure method. This method uses the ARB

[6] Orosi Rock Air Quality, Greenhouse Gas, and Health Risk Assessment Gravel Mine Expansion, page 26

emissions inventory's PM10 database, ambient PM10 monitoring data, and the results from several studies to estimate concentrations of diesel PM.

In addition to DPM, the operation of the project would also release amounts of fugitive dust that contain several TACs through the various stages of the aggregate processing. These TACs include aluminum, arsenic, beryllium, cadmium, chromium, cobalt, copper, lead, manganese, nickel, selenium, zinc, and crystalline silica."[7]

REGULATORY SETTING

Federal Agencies & Regulations

Clean Air Act

"The Federal Clean Air Act (CAA), adopted in 1970 and amended twice thereafter (including the 1990 amendments), establishes the framework for modern air pollution control. The act directs the Environmental Protection Agency (EPA) to establish ambient air standards, the National Ambient Air Quality Standards (NAAQS)… for six pollutants: ozone, carbon monoxide, lead, nitrogen dioxide, particulate matter (less than 10 microns in diameter [PM10] and less than 2.5 microns in diameter [PM2.5]), and sulfur dioxide. The standards are divided into primary and secondary standards; the former are set to protect human health with an adequate margin of safety and the latter to protect environmental values, such as plant and animal life.

Areas that do not meet the ambient air quality standards are called "non-attainment areas". The Federal CAA requires each state to submit a State Implementation Plan (SIP) for non-attainment areas. The SIP, which is reviewed and approved by the EPA, must demonstrate how the federal standards will be achieved. Failing to submit a plan or secure approval could lead to the denial of federal funding and permits for such improvements as highway construction and sewage treatment plants. For cases in which the SIP is submitted by the State but fails to demonstrate achievement of the standards, the EPA is directed to prepare a federal implementation plan or EPA can "bump up" the air basin in question to a classification with a later attainment date that allows time for additional reductions needed to demonstrate attainment, as is the case for the San Joaquin Valley.

SIPs are not single documents. They are a compilation of new and previously submitted plans, programs (such as monitoring, modeling, permitting, etc.), district rules, state regulations and federal controls. The California SIP relies on the same core set of control strategies, including emission standards for cars and heavy trucks, fuel regulations and limits on emissions from consumer products. California State law makes the California Air Resources Board (CARB) the lead agency for all purposes related to the SIP. Local Air Districts and other agencies, such as the Bureau of Automotive Repair and the Department of Pesticide Regulation, prepare SIP elements and submit them to CARB for review and approval. The CARB forwards SIP revisions to the EPA for approval and publication in the Federal Register."[8]

[7] Orosi Rock Air Quality, Greenhouse Gas, and Health Risk Assessment Gravel Mine Expansion, pages 26 and 27
[8] Tulare County 2030 General Plan RDEIR, pages 3.3-1 to 3.3-2

Table 3.3-3
State & National Criteria Air Pollutant Standards, Effects, and Sources

Pollutant	Averaging Time	State Standard	National Standard	Pollutant Health and Atmospheric Effects	Major Pollutant Sources
Ozone	1 hour	0.09 ppm	---	(a) Decrease of pulmonary function and localized lung edema in humans and animals; (b) Risk to public health implied by alterations in pulmonary morphology and host defense in animals; (c) Increased mortality risk; (d) Risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (e) Vegetation damage; (f) Property damage.	Formed when reactive organic gases (ROG) and nitrogen oxides (NO_X) react in the presence of sunlight. Major sources include on-road motor vehicles, solvent evaporation, and commercial / industrial mobile equipment.
	8 hours	0.07 ppm[1]	0.075 ppm		
Carbon Monoxide	1 hour	20 ppm	35 ppm	(a) Aggravation of angina pectoris (chest pain) and other aspects of coronary heart disease; (b) Decreased exercise tolerance in persons with peripheral vascular disease and lung disease; (c) Impairment of central nervous system functions; (d) Possible increased risk to fetuses.	Internal combustion engines, primarily gasoline-powered motor vehicles.
	8 hours	9.0 ppm	9 ppm		
Nitrogen Dioxide	1 hour	0.18 ppm	---	(a) Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; (b) Risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; (c) Contribution to atmospheric discoloration - Colors atmosphere reddish-brown.	Motor vehicles, petroleum refining operations, industrial sources, aircraft, ships, and railroads.
	Annual Avg.	0.030	0.053 ppm		
Sulfur Dioxide	1 hour	0.25 ppm	---	Bronchoconstriction accompanied by symptoms which may include wheezing, shortness of breath and chest tightness, during exercise or physical activity in persons with asthma. Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient sulfur dioxide levels. It is not clear whether the two pollutants act synergistically or one pollutant alone is the predominant factor.	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
	3 hours	---	0.5 ppm		
	24 hours	0.04 ppm	0.14 ppm		
	Annual Avg.	---	0.03 ppm		
Respirable Particulate Matter (PM10)	24 hours	50 mg/m^3	150 mg/m^3	(a) Exacerbation of symptoms in sensitive patients with respiratory or cardiovascular disease; (b) Declines in pulmonary function growth in children; (c) Increased risk of premature death from heart or lung diseases in the elderly. Daily fluctuations in PM2.5 levels have been related to hospital admissions for acute respiratory conditions, school absences, and increased medication use in children and adults with asthma.	Dust and fume-producing industrial and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	Annual Avg.	20 mg/m^3	---		
Fine Particulate Matter (PM2.5)	24 hours	---	35 mg/m^3		Fuel combustion in motor vehicles, equipment, and industrial sources; residential and agricultural burning; Also, formed from photochemical reactions of other pollutants, including NO_X, sulfur oxides, and organics.
	Annual Avg.	12 mg/m^3	15 mg/m^3		

Pollutant	Averaging Time	State Standard	National Standard	Pollutant Health and Atmospheric Effects	Major Pollutant Sources
Lead	Rolling 3-Month Average NAAQS/Monthly Avg. State	1.5 mg/m^3	0.15 mg/m^3	Lead accumulates in bones, soft tissue, and blood and can affect the kidneys, liver, and nervous system. It can cause impairment of blood formation and nerve conduction. The more serious effects of lead poisoning include behavior disorders, mental retardation, neurological impairment, learning deficiencies, and low IQs. Lead may also contribute to high blood pressure and heart disease.	Present source: lead smelters, battery manufacturing & recycling facilities. Past source: combustion of leaded gasoline.
	Quarterly	---	1.5 mg/m^3		
Hydrogen Sulfide	1 hour	0.03 ppm	No National Standard	High levels of hydrogen sulfide can cause immediate respiratory arrest. It can irritate the eyes and respiratory tract and cause headache, nausea, vomiting, and cough. Long exposure can cause pulmonary edema.	Geothermal Power Plants, Petroleum Production and refining
Sulfates	24 hour	25 mg/m^3	No National Standard	(a) Decrease in ventilatory function; (b) Aggravation of asthmatic symptoms; (c) Aggravation of cardio-pulmonary disease; (d) Vegetation damage; (e) Degradation of visibility; (f) Property damage.	Produced by the reaction in the air of SO_2.
Visibility Reducing Particles	8 hour	Extinction of 0.23/km; visibility of 10 miles or more	No National Standard	Reduces visibility, reduced airport safety, lower real estate value, and discourages tourism.	See PM2.5.
Sulfates	24 Hour	25 µg/m^3	—	(a) Decrease in ventilatory function; (b) aggravation of asthmatic symptoms; (c) aggravation of cardio-pulmonary disease; (d) vegetation damage; (e) degradation of visibility; (f) property damage.	Sulfates are particulates formed through the photochemical oxidation of sulfur dioxide. In California, the main source of sulfur compounds is combustion of gasoline and diesel fuel.
Lead[e]	30-day	1.5 µg/m^3	—	Lead accumulates in bones, soft tissue, and blood and can affect the kidneys, liver, and nervous system. It can cause impairment of blood formation and nerve conduction, behavior disorders, mental retardation, neurological impairment, learning deficiencies, and low IQs.	Lead ore crushing, lead-ore smelting, and battery manufacturing are currently the largest sources of lead in the atmosphere in the United States. Other sources include dust from soils contaminated with lead-based paint, solid waste disposal, and crustal physical weathering.
	Quarter	—	1.5 µg/m^3		
	Rolling 3-month average	—	0.15 µg/m^3		
Vinyl chloride[e]	24 Hour	0.01 ppm	—	Short-term exposure to high levels of vinyl chloride in the air causes central nervous system effects, such as dizziness, drowsiness, and headaches. Epidemiological studies of occupationally exposed workers have linked vinyl chloride exposure to development of a rare cancer, liver angiosarcoma, and have suggested a relationship between exposure and lung and brain cancers.	Most vinyl chloride is used to make polyvinyl chloride plastic and vinyl products, including pipes, wire and cable coatings, and packaging materials. It can be formed when plastics containing these substances are left to decompose in solid waste landfills. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites.
Hydrogen sulfide	1 Hour	0.03 ppm	—	High levels of hydrogen sulfide can cause immediate respiratory arrest. It can irritate the eyes and respiratory tract and cause headache, nausea, vomiting, and cough. Long exposure can cause pulmonary edema.	Manure, storage tanks, ponds, anaerobic lagoons, and land application sites are the primary sources of hydrogen sulfide. Anthropogenic sources include the combustion of sulfur containing fuels (oil and coal).

Pollutant	Averaging Time	State Standard	National Standard	Pollutant Health and Atmospheric Effects	Major Pollutant Sources
Volatile organic compounds (VOC)		There are no State or federal standards for VOCs because they are not classified as criteria pollutants.		Although health-based standards have not been established for VOCs, health effects can occur from exposures to high concentrations because of interference with oxygen uptake. In general, concentrations of VOCs are suspected to cause eye, nose, and throat irritation; headaches; loss of coordination; nausea; and damage to the liver, the kidneys, and the central nervous system. Many VOCs have been classified as toxic air contaminants.	Indoor sources of VOCs include paints, solvents, aerosol sprays, cleansers, tobacco smoke, etc. Outdoor sources of VOCs are from combustion and fuel evaporation. A reduction in VOC emissions reduces certain chemical reactions that contribute to the formulation of ozone. VOCs are transformed into organic aerosols in the atmosphere, which contribute to higher PM_{10} and lower visibility.
Benzene		There are no ambient air quality standards for benzene.		Short-term (acute) exposure of high doses from inhalation of benzene may cause dizziness, drowsiness, headaches, eye irritation, skin irritation, and respiratory tract irritation, and at higher levels, loss of consciousness can occur. Long-term (chronic) occupational exposure of high doses has caused blood disorders, leukemia, and lymphatic cancer.	Benzene is emitted into the air from fuel evaporation, motor vehicle exhaust, tobacco smoke, and from burning oil and coal. Benzene is used as a solvent for paints, inks, oils, waxes, plastic, and rubber. Benzene occurs naturally in gasoline at 1 to 2 percent by volume. The primary route of human exposure is through inhalation.
Diesel particulate matter (diesel PM)		There are no ambient air quality standards for diesel PM.		Some short-term (acute) effects of diesel PM exposure include eye, nose, throat, and lung irritation, coughs, headaches, light-headedness, and nausea. Studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems. Human studies on the carcinogenicity of diesel PM demonstrate an increased risk of lung cancer, although the increased risk cannot be clearly attributed to diesel exhaust exposure.	Diesel exhaust is a major source of ambient particulate matter pollution in urban environments. Typically, the main source of diesel PM is from combustion of diesel fuel in diesel-powered engines. Such engines are in on-road vehicles such as diesel trucks, off-road construction vehicles, diesel electrical generators, and various pieces of stationary construction equipment.

Notes:
ppm = parts per million (concentration) $\mu g/m^3$ = micrograms per cubic meter Annual = Annual Arithmetic Mean 30-day = 30-day average Quarter = Calendar quarter

[a] Federal standard refers to the primary national ambient air quality standard, or the levels of air quality necessary, with an adequate margin of safety to protect the public health. All standards listed are primary standards except for 3 Hour SO_2, which is a secondary standard. A secondary standard is the level of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[b] To attain the 1-hour NO_2 national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (0.100 ppm).

[c] On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

[d] Visibility-reducing particles: In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

[e] The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

Source of effects, properties, and sources: South Coast Air Quality Management District 2007; California Environmental Protection Agency 2002; California Air Resources Board 2009; U.S. Environmental Protection Agency 2003, 2009a, 2009b, 2010, 2011a, and 2012; National Toxicology Program 2011a and 2011b.
Source of standards: California Air Resources Board 2012a.

State Agencies & Regulations

California Clean Air Act

"The California CAA of 1988 establishes an air quality management process that generally parallels the federal process. The California CAA, however, focuses on attainment of the State ambient air quality standards.., which, for certain pollutants and averaging periods are more stringent than the comparable federal standards. Responsibility for meeting California's standards is addressed by the CARB and local air pollution control districts (such as the eight county AIR DISTRICT, which administers air quality regulations for Tulare County). Compliance strategies are presented in district-level air quality attainment plans.

The California CAA requires that Air Districts prepare an air quality attainment plan if the district violates State air quality standards for criteria pollutants including carbon monoxide, sulfur dioxide, nitrogen dioxide, PM2.5, or ozone. Locally prepared attainment plans are not required for areas that violate the State PM10 standards. The California CAA requires that the State air quality standards be met as expeditiously as practicable but does not set precise attainment deadlines. Instead, the act established increasingly stringent requirements for areas that will require more time to achieve the standards.
The air quality attainment plan requirements established by the California CAA are based on the severity of air pollution caused by locally generated emissions. Upwind air pollution control districts are required to establish and implement emission control programs commensurate with the extent of pollutant transport to downwind districts."[9]

California Air Resources Board

"The CARB is responsible for establishing and reviewing the State ambient air quality standards, compiling the California State Implementation Plan (SIP) and securing approval of that plan from the U.S. EPA. As noted previously, federal clean air laws require areas with unhealthy levels of ozone, inhalable particulate matter, carbon monoxide, nitrogen dioxide, and sulfur dioxide to develop SIPs. SIPs are comprehensive plans that describe how an area will attain NAAQS. The 1990 amendments to the Federal CAA set deadlines for attainment based on the severity of an area's air pollution problem. State law makes CARB the lead agency for all purposes related to the SIP. The California SIP is periodically modified by the CARB to reflect the latest emission inventories, planning documents, and rules and regulations of various air basins. The CARB produces a major part of the SIP for pollution sources that are statewide in scope; however, it relies on the local Air Districts to provide emissions inventory data and additional strategies for sources under their jurisdiction. The SIP consists of the emission standards for vehicular sources and consumer products set by the CARB, and attainment plans adopted by the local air agencies as approved by CARB. The EPA reviews the air quality SIPs to verify conformity with CAA mandates and to ensure that they will achieve air quality goals when implemented. If EPA determines that a SIP is inadequate, it may prepare a Federal Implementation Plan for the nonattainment area, and may impose additional control measures.
In addition to preparation of the SIP, the CARB also regulates mobile emission sources in California, such as construction equipment, trucks, automobiles, and oversees the activities of

[9] Tulare County 2030 General Plan RDEIR, page 3.3-1

air quality management districts and air pollution control districts, which are organized at the county or regional level. The local or regional Air Districts are primarily responsible for regulating stationary emission sources at industrial and commercial facilities within their jurisdiction and for preparing the air quality plans that are required under the Federal CAA and California CAA."[10]

Local Policy & Regulations

San Joaquin Valley Air Pollution Control District

"The San Joaquin Valley Air Pollution Control District (Air District) is made up of eight counties in California's Central Valley: San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare, and the San Joaquin Valley Air Basin portion of Kern.

The Air District is primarily responsible for regulating stationary source emissions within Tulare County and preparing the air quality plans (or portions thereof) for its jurisdiction. Air District's primary approach of implementing local air quality plans occurs through the adoption of specific rules and regulations. Stationary sources within the jurisdiction are regulated by the Air District's permit authority over such sources and through its review and planning activities. For example, the Air District adopted its Regulation VIII-(Fugitive PM^{10} Prohibitions), on October 21, 1993 and amended it on several occasions since then. This Regulation consists of a series of emission reduction rules intended to implement the PM10 Maintenance Plan. The PM10 Maintenance Plan emphasizes reducing fugitive dust as a means of achieving attainment of the federal standards for PM10. Regulation VIII specifically addresses the following activities:

- construction, demolition, excavation, extraction;
- handling and storage of bulk materials;
- landfill disposal sites;
- paved and unpaved roads; and
- vehicle and/or equipment parking, shipping and receiving, transfer, fueling, and service areas.

The Air District has limited authority to regulate transportation sources and indirect sources that attract motor vehicle trips.

- Rule 9510 (Indirect Source Review) requires developers to mitigate project emissions through 1) on-site design features that reduce trips and vehicle miles traveled, 2) controls on other emission sources, and 3) with reductions obtained through the payment of a mitigation fee used to fund off-site air quality mitigation projects. Rule 9510 requires construction related NOx emission reductions of 20 percent and PM10 reductions of 45 percent. Rule 9510 requires a 33 percent reduction in operational NOx emissions and a 50 percent reduction in PM10. The reductions are calculated by comparing the unmitigated baseline emissions and mitigated emissions from the first year of project operation. The Air District recommends using the [CalEEMOD] model to quantify

[10] Tulare County 2030 General Plan RDEIR, pages 3.3-6 to 3.3-7

project emissions and emission reductions. Rule 9510 was adopted to reduce the impacts of development on Air District's attainment plans.

Other Air District Rules and Regulations that affect development in Tulare County include:

- Rule 2201 (New and Modified Stationary Source Review): This rule requires new and modified stationary emission sources to implement best available control technology and to offset emissions exceeding thresholds contained in the rule. The rule implements the federal Title V permitting program for the San Joaquin Valley Air Basin.
- Rule 4101 - Visible Emissions
- Rule 4102 (Nuisance): The purpose of this rule is to protect the health and safety of the public, and applies to any source operation that emits or may emit air contaminants or other materials.
- Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations): The purpose of this rule is to limit VOC emissions from asphalt paving and maintenance operations. If asphalt paving will be used, then the paving operations will be subject to Rule 4641.
- Rule 4202 - Particulate Matter - Emission Rate

The Air District's Governing Board has also recently adopted the 2008 PM2.5 Plan. This plan highlights a variety of measures designed to achieve all the PM2.5 standards - the 1997 federal standards, the 2006 federal standards, and the state standard - as soon as possible.

The district has published a Guide for Assessing and Mitigating Air Quality Impacts (GAMAQI) (Air District, page 1, 2002), an advisory document that provides lead agencies, consultants, and project applicants with uniform procedures for addressing air quality in environmental documents. A major part of the GAMAQI includes a discussion of air quality control measures that are recommended for use in mitigating construction and operation-related impacts. The district has also published Air Quality Guidelines for General Plans (Air District, page 1-1, 2005), which provides guidance to local officials and staff on developing and implementing local policies and programs to be included in local jurisdictions' general plans."[11]

Air District Rules Specific to the proposed Project

"The District rules and regulations that may apply to the project include but are not limited to the following:

Rule 2201 – New and Modified Stationary Source Review
Rule 2520 – Federally Mandated Operating Permits
Rule 4001 – New Source Performance Standards
Rule 4002 – National Emission Standards for Hazardous Air Pollutants
Rule 4101 – Visible Emissions
Rule 4102 – Nuisance
Rule 4702 – Internal Combustion Engines – Phase 2

[11] Tulare County 2030 General Plan RDEIR pages 3.3-7 to 3.3-8

Rule 4801 – Sulfur Compounds
Regulation VIII – Fugitive PM_{10} Prohibitions; Rules 8011-8081

Note that District Rule 9510 – Indirect Source Review – does not apply to the project according to the District letter attached as Appendix A. The project is except because it is a project on a facility whose primary functions are subject to Rule 2201 or Rule 2010."[12]

"Airborne Toxic Control Measure for Diesel Particulate Matter from Portable Engines Rated at 50 horsepower and Greater. Effective February 19, 2011, each fleet shall comply with weighted reduced particulate matter emission fleet averages by compliance dates listed in the regulation.

ARB Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling adopts new section 2485 within Chapter 10, Article 1, Division 3, title 13 in the California Code of Regulations. The measure limits the idling of diesel vehicles to reduce emissions of toxics and criteria pollutants. The driver of any vehicle subject to this section: (1) shall not idle the vehicle's primary diesel engine for greater than five minutes at any location; and (2) shall not idle a diesel-fueled auxiliary power system for more than five minutes to power a heater, air conditioner, or any ancillary equipment on the vehicle if it has a sleeper berth and the truck is located within 100 feet of a restricted area (homes and schools).

ARB Final Regulation Order, Requirements to Reduce Idling Emissions from New and In-Use Trucks, requires that new 2008 and subsequent model-year heavy-duty diesel engines be equipped with an engine shutdown system that automatically shuts down the engine after 300 seconds of continuous idling operation once the vehicle is stopped, the transmission is set to "neutral" or "park," and the parking brake is engaged. If the parking brake is not engaged, then the engine shutdown system shall shut down the engine after 900 seconds of continuous idling operation once the vehicle is stopped and the transmission is set to "neutral" or "park." Any project trucks manufactured after 2008 would be consistent with this rule, which would ultimately reduce air emissions.

ARB Regulation for In-Use Off-Road Diesel Vehicles. On July 26, 2007, the California Air Resources Board (ARB) adopted a regulation to reduce diesel PM and NO_x emissions from in-use (existing) off-road heavy-duty diesel vehicles in California. Such vehicles are used in construction, mining, and industrial operations. The regulation limits idling to no more than 5 consecutive minutes, requires reporting and labeling, and requires disclosure of the regulation upon vehicle sale. The ARB enforces that part of the rule with fines up to $10,000 per day for each vehicle in violation. Performance requirements of the rule are based on a fleet's average NO_x emissions, which can be met by replacing older vehicles with newer, cleaner vehicles or by applying exhaust retrofits. The regulation was amended in 2010 to delay the original timeline of the performance requirements making the first compliance deadline January 1, 2014 for large fleets (over 5,000 horsepower), 2017 for medium fleets (2,501 to 5,000 horsepower), and 2019 for small fleets (2,500 horsepower or less).

[12] Orosi Rock Air Quality, Greenhouse Gas, and Health Risk Assessment Gravel Mine Expansion, page 9

Statewide Truck and Bus Rule. On December 12, 2008, the ARB approved this regulation to reduce emissions from existing on-road diesel trucks and buses operating in California. This regulation applies to all on-road heavy-duty diesel-fueled vehicles with a gross vehicle weight rating greater than 14,000 pounds, agricultural yard trucks with off-road certified engines, and certain diesel fueled shuttle vehicles of any gross vehicle weight rating. Out-of-state trucks and buses that operate in California are also subject. Under the regulation, older, heavier trucks, i.e. those with pre-2000 year engines and a gross vehicle weight rating greater than 26,000 pounds, are required to have installed a particulate matter filter and must be replaced with a 2010 engine between 2015 and 2020, depending on the model year. By 2015, all heavier pre-1994 trucks must be upgraded to 2010 engines and newer trucks are thereafter required to be replaced over the next 8 years. Older, more polluting trucks are required to be replaced first, while trucks that already have relatively clean 2007-2009 engines are not required to be replaced until 2023. Lighter trucks (14,001 to 26,000 pounds) must adhere to a similar schedule, and will all be replaced by 2020. Furthermore, nearly all trucks that are not required under the Truck and Bus Regulation to be replaced by 2015 are required to be upgraded with a particulate matter filter by that date.

ARB Airborne Toxic Control Measure. In July 2001, the ARB approved an Air Toxic Control Measure for construction, grading, quarrying and surface mining operations to minimize emissions of naturally occurring asbestos. The regulation requires application of best management practices to control fugitive dust in areas known to have naturally occurring asbestos and requires notification to the local air district prior to commencement of ground-disturbing activities. The measure establishes specific testing, notification and engineering controls prior to grading, quarrying, or surface mining in construction zones where naturally occurring asbestos is located on projects of any size. There are additional notification and engineering controls at work sites larger than one acre in size. These projects require the submittal of a "Dust Mitigation Plan" and approval by the air district prior to the start of a project."[13]

Ozone Plans

"As an extreme nonattainment area for the 1-hour ozone national standard, the District adopted the Extreme Ozone Attainment Demonstration Plan in 2004. On March 8, 2010, the EPA approved the Plan for 1-hour ozone. Although effective June 15, 2005, the EPA revoked the 1-hour standard, the control requirements remain in effect to ensure progress toward meeting the new, more stringent 8-hour ozone standard that has replaced the 1-hour standard. The Plan contains commitments to reduce a precursor of ozone, NOx, including NOx reductions from indirect sources.

The 2007 Ozone Plan contains measures to reduce ozone and particulate matter precursor emissions to bring the Basin into attainment with the federal 8-hour ozone standard. The 2007 Ozone Plan calls for a 75-percent reduction of NOx and a 25-percent reduction of ROG. **Error! Reference source not found.** displays the anticipated NOx reductions attributed in the 2007 Ozone Plan (Source: 2007 Ozone Plan). The plan, with innovative measures and a "dual path" strategy, assures expeditious attainment of the federal 8-hour ozone standard for all Basin

[13] Ibid. Pages 9 to 11

residents. The District Governing Board adopted the 2007 Ozone Plan on April 30, 2007. The ARB approved the plan on June 14, 2007."[14]

Particulate Matter Plans

"The District adopted the 2007 PM10 Maintenance Plan in September 2007 to assure the San Joaquin Valley's continued attainment of the EPA's PM10 standard. The EPA designated the valley as an attainment/maintenance area for PM10.

The 2008 PM2.5 Plan builds upon the comprehensive strategy adopted in the 2007 Ozone Plan to bring the Basin into attainment of the 1997 national standards for PM2.5. The EPA has identified NOx and sulfur dioxide as precursors that must be addressed in air quality plans for the 1997 PM2.5 standards. The 2008 PM2.5 Plan is a continuation of the District's strategy to improve the air quality in the Basin.
The San Joaquin Valley Air District is currently preparing the 2012 PM2.5 Plan to bring the San Joaquin Valley into attainment of the EPA's most recent 24-hour PM2.5 standard of 35 $\mu g/m^3$. The District is currently developing this plan through a public review process."[15]

Tulare County General Plan Policies

The Tulare County General Plan has a number of policies that apply to projects within County of Tulare. General Plan policies that relate to the proposed Project are listed below.

AQ-1.1 Cooperation with Other Agencies
The County shall cooperate with other local, regional, Federal, and State agencies in developing and implementing air quality plans to achieve State and federal Ambient Air Quality Standards. The County shall partner with the SJVAPCD, Tulare County Association of Governments (TCAG), and the California Air Resource Board to achieve better air quality conditions locally and regionally.

AQ-1.2 Cooperation with Local Jurisdictions
The County shall participate with cities, surrounding counties, and regional agencies to address cross-jurisdictional transportation and air quality issues.

AQ-1.3 Cumulative Air Quality Impacts
The County shall require development to be located, designed, and constructed in a manner that would minimize cumulative air quality impacts. Applicants shall be required to propose alternatives as part of the State CEQA process that reduce air emissions and enhance, rather than harm, the environment.

AQ-1.4 Air Quality Land Use Compatibility
The County shall evaluate the compatibility of industrial or other developments which are likely to cause undesirable air pollution with regard to proximity to sensitive land uses, and wind direction and circulation in an effort to alleviate effects upon sensitive receptors.

[14] Ibid. Page 32
[15] Ibid. Page 33

AQ-1.5 California Environmental Quality Act (CEQA) Compliance
The County shall ensure that air quality impacts identified during the CEQA review process are consistently and reasonable mitigated when feasible.

AQ-1.7 Support Statewide Climate Change Solutions
The County shall monitor and support the efforts of Cal/EPA, CARB, and the SJVAPCD, under AB 32 (Health and Safety Code §38501 et seq.), to develop a recommended list of emission reduction strategies. As appropriate, the County will evaluate each new project under the updated General Plan to determine its consistency with the emission reduction strategies.

AQ-1.10 Alternative Fuel Vehicle Infrastructure
County shall support the development of necessary facilities and infrastructure needed to encourage the use of low or zero-emission vehicles (e.g. electric vehicle charging facilities and conveniently located alternative fueling stations, including CNG filling stations.

AQ-2.1 Transportation Demand Management Programs
The County shall coordinate and provide support for County Transportation Demand Management programs with other public and private agencies, including programs developed by the TCAG and the SJVAPCD.

AQ-2.2 Indirect Source Review
The County shall require major development projects, as defined by the SJVAPCD, to reasonably mitigate air quality impacts associated with the project. The County shall notify developers of SJVAPCD Rule 9510 – Indirect Source Review requirements and work with SJVAPCD to determine mitigations, as feasible, that may include, but are not limited to the following:

1. Providing bicycle access and parking facilities,
2. Increasing density,
3. Encouraging mixed use developments,
4. Providing walkable and pedestrian-oriented neighborhoods,
5. Providing increased access to public transportation,
6. Providing preferential parking for high-occupancy vehicles, car pools, or alternative fuels vehicles, and
7. Establishing telecommuting programs or satellite work centers.

AQ-2.3 Transportation and Air Quality
When developing the regional transportation system, the County shall work with TCAG to comprehensively study methods of transportation which may contribute to a reduction in air pollution in Tulare County. Some possible alternatives that should be studied are:

1. Commuter trains (Light Rail, Amtrak, or High Speed Rail) connecting with Sacramento, Los Angeles, and San Francisco, with attractive services scheduled up and down the Valley,
2. Public transportation such as buses and light rail, to serve between communities of the Valley, publicly subsidized if feasible,
3. Intermodal public transit such as buses provided with bicycle racks, bicycle parking at bus stations, bus service to train stations and airports, and park and ride facilities, and

4. Community transportation systems supportive of alternative transportation modes, such as cycling or walking trails, with particular attention to high-density areas.

AQ-2.4 Transportation Management Associations
The County shall encourage commercial, retail, and residential developments to participate in or create Transportation Management Associations (TMAs) that may assist in the reduction of pollutants through strategies that support carpooling or other alternative transportation modes.

AQ-2.5 Ridesharing
The County shall continue to encourage ridesharing programs such as employer-based rideshare programs.

AQ-3.1 Location of Support Services
The County shall encourage the location of ancillary employee services (including, but not limited to, child care, restaurants, banking facilities, convenience markets) near major employment centers for the purpose of reducing midday vehicle trips.

AQ-3.2 Infill Near Employment
The County shall identify opportunities for infill development projects near employment areas within all unincorporated communities and hamlets to reduce vehicle trips.

AQ-3.3 Street Design
The County shall promote street design that provides an environment which encourages transit use, biking, and pedestrian movements.

AQ-3.4 Landscape
The County shall encourage the use of ecologically based landscape design principles that can improve local air quality by absorbing CO_2, producing oxygen, providing shade that reduces energy required for cooling, and filtering particulates. These principles include, but are not limited to, the incorporation of parks, landscaped medians, and landscaping within development.

AQ-3.5 Alternative Energy Design
The County shall encourage all new development, including rehabilitation, renovation, and redevelopment, to incorporate energy conservation and green building practices to maximum extent feasible. Such practices include, but are not limited to: building orientation and shading, landscaping, and the use of active and passive solar heating and water systems.

AQ-3.6 Mixed Land Uses
The County shall encourage the clustering of land uses that generate high trip volumes, especially when such uses can be mixed with support services and where they can be served by public transportation.

AQ-4.1 Air Pollution Control Technology
The County shall utilize the BACM and RACM as adopted by the County to support SJVAPCD air quality attainment plans to achieve and maintain healthful air quality and high visibility

standards. These measures shall be applied to new development approvals and permit modifications as appropriate.

AQ-4.2 Dust Suppression Measures
The County shall require developers to implement dust suppression measures during excavation, grading, and site preparation activities consistent with SJVAPCD Regulation VIII – Fugitive Dust Prohibitions. Techniques may include, but are not limited to, the following:

1. Site watering or application of dust suppressants,
2. Phasing or extension of grading operations,
3. Covering of stockpiles,
4. Suspension of grading activities during high wind periods (typically winds greater than 25 miles per hour), and
5. Re-vegetation of graded areas.

AQ-4.3 Paving or Treatment of Roadways for Reduced Air Emissions
The County shall require that all new roads be paved or treated to reduce dust generation where feasible as required by SJVAPCD Regulation VIII, Rule 8061- Paved and Unpaved Roads. For new projects with unpaved roads, funding for roadway maintenance shall be adequately addressed and secured.

AQ-4.4 Wood Burning Devices
The County shall require the use of natural gas where service is available or the installation of low-emission, EPA-certified fireplace inserts in all open hearth fireplaces in new homes as required under the SJVAPCD Rule 4901– Woodburning Fireplaces and Woodburning Heaters. The County shall promote the use of natural gas over wood products in space heating devices and fireplaces in all existing and new homes.

AQ-4.5 Public Awareness
The County shall promote public awareness of the seriousness and extent of the existing air quality problems.

AQ-4.6 Asbestos Airborne Toxic Control and Dust Protection
Asbestos is of concern to Tulare County because it occurs naturally in surface deposits of several types of ultramafic materials (materials that contain magnesium and iron and a very small amount of silica). Asbestos emissions can result from the sale or use of asbestos-containing materials, road surfacing with such materials, grading activities, and surface mining.

<u>Tulare County Climate Action Plan</u>

AQ-1.8 Greenhouse Gas Emissions Reduction Plan/Climate Action Plan
The County will develop a Greenhouse Gas Emissions Reduction Plan (Plan) that identifies greenhouse gas emissions within the County as well as ways to reduce those emissions. The Plan will incorporate the requirements adopted by the California Air Resources Board specific to this issue. In addition, the County will work with the Tulare County Association of

Governments and other applicable agencies to include the following key items in the regional planning efforts.

1. Inventory all known, or reasonably discoverable, sources of greenhouse gases in the County,
2. Inventory the greenhouse gas emissions in the most current year available, and those projected for year 2020, and
3. Set a target for the reduction of emissions attributable to the County's discretionary land use decisions and its own internal government operations.

AQ-1.9 Support Off-Site Measures to Reduce Greenhouse Gas Emissions
The County will support and encourage the use of off-site measures or the purchase of carbon offsets to reduce greenhouse gas emissions.

AQ-1.10 Alternative Fuel Vehicle Infrastructure
County shall support the development of necessary facilities and infrastructure needed to encourage the use of low or zero-emission vehicles (e.g. electric vehicle charging facilities and conveniently located alternative fueling stations, including CNG filling stations).

IMPACT EVALUATION

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

Project Impact Analysis: ***Less than Significant Impact***

"Air quality plans are plans for reaching attainment of air quality standards. The assumptions, inputs, and control measures are analyzed to determine if the Air Basin can reach attainment for the ambient air quality standards. In order to show attainment of the standards, the District analyzes the growth projections in the valley, contributing factors in air pollutant emissions and formations, and existing and future emissions controls. The District then formulates a control strategy to reach attainment."[16]

"A measure of determining if the project is consistent with the air quality plans is if the project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the air quality plans. Because of the region's nonattainment status for ozone, PM2.5, and PM10, if project-generated emissions of either of the ozone precursor pollutants (ROG and NOx), PM10, or PM2.5 would exceed the

[16] Ibid. Page 68

District's significance thresholds, then the project would be considered to conflict with the attainment plans.

As discussed in [Response to 3.3 c)], project emissions would not exceed the District's significance thresholds. Therefore, the project would not conflict with or obstruct implementation of the regional air quality plan."[17]

"The project would comply with all applicable rules and regulations contained in the air quality plans for the area. Therefore, the project would not conflict with or obstruct the applicable air quality attainment plan after the incorporation of mitigation measures."[18]

Cumulative Impact Analysis: ***Less than Significant Impact***

The geographic area of this cumulative analysis is San Joaquin Air Basin. This cumulative analysis is based on the information provided in the Air Quality Report.

As emissions will not conflict with or obstruct the applicable air quality attainment plan after the incorporation of mitigation measures, comply with all applicable rules and regulations contained in the air quality plans for the area, and will not exceed Air District thresholds, ***Less Than Significant Cumulative Impacts*** related this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***Less than Significant Impact***

As noted earlier, ***Less Than Significant Project-specific and Cumulative Impacts*** related to this Checklist item will occur.

b) Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Project Impact Analysis: ***Less than Significant Impact***

"The project is not expected to generate hydrogen sulfide or vinyl chloride; therefore, there would be no related impact.

Carbon Monoxide **-** The District's 2012 Draft Guide includes an operational threshold for CO of 100 tons per year. As shown in the emissions estimates presented in Appendix E of this report, the net increase in CO emissions compared with the existing conditions is 2.8 tons per year, far under the District's draft threshold of 100 tons per year. Emissions are ***Less Than Significant***.

[17] Ibid. Page 68
[18] Ibid. Page 68

Lead - Lead along with several other metals would be reduced principally from fugitive dust generated by the various aggregated production activities. The potential health impacts from lead are included in the health risk assessment provided in Impact AIR-4 below.

Visibility-Reducing Particles - Visibility-reducing particles are suspended particulates that reduce visibility. During operational activities, fugitive dust (PM_{10} and $PM_{2.5}$) is generated (see Impact AIR-3 for emission quantification). The majority of this fugitive dust will remain localized and will be deposited near the project site. Fugitive dust should not substantially impact local visibility. In addition, compliance with Regulation VIII will reduce fugitive dust impacts. Emissions are ***Less Than Significant***.

Sulfur Dioxide - The project will emit a small amount of sulfur dioxide during operation. The District's 2012 Draft Guide includes an operational threshold for SO_x of 27 tons per year. As outlined in Appendix E, the net increase of SO_x emissions would be 0.26 tons per year, which is far less than the District's draft threshold of 27 tons per year. The Air Basin is in attainment for sulfur dioxide. Therefore, project emissions of sulfur dioxide are ***Less Than Significant.***

Ozone, PM_{10}, $PM_{2.5}$, Nitrogen Dioxide, NO_x. As discussed in Impact AIR-3, the net increase in ozone precursor emissions (ROG, NO_x), PM_{10}, and $PM_{2.5}$ are less than the District's significance thresholds. There would be localized onsite emissions of those pollutants; however, it is not anticipated that emissions would cause or contribute to an exceedance of the ambient air quality standards. Emissions are ***Less Than Significant***."[19]

Cumulative Impact Analysis: ***Less than Significant Impact***

The geographic area of this cumulative analysis is San Joaquin Air Basin. This cumulative analysis is based on the information provided in the Air Quality Report noted earlier.

Since the Project will not exceed any air quality standard, *Less Than Significant* ***Cumulative Impacts*** related this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***Less than Significant Impact***

As noted earlier, ***Less Than Significant Project-specific and Cumulative Impacts*** related to this Checklist item will occur.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?

[19] Ibid. Page 69

Project Impact Analysis: ***Less than Significant Impact with Mitigation***

"Ozone is a secondary pollutant that can be formed miles away from the source of emissions through reactions of ROG and NOx emissions in the presence of sunlight. Therefore, ROG and NOx are termed ozone precursors. The Basin often exceeds the ozone standards. Therefore, if the project emits a substantial quantity of ozone precursors, the project may contribute to an exceedance of the ozone standard. The District established significance thresholds for ozone precursors, ROG and NOx, and has published them in its Guide. For typical projects, operation-related emissions that exceed the threshold of 10 tons per year for ROG or NOx would be considered significant.

The May 2012 Draft Guide contains a threshold for PM10 and PM2.5 of 15 tons per year each, which are to be used in this impact analysis.

The 2012 Draft Guide separates operational permitted equipment and activities and non-permitted equipment and activities and recommends that the emissions be separated and compared with separate thresholds. For example, if a generic project's permitted ROG emissions were 9 tons per year and the non-permitted ROG emissions were 9 tons per year, the project's emissions would be less than significant, since each permitted and non-permitted emission source is judged separately. However, since this approach is in the District's draft Guide, which has not been finalized or adopted, the emissions are not separated to present a worst-case scenario.

For purposes of this analysis, the net new emissions are compared with the following annual significance thresholds:

- 10 tons per year ROG (ozone precursor)
- 10 tons per year NOx (ozone precursor)
- 15 tons per year PM10
- 15 tons per year PM2.5"[20]

Operational Emissions

"Operational emissions occur over the lifetime of the project... The existing emissions for the processing of 200,000 tons per year are shown in Table [3.3-4]."

Table 3.3-4
Operational Air Pollutant Emissions (Existing, 200,000 tons/year processing)

Type	Source	Emissions (tons/year)			
		ROG	NOx	PM10	PM2.5
Permitted	Equipment (exhaust)	0.04	0.90	0.04	0.04
	Dust from material processing	—	—	0.47	0.09

[20] Ibid Pages 70 and 71

Type	Source	Emissions (tons/year)			
		ROG	NOx	PM10	PM2.5
	Subtotal Permitted	0.04	0.90	0.51	0.12
Non Permitted	Drilling and blasting	0.00	0.34	0.04	0.01
	Off road equipment (exhaust)	1.96	13.50	0.78	0.78
	Off road equipment (onsite dust)	—	—	0.79	0.06
	Dust (truck loading, wind erosion, storage piles)	—	—	0.17	0.08
	Haul trucks (offsite exhaust, paved road dust)	0.21	2.68	0.18	0.10
	Haul trucks (onsite exhaust)	0.02	0.21	0.00	0.00
	Haul trucks (unpaved road dust)	—	—	1.52	0.15
	Subtotal Non Permitted	2.19	16.72	3.50	1.18
Total Existing		2.23	17.62	4.01	1.30

Notes:
ROG = reactive organic gases NOx = nitrogen oxides PM10 and PM2.5 = particulate matter
Source of all emissions except those specified otherwise below: 27.8 percent of project emissions.
Source of blasting: 8 blasts/year - spreadsheets prepared by Michael Brandman Associates (Appendix E).
Source of off road equipment (exhaust): CalEEMod output for existing, construction onsite and converted from pounds per day to tons per year assuming 312 days per year (Appendix E).

"The emissions with processing 800,000 tons per year are shown in Table [3.3-5]. The existing emissions are subtracted from the total emissions to derive the project increment emissions. As shown in Table [3.3-5], the net emissions are less than the significance thresholds and are therefore less than significant. Compared with the existing conditions, cleaner/newer offroad equipment was assumed for the project, which accounts for a 7.6-ton-per-year reduction in NOx emissions. However, specific requirements regarding off-road mobile equipment are not in the Authority to Construct or the project description. Therefore, consistent with CEQA requirements, mitigation measure [3-1] is recommended to ensure that the equipment is as clean as the assumptions indicate. In addition, although the project applicant indicated that the project would use electric permitted equipment, the permit allows for diesel or electric. Therefore, the related analysis assumed diesel equipment, since the diesel-related emissions would be greater than for electric."[21]

Table 3.3-5
Operational Air Pollutant Emissions (800,000 tons per year processing)

Type	**Source**	**Emissions (tons/year)**			
		ROG	**NOx**	**PM10**	**PM2.5**
Permitted	Equipment (exhaust)	0.15	3.23	0.13	0.13
	Dust from material processing	—	—	1.71	0.32
	Subtotal Permitted	0.15	3.23	1.83	0.44

[1] Ibid. Page 72

Type	Source	Emissions (tons/year)			
		ROG	**NOx**	**PM10**	**PM2.5**
Non Permitted	Drilling and blasting	0.00	1.02	0.13	0.02
	Off road equipment (exhaust)	1.17	5.90	0.33	0.33
	Off road equipment (onsite dust)	—	—	2.86	0.21
	Dust (truck loading, wind erosion, storage piles)	—	—	0.63	0.29
	Haul trucks (offsite exhaust, paved road dust)	0.77	9.63	0.66	0.35
	Haul trucks (onsite exhaust)`	0.08	0.76	0.01	0.01
	Haul trucks (unpaved road dust)	—	—	5.46	0.55
	Subtotal Non Permitted	2.03	17.31	10.07	1.75
Subtotal		2.17	20.54	11.91	2.20
Existing		2.23	17.62	4.01	1.30
Net emissions		-0.06	2.92	7.90	0.89
Significance threshold		10	10	15	15
Exceed threshold - significant impact?		No	No	No	No

Notes:
ROG = reactive organic gases NOx = nitrogen oxides PM10 and PM2.5 = particulate matter
Source of existing emissions: Table 16.
Source of blasting: 24 blasts/year - spreadsheets prepared by Michael Brandman Associates (Appendix E).
Source of permitted equipment (exhaust and dust): San Joaquin Valley Air Pollution Control District (Appendix E).
Source of off road equipment (exhaust and dust): CalEEMod for project, construction onsite emissions converted to tons per year by multiplying by 0.0005 and 312 days per year (Appendix E).
Source of haul trucks (dust): spreadsheets prepared by Michael Brandman Associates (Appendix E).
Source of haul trucks (offsite exhaust, road dust): CalEEMod for project, operational emissions annual output (Appendix E).
Source of haul trucks (onsite exhaust): spreadsheets prepared by Michael Brandman Associates using EMFAC2011 emission factors (Appendix E).
Source of thresholds: San Joaquin Valley Air Pollution Control District 2002 and 2012.

As no thresholds will be exceeded, ***Less Than Significant Impacts*** related to this Checklist item will occur with mitigation.

Cumulative Impact Analysis: ***Less than Significant Impact***

The geographic area of this cumulative analysis is San Joaquin Air Basin. This cumulative analysis is based on the information provided in the Air Quality Report.

"The Basin is in nonattainment for ozone, NO2, PM10, and PM2.5, which means that the background levels of those pollutants are at times higher than the ambient air quality standards. The air quality standards were set to protect public health, including the health of sensitive individuals (such as the elderly, children, and the sick). Therefore, when the concentration of those pollutants exceeds the standard, it is likely that some sensitive individuals in the population would experience health effects. However, the health effects are a factor of the dose-response curve. Concentration of the pollutant in the air (dose), the

length of time exposed, and the response of the individual are factors involved in the severity and nature of health impacts. If a significant health impact results from project emissions, it does not mean that 100 percent of the population would experience health effects.

ROG and NOx have significance thresholds because they are precursors to ozone. The significance thresholds for ROG and NOx are not designed to be indicators of health effects from ROG and NOx individually. However, one could conclude that cumulative health impacts of ozone and/or particulate matter would result if the thresholds are exceeded. It would not be a project-specific impact because project emissions of ROG and NOx are regional in nature and are dispersed over miles; project emissions alone would not result in a significance ozone health effect. The combination of unmitigated project emissions with pollutants from other sources within the Basin could cumulatively contribute to a significant impact.

The emissions analysis shown above indicates that the net increase in emissions would not exceed the District's regional significance thresholds. The project would not result in cumulative health impacts."[22]

Mitigation Measure(s):

3-1 During operation of the Project, off-road equipment used on the Project site (e.g., loaders, excavators, backhoes, dozers, etc.) shall be U.S. Environmental Protection Agency Tier 3-certified or higher, with the exception of a maximum total of 1,000 hours per year allowed for Tier 2 equipment.

Conclusion: ***Less than Significant Impact with Mitigation***

Less than significant Project- related and Cumulative Impacts to this Checklist item will occur with mitigation.

d) Expose sensitive receptors to substantial pollutant concentrations?

Project Impact Analysis: ***Less than Significant Impact***

"Those individuals who are sensitive to air pollution include children, the elderly, and persons with pre-existing respiratory or cardiovascular illness. The District considers a sensitive receptor to be a location that houses or attracts children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. Examples of sensitive receptors include hospitals, residences, convalescent facilities, and schools."[23]

"The District's modeling guidance indicates that sensitive receptors within 2 kilometers of the project should be included. Figure [3.3-1] displays the receptors (represented by blue

[22] Ibid. Pages 73 and 74
[23] Ibid. Page 74

triangles) within 2 kilometers of the project. The receptor to the far west of the project site is Palm Elementary School, which is outside of the 2-kilometer radius at 2.8 kilometers."[24]

Figure 3.3-1
Sensitive Receptors

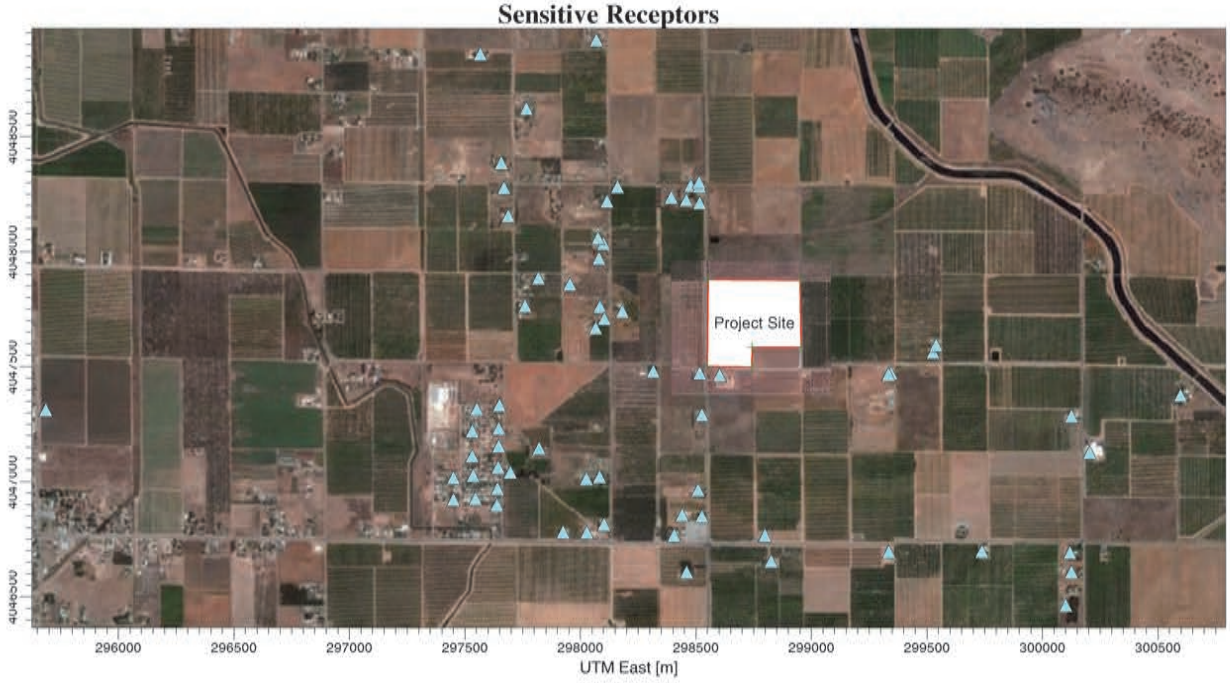


Table 3.3-6
Sensitive Receptors within 1000 feet from Project Boundary

Sensitive Receptor	Distance to Nearest Project Boundary (feet)
House at southeast intersection of Road 144 and Avenue 420	100
House at southwest intersection of Road 144 and 420	130
House south of Avenue 420 between road 144 and Road 142	750
House west of Road 144 between Avenue 420 and Avenue 416	720

Source: Estimated using aerial photography

"Any project with the potential to expose sensitive receptors or the public to substantial levels of toxic air contaminants would have a potentially significant impact. A health risk is the probability that exposure to a given toxic air contaminant (TAC) under a given set of conditions will result in an adverse health effect. The health risk is affected by several factors, such as the amount, toxicity, and concentration of the contaminant; meteorological conditions; distance from the emission sources to people; the distance between emission sources; the age, health, and lifestyle of the people living or working at a location; and the length of exposure to the toxic air contaminant. The health risk is determined by estimating potential emissions and then entering the emissions into air dispersion models (AERMOD

[24] Ibid. Page 64

and HARP), which estimate the concentration of pollutants at the nearby sensitive receptors. The concentrations are converted to risk using a set of formulas within the HARP model relating TAC concentrations with their attendant cancer risks and non-cancer hazards.

The SJVAPCD has adopted the following health risk significance thresholds for project-specific impacts:

- Cancer risk: less than a risk of 10 in one million
- Non-cancer hazard index of 1.0

As discussed previously in the methodology section, this health risk assessment assesses the risk from the following TACs: diesel particulate matter, aluminum, arsenic, barium, beryllium, cadmium, chromium, chromium VI, cobalt, copper, lead, manganese, nickel, selenium, zinc, and crystalline silica.

As shown in Table [3.3-7], applying the estimated emissions and air dispersion models results in a cancer risk at the maximum impacted sensitive receptor of 4.0, which is less than the District's significance threshold of 10 in one million. Therefore, impacts are less than significant. The maximum impacted sensitive receptor is located approximately 380 meters east of the main entrance to the project."[25]

Table 3.3-7
Cancer Risk from Project Operations

Location	Cancer Risk (per million)		Exceeds Significance Threshold?
	Maximum Lifetime Project Risk	Significance Threshold	
Maximum Impacted Sensitive Receptor	4.0	10	No

Source: Modeling conducted by Michael Brandman Associates

"A "significant" health risk is the level of exposure to air toxics at which facility operators are required to notify the public. A facility with a cancer risk over 10 in one million does not necessarily mean that those exposed will develop harmful effects. To put the cancer risk in perspective, there is an approximate risk that around 1 in 100 people will get into a car accident (SJVAPCD 2012). As noted in Table [3.3-7], the maximum cancer risk at any sensitive receptor was estimated to be 4.0 in 1,000,000 people. A cancer risk of 4.0 in a million is the likelihood that up to 4 people out of one million equally exposed people would contract cancer if exposed continuously (24 hours per day) to the specific concentration over 70 years (an assumed lifetime). This would be in addition to those cancer cases that would normally occur in an unexposed population of one million people. Thus, the operation of the project would not exceed the District's cancer risk significance threshold of 10 in a million and, therefore, would not expose sensitive receptors to substantial pollutant concentration.

The maximum calculated non-cancer risk as represented by the Hazard Index from the operation of the project was found to be less than 0.05, substantially less than the District's

[25] Ibid. Pages 74 and 75

non-cancer risk threshold of 1.0. Therefore, non-cancer risks are less than significant. This means that the nearby residents are not likely to experience significant non-cancer health effects from the TAC emissions from the project (e.g., eye, nose, throat, and lung irritation; coughs; headaches; light-headedness; and nausea).

During blasting, there is also the possibility that some gases could be trapped below the surface and migrate through cracks or fissures below ground. Carefully designed blasting patterns will minimize the potential for trapped gases. In addition, the geology of the site is not conducive to such migration. Finally, the blasting will occur at a considerable distance from any residences or other structures that could be impacted. Thus, there would not be potential adverse effects from potential underground migration of blasting gases.

In addition to the gaseous emissions discussed above, there is a possibility of some of the explosive not being completely combusted in the blast. However, neither ammonium nitrate nor fuel oil is listed as an air toxic in California or by the EPA. Furthermore, carefully designed blasts will consume [the entire] explosive. Therefore, potential adverse impacts related to incomplete combustion are not expected."[26]

Valley Fever

"Valley fever, or coccidioidomycosis, is an infection caused by inhalation of the spores of the fungus, Coccidioides immitis. The spores live in soil and can live for an extended time in harsh environmental conditions. Activities or conditions that increase the amount of fugitive dust contribute to greater exposure, and they include dust storms, grading, and recreational off-road activities.

By geographic region, hospitalizations for Valley fever in the San Joaquin Valley increased from 230 (6.9 per 100,000 population) in 2000 to 701 (17.7 per 100,000 population) in 2007. Within the region, Kern County reported the highest hospitalization rates, increasing from 121 (18.2 per 100,000 population) in 2000 to 285 (34.9 per 100,000 population) in 2007, and peaking in 2005 at 353 hospitalizations (45.8 per 100,000 population). The Centers for Disease Control and Prevention indicates that 752 of the 8,657 persons (8.7 percent) hospitalized in California between 2000 and 2007 for Valley fever died (CDC 2009).

Operational activities would generate fugitive dust. The project will minimize the generation of fugitive dust by complying with the District's Regulation VIII and the District's permit requirements. Therefore, this regulation would reduce valley fever impacts to less than significant."[27]

Naturally Occurring Asbestos

"According to a map of areas where naturally occurring asbestos in California are likely to occur (U.S. Geological Survey 2011), and discussion with the project applicant (November 27, 2012, phone) asbestos is not located on the project site. Therefore, development of the

[26] Ibid. Pages 75 and 76
[27] Ibid. Page 76

project is not anticipated to expose receptors to naturally occurring asbestos. Impacts would be less than significant."[28]

Less Than Significant Project-specific Impacts related to this Checklist item will occur.

Cumulative Impact Analysis: ***Less than Significant Impact***

The geographic area of this cumulative analysis is San Joaquin Air Basin. This cumulative analysis is based on the information provided in the Air Quality Report.

Since the Project will result in less than significant Project-specific impacts, ***Less Than Significant Cumulative Impacts*** related to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***Less than Significant Impact***

As noted earlier, ***Less Than Significant Project-specific and Cumulative Impacts*** related to this Checklist item will occur.

e) Create objectionable odors affecting a substantial number of people?

Project Impact Analysis: ***Less than Significant Impact***

"Odor impacts on residential areas and other sensitive receptors, such as hospitals, day-care centers, schools, etc., warrant the closest scrutiny, but consideration could also be given to other land uses where people may congregate, such as recreational facilities, worksites, and commercial areas.

Two situations create a potential for odor impact. The first occurs when a new odor source is located near an existing sensitive receptor. The second occurs when a new sensitive receptor locates near an existing source of odor. The District has determined the common land use types that are known to produce odors in the Basin. These types are shown in Table [3.3-8]."

Table 3.3-8
Screening Levels for Potential Odor Sources

Odor Generator	Distance
Wastewater Treatment Facilities	2 miles
Sanitary Landfill	1 mile
Transfer Station	1 mile

[28] Ibid. Page 76

Odor Generator	Distance
Compositing Facility	1 mile
Petroleum Refinery	2 miles
Asphalt Batch Plant	1 mile
Chemical Manufacturing	1 mile
Fiberglass Manufacturing	1 mile
Painting/Coating Operations (e.g., auto body shop)	1 mile
Food Processing Facility	1 mile
Feed Lot/Dairy	1 mile
Rendering Plant	1 mile
Wastewater Treatment Facilities	2 miles

Source: San Joaquin Valley Air Pollution Control District, 2002.

"According to the District's 2002 Guide, analysis of potential odor impacts should be conducted for the following two situations:

- Generators - projects that would potentially generate odorous emissions proposed to locate near existing sensitive receptors or other land uses where people may congregate, and
- Receivers - residential or other sensitive receptor projects or other projects built for the intent of attracting people locating near existing odor sources.

If the project were to result in sensitive receptors being located closer to an odor generator in the list in Table [3.3-8] than the recommended distances, a more detailed analysis including a review of District odor complaint records is recommended. The detailed analysis would involve contacting the District's Compliance Division for information regarding odor complaints. For a project locating near an existing source of odors, the project should be identified as having a significant odor impact if it is proposed for a site that is closer to an existing odor source than any location where there have been:

- More than one confirmed complaint per year averaged over a three-year period, or
- Three unconfirmed complaints per year averaged over a three-year period."[29]

"During operation, onsite diesel powered equipment and vehicles will emit diesel PM, which is odorous to some. These odors will dissipate with distance and should not reach an objectionable level at nearby residences. Impacts would be less than significant."[30]

Cumulative Impact Analysis: ***Less than Significant Impact***

The geographic area of this cumulative analysis is San Joaquin Air Basin. This cumulative analysis is based on the information provided in the Air Quality Report.

[29] Ibid. Page 78
[30] Ibid.

Since the Project will result in less than significant Project-specific impacts, ***Less Than Significant Cumulative Impacts*** related this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***Less than Significant Impact***

As noted earlier, ***Less Than Significant Project-specific and Cumulative Impacts*** related to this Checklist item will occur.

DEFINITIONS

Definitions

Ambient Air Quality Standards - These standards measure outdoor air quality. They identify the maximum acceptable average concentrations of air pollutants during a specified period of time. These standards have been adopted at a State and Federal level.

Best Available Control Measures (BACM) - A set of programs that identify and implement potentially best available control measures affecting local air quality issues.

Beat Available Control Technologies (BACT) - The most stringent emission limitation or control technique of the following: 1.) Achieved in practice for such category and class of source, 2.) Contained in any State Implementation Plan approved by the Environmental Protection Agency for such category and class of source. A specific limitation or control technique shall not apply if the owner of the proposed emissions unit demonstrates to the satisfaction of the APCO that such a limitation or control technique is not presently achievable, 3.) Contained in an applicable federal New Source Performance Standard, or 4.) Any other emission limitation or control technique, including process and equipment changes of basic or control equipment, found by the APCO to be cost effective and technologically feasible for such class or category of sources or for a specific source.

Carbon Dioxide (CO_2) - A naturally occurring gas, and also a by-product of burning fossil fuels and biomass, as well as land-use changes and other industrial processes. It is the principal anthropogenic greenhouse gas that affects the Earth's radiative balance. It is the reference gas against which other greenhouse gases are measured and therefore has a Global Warming Potential of 1.

Carbon Monoxide (CO) - Carbon monoxide is an odorless, colorless gas that is highly toxic. It is formed by the incomplete combustion of fuels and is emitted directly into the air (unlike ozone).

Climate Change - Climate change refers to a statistically significant variation in either the mean state of the climate or in its variability, persisting for an extended period (typically decades or longer). Climate change may be due to natural internal processes or external forcings, or to persistent anthropogenic changes in the composition of the atmosphere or in land use.

Global Warming - Global warming is an average increase in the temperature of the atmosphere near the Earth's surface and in the troposphere, which can contribute to changes in global climate patterns. Global warming can occur from a variety of causes, both natural and human induced. In common usage, "global warming" often refers to the warming that can occur as a result of increased emissions of greenhouse gases from human activities.

Greenhouse Effect - Trapping and build-up of heat in the atmosphere (troposphere) near the Earth's surface. Some of the heat flowing back toward space from the Earth's surface is absorbed by water vapor, carbon dioxide, ozone, and several other gases in the atmosphere and then reradiated back toward the Earth's surface. If the atmospheric concentrations of these greenhouse gases rise, the average temperature of the lower atmosphere will gradually increase.

Greenhouse Gas - Any gas that absorbs infrared radiation in the atmosphere. Greenhouse gases include, but are not limited to, water vapor, carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrochlorofluorocarbons (HCFCs), ozone (O_3), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6).

Hydrogen Sulfide (H_2S) - Hydrogen sulfide is a highly toxic flammable gas. Because it is heavier than air, it tends to accumulate at the bottom of poorly ventilated spaces.

Lead (Pb) - Lead is the only substance which is currently listed as both a criteria air pollutant and a toxic air contaminant. Smelters and battery plants are the major sources of the pollutant "lead" in the air. The highest concentrations of lead are found in the vicinity of nonferrous smelters and other stationary sources of lead emissions. The EPA's health-based national air quality standard for lead is 1.5 micrograms per cubic meter (æg/m_3) [measured as a quarterly average].

Metropolitan Planning Organization (MPO) - Tulare County Association of Governments (TCAG) is the MPO for Tulare County. MPO's are responsible for developing reasonably available control measures (RACM) and best available control measures (BACM) for use in air quality attainment plans and for addressing Transportation Conformity requirements of the federal Clean Air Act.

Mobile Source - A mobile emission source is a moving object, such as on-road and off-road vehicles, boats, airplanes, lawn equipment, and small utility engines.

Nitrogen Oxides (Oxides of Nitrogen, NO_x) - NO_x are compounds of nitric oxide (NO) and nitrogen dioxide (NO_2). NO_x are primarily created from the combustion process and are a major contributor to ozone smog and acid rain formation. NOx also forms ammonium nitrate particulate in chemical reactions that occur when NOx forms nitric acid and combines with ammonia. Ammonium nitrate particulate is an important contributor to PM10 and PM2.5.

Ozone (O_3) - Ozone is a pungent, colorless, toxic gas created in the atmosphere rather than emitted directly into the air. O_3 is produced in complex atmospheric reactions involving oxides of nitrogen, reactive organic gases (ROG), and ultraviolet energy from the sun in a photochemical reaction. Motor vehicles are the major sources of O_3 precursors.

Ozone Precursors - Chemicals such as non-methane hydrocarbons, also referred to as ROG, and oxides of nitrogen, occurring either naturally or as a result of human activities, which contribute to the formation of ozone, a major component of smog.

Photochemical - Some air pollutants are direct emissions, such as the CO produced by an automobile's engine. Other pollutants, primarily O_3, are formed when two or more chemicals react (using energy from the sun) in the atmosphere to form a new chemical. This is a photochemical reaction.

Particulate Matter 2.5 Micrometers (PM2.5) - The federal government has recently added standards for smaller dust particulates. PM2.5 refers to dust/particulates/aerosols that are 2.5 microns in diameter or smaller. Particles of this size can be inhaled more deeply in the lungs and the chemical composition of some particles is toxic and has serious health impacts.

Particulate Matter 10 Micrometers (PM10) - Dust and other particulates exhibit a range of particle sizes. Federal and State air quality regulations reflect the fact that smaller particles are easier to inhale and can be more damaging to health. PM10 refers to dust/particulates that are 10 microns in diameter or smaller. The fraction of PM between PM2.5 and PM10 is comprised primarily of fugitive dust. The particles between PM10 and PM2.5 are primarily combustion products and secondary particles formed by chemical reactions in the atmosphere.

Reactive Organic Gas (ROG) - A photo chemically reactive chemical gas composed of non-methane hydrocarbons that may contribute to the formation of smog. This is also sometimes referred to as Volatile Organic Compounds (VOCs).

Reasonable Available Control Measures (RACM) - A broadly defined term referring to technologies and other measures that can be used to control pollution. They include Reasonably Available Control Technology and other measures. In the case of PM10, RACM refers to approaches for controlling small or dispersed source categories such as road dust, woodstoves, and open burning. Regional Transportation Planning Agencies are required to implement RACM for transportation sources as part of the federal ozone attainment plan process in partnership with the Air District.

Reasonable Available Control Technologies (RACT) - Devices, systems, process modifications, or other apparatus or techniques that are reasonably available, taking into account: the necessity of imposing such controls in order to attain and maintain a national ambient air quality standard; the social, environmental, and economic impact of such controls; and alternative means of providing for attainment and maintenance of such a standard.

San Joaquin Valley Air Basin (SJVAB) - An air basin is a geographic area that exhibits similar meteorological and geographic conditions. California is divided into 15 air basins to assist with the statewide regional management of air quality issues. The SJVAB extends in the Central Valley from San Joaquin County in the north to the valley portion of Kern County in the south.

San Joaquin Valley Unified Air Pollution Control District (Air District) - The Air District is the regulatory agency responsible for developing air quality plans, monitoring air quality, developing air quality regulations, and permitting programs on stationary/industrial sources and agriculture and reporting air quality data for the SJVAB. The Air District also regulates indirect sources and has limited authority over transportation sources through the implementation of transportation control measures (TCM).

Sensitive Receptors - Sensitive receptors are defined as land uses that typically accommodate sensitive population groups such as long-term health care facilities, rehabilitation centers, retirement homes, convalescent homes, residences, schools, childcare centers, and playgrounds.

Sensitive Population Groups - Sensitive population groups are a subset of the general population that are at greater risk than the general population to the effects of air pollution. These groups include the elderly, infants and children, and individuals with respiratory problems, such as asthma.

Sulfur Dioxide (SO_2) - Sulfur dioxide belongs to the family of SOx. These gases are formed when fuel containing sulfur (mainly coal and oil) is burned, and during metal smelting and other industrial processes.

Stationary Source - A stationary emission source is a non-mobile source, such as a power plant, refinery, or manufacturing facility.

Sulfates - Sulfates occur as microscopic particles (aerosols) resulting from fossil fuel and biomass combustion. SOx can form sulfuric acid in the atmosphere that in the presence of ammonia forms ammonium sulfate particulates, a small but important component of PM10 and PM2.5. Sulfates increase the acidity of the atmosphere and form acid rain.

Transportation Conformity - A federal requirement for transportation plans and projects to demonstrate that they will not result in emissions that exceed attainment plan emission budgets or exceed air quality standards.

Transportation Control Measures (TCMs) - Any measure that is identified for the purposes of reducing emissions or concentrations of air pollutants from transportation sources by reducing vehicle use or changing traffic flow or congestion conditions.

Transportation Management Agencies - Transportation Management Agencies are private, non-profit, member-controlled organizations that provide transportation services in a particular area, such as a commercial district, mall, medical center, or industrial park. Transportation Management Agencies are appropriate for any geographic area where there are multiple employers or businesses clustered together that can benefit from cooperative transportation

management or parking brokerage services. Regional and local governments, business associations, and individual businesses can all help establish Transportation Management Agencies.

Transportation Management Associations (TMAs) - Groups of employers uniting together to work collectively to manage transportation demand in a particular area.

Tulare County Association of Governments (TCAG) - TCAG is the Transportation Planning Agency (TPA) for Tulare County. TCAG is also designated as a Metropolitan Planning Organization (MPO), the agency responsible for preparing long range Regional Transportation Plans and demonstrating Transportation Conformity with air quality plans.

Wood-burning Devices - Wood-burning devices are designed to burn "solid fuels" such as cordwood, pellet fuel, manufactured logs, or any other non-gaseous or non-liquid fuels.

Abbreviations and Acronyms

(ACM)	Asbestos Containing Materials
(BACM)	Best Available Control Measures
(CAA)	Clean Air Act
(CARB or ARB)	California Air Resources Board
(CH_4)	Methane
(CO)	Carbon Monoxide
(CO_2)	Carbon Dioxide
(EPA)	Environmental Protection Agency
(GAMAQI)	Guide for Assessing and Mitigating Air Quality Impacts
(HCFCs)	Hydrochlorofluorocarbons
(HFCs)	Hydrofluorocarbons
(HI)	Hazard Index
(H_2S)	Hydrogen Sulfide
(NAAQS)	National Ambient Air Quality Standards
(NO_2)	Nitrogen Dioxide
(NESHAPs)	National Environmental Standards for Hazardous Air Pollutants
(MPO)	Metropolitan Planning Organization
(O_3)	Ozone
(Pb)	Lead
(PFCs)	Perfluorocarbons
(PM2.5)	Particulate Matter 2.5 Micrometers in diameter
(PM10)	Particulate Matter 10 Micrometers in diameter
(RACM)	Reasonably Available Control Measures
(RACT)	Reasonably Available Control Technologies
(ROG)	Reactive Organic Gases
(SEKI)	Sequoia and Kings Canyon National Park
(SIP)	State Implementation Plan
(SF_6)	Sulfur Hexafluoride
(SO_2)	Sulfur Dioxide

(AIR DISTRICT)	San Joaquin Valley Unified Air Pollution Control District
(SJVAB)	San Joaquin Valley Air Basin
(TAC)	Toxic Air Contaminants
(TCAG)	Tulare County Association of Governments
(TCM)	Transportation Control Measures
(URBEMIS)	Urban Emissions model
(VOC)	Volatile Organic Compound

REFERENCES

2013 CEQA Guidelines

Tulare County 2030 General Plan, Recirculated Draft Environmental Impact Report (RDEIR), February 2010

Air District Web Site, http://www.valleyair.org/air_quality_plans/pm25plans2012_old-122112.htm

Orosi Rock Air Quality, Greenhouse Gas, and Health Risk Assessment Gravel Mine Expansion, Michael Brandman Associates, December 6, 2012

Biological Resources
Chapter 3.4

SUMMARY OF FINDINGS

The proposed Project will result in less than significant impacts to Biological Resources. A detailed review of potential impacts is provided in the following analysis.

INTRODUCTION

California Environmental Quality Act (CEQA) Requirements

"Whenever possible, public agencies are required to avoid or minimize environmental impacts by implementing practical alternatives or mitigation measures. According to Section 15382 of the CEQA Guidelines, a significant effect on the environment means a "substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic interest."[1]

The California Environmental Quality Act (CEQA; California Public Resources Code §§ 21000-21177) requires that State agencies, local governments, and special districts evaluate and disclose impacts from "projects" in the State. CEQA Guidelines Section 15380 clearly indicates that species of special concern (SSCs) should be included in an analysis of project impacts if they can be shown to meet the criteria of sensitivity.[2]

CEQA Guidelines Sections 15063 and 15065 address how an impact is identified as significant. These sections are particularly relevant to SSCs. Project-level impacts to listed, rare, threatened, or endangered species are generally considered significant, and therefore require lead agencies to prepare an Environmental Impact Report to fully analyze and evaluate the impacts. In determining to assign "impact significance" to populations of non-listed species, factors which are usually considered include population-level effects, proportion of the species' range affected by a project, regional effects, and impacts to habitat features.[3]

This section of the ~~Draft~~ Final Environmental Impact Report (~~DEIR~~FEIR) for the Project meets CEQA requirements by addressing potential impacts to biological resources on the proposed Project site, which is located in a portion of the San Joaquin Valley in Tulare County. The "Environmental Setting" section provides a description of biological resources in the region, with special emphasis on the proposed Project site and vicinity. The "Regulatory Setting" provides a description of applicable State and local regulatory policies. A description of the

[1] DFW, http://www.dfg.ca.gov/wildlife/nongame/ssc/
[2] DFW, http://www.dfg.ca.gov/wildlife/nongame/ssc/
[3] Ibid.

potential impacts of the proposed project is also provided and includes the identification of feasible mitigation to avoid or lessen the impacts.

Thresholds of Significance

The geographical area may be either statewide or nationwide, depending on the sensitive status of the species. Standards for listing as federal endangered species are determined by the Federal Endangered Species Act, administered by U.S. Department of Fish and Wildlife. Standards for listing of California special status species (Endangered, Threatened, Candidate Endangered, Candidate Threatened, and Sensitive Species) are administered by the California Department of Fish and Wildlife (DFW). These requirements are described in further detail in the "Regulatory" section of this document.

ENVIRONMENTAL SETTING

"The planning area of Cutler and Orosi is void of native lands which would provide a habitat for threatened, candidate, proposed or endangered species. Sand Creek, before it was channelized and rerouted, probably supported a riparian plant community which included valley oak, sycamore, various species of willow, and numerous understory species. Without this streamside community, wildlife is restricted to bird and mammal life associated with the urban and agricultural landscape. Birds common to the area include crow, starling, meadowlark, blackbird, various species of sparrow, killdeer, dove, sparrow and red-tailed hawk, and swallows. Mammals include gophers, California ground squirrel, and various species of mice, cottontail and jack rabbits, coyote, and opossum."[4]

Gray Consulting prepared a Biological Scoping Report for the project site in 2004. This evaluation included a reconnaissance-level biological field survey for biotic habitats, the plants and animals occurring in those habitats, and significant habitat values that may be protected by state and federal law.

There are two habitat conservation plans that apply in Tulare County: 1) Recovery Plan for Upland Species of the San Joaquin Valley, and 2) the Kern Water Bank Habitat Conservation Plan.

The Recovery Plan for Upland Species of the San Joaquin Valley identifies the following species that are important in the San Joaquin Valley:

- California Jewelflower *(Caalanthus cahfornicus),*
- Palmate-Bracted Bird's-Beak *(Cordylanthus palmatus)*
- Kern Mallow *(Eremalche kernensis)*
- Hoover's Woolly-Star *(Eriastrumn hoox'eri)*
- San Joaquin Woolly-Threads *(Lemnbertia congdonii)*
- Bakersfield Cactus *(Opurmtia basilaris* var. *rreleasei)*

[4] Cutler-Orosi Community Plan, page 27

- Lesser Saltscale *(A triplex nminuscula)*
- Bakersfield Smallscale *(A triplex tularensis)*
- Lost Hills Saltbush *(Atriplex vallicola)*
- Vasek's Clarkia *(Clarkia tembloriensis* ssp. *calientensis)*
- Temblor Buckwheat *(Eriogonunm tentblorense)*
- Tejon Poppy *(Eschscholzia lenmnionii* ssp. *kernensis)*
- Diamond-petaled California Poppy *(Eschscholzia rhomimbipetala)*
- Comanche Point Layia *(La via leucopappa)*
- Munz's Tidy-tips *(Layia rnunzii)*
- Jared's Peppergrass *(Lepidiunmjaredii)*
- Merced Monardella *(Monardella leucocephala)*
- Merced Phacelia *(Phacelia ciliata* var. *opaca)*
- Oil Neststraw *(Stylocline citroleurn)*
- Giant Kangaroo Rat *(Dipodomys ingens)*
- Fresno Kangaroo Rat *(Dipodonmys nitratoides exilis)*
- Tipton Kangaroo Rat *(Dipodonmy's nitratoides nitratoides}*
- Blunt-Nosed Leopard Lizard *(Ganmbelia si/a)*
- San Joaquin Kit Fox (*Vu/pes macrotis nmutica)*
- Ciervo Aegialian Scarab Beetle *(Aegialia concinna)*
- San Joaquin Dune Beetle *(Coelus gracilis)*
- Doyen's Dune Weevil *(Trigonoscuta* sp.)
- San Joaquin Antelope Squirrel *(Antnmospermophi/us nelsoni)*
- Short-Nosed Kangaroo Rat *(Dipodonmys nitratoides brevinasus)*
- Riparian Woodrat *(Neotomafuscipes riparia)*
- Tulare Grasshopper Mouse *(Onvchomys torridus tu/arensis)*
- Buena Vista Lake Shrew *(Sorex ormmatus relictus)*
- Riparian Brush Rabbit *(Sylvilagus bachmani riparius)*
- Le Conte's Thrasher *(Toxostoma lecontei leconrel)*

The Kern Water Bank Habitat Conservation Plan also applies to Tulare County. This plan; however, only applies to an area in Allensworth located in the southwest quadrant of the County.

REGULATORY SETTING

Applicable Federal, State, and local regulations specific to biological resources are described below. The following environmental regulatory settings were summarized, in part, from information contained in the Tulare County General Plan 2010 Background Report.

Federal Agencies & Regulations

Federal Endangered Species Act

"The U.S. Fish and Wildlife Service (USFWS) administers the federal Endangered Species Act (16 USC Section 153 et seq.) and thereby has jurisdiction over federally listed threatened, endangered,

and proposed species. Projects that may result in a "take" of a listed species or critical habitat must consult with the USFWS. "Take" is broadly defined as harassment, harm, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collection; any attempt to engage in such conduct; or destruction of habitat that prevents an endangered species from recovering (16 USC 1532, 50 CFR 17.3). Federal agencies that propose, fund, or must issue a permit for a project that may affect a listed species or critical habitat are required to consult with the USFWS under Section 7 of the Federal Endangered Species Act. If it is determined that a federally listed species or critical habitat may be adversely affected by the federal action, the USFWS will issue a "Biological Opinion" to the federal agency that describes minimization and avoidance measures that must be implemented as part of the federal action. Projects that do not have a federal nexus must apply for a take permit under Section 10 of the Act. Section 10 of the act requires that the project applicant prepare a habitat conservation plan as part of the permit application (16 USC 1539)."[5]

"Under Section 4 of the Federal Endangered Species Act, a species can be removed, or delisted, from the list of threatened and endangered species. Delisting is a formal action made by the USFWS and is the result of a determined successful recovery of a species. This action requires posts in the federal registry and a public comment period before a final determination is made by the USFWS."[6]

Habitat Conservation Plans

"Habitat Conservation Plans (HCPs) are required for a non-federal entity that has requested a take permit of a federal listed species or critical habitat under Section 10 of the Endangered Species Act. HCPs are designed to offset harmful effects of a proposed project on federally listed species. These plans are utilized to achieve long-term biological and regulatory goals. Implementation of HCPs allows development and projects to occur while providing conservation measures that protect federally listed species or their critical habitat and offset the incidental take of a proposed project. HCPs substantially reduce the burden of the Endangered Species Act on small landowners by providing efficient mechanisms for compliance with the ESA, thereby distributing the economic and logistic effects of compliance. A broad range of landowner activities can be legally protected under these plans (County of Tulare, 2010 Background Report, pages 9-6 and 9-7, 2010a). There are generally two types of HCPs, project specific HCPs which typically protect a few species and have a short duration and multi-species HCPs which typically cover the development of a larger area and have a longer duration."[7]

Migratory Bird Treaty and Bald and Golden Eagle Protection Act

"The Migratory Bird Treaty Act (MBTA, 16 USC Section 703-711) and the Bald and Golden Eagle Protection Act (16 USC Section 668) protect certain species of birds from direct "take". The MBTA protects migrant bird species from take by setting hunting limits and seasons and protecting occupied nests and eggs. The Bald and Golden Eagle Protection Act (16 USC Sections 668-668d) prohibits the take or commerce of any part of Bald and Golden Eagles. The USFWS administers

[5] Tulare County General Plan Update DEIR, page 3.11-2
[6] Ibid.
[7] Ibid.

both acts, and reviews federal agency actions that may affect species protected by the acts."[8]

Clean Water Act - Section 404

"Wetlands and other waters of the U.S. are subject to the jurisdiction of the U.S. Army Corp of Engineers (USACE) and U.S. Environmental Protection Agency (EPA) under Section 404 of the Clean Water Act (33 U.S.C. 1251 et seq., 1972). Together, the EPA and the USACE determine whether they have jurisdiction over the non-navigable tributaries that are not relatively permanent based on a fact-specific analysis to determine if there is a significant nexus. These non-navigable tributaries include wetlands adjacent to non-navigable tributaries that are not relatively permanent and wetlands adjacent to but that do not directly abut a relatively permanent non-navigable tributary."[9]
"Wet areas that are not regulated by this Act do not have a hydrologic link to other waters of the U.S., either through surface or subsurface flow and include ditches that drain uplands, swales or other erosional features. The USACE has the authority to issue a permit for any discharge, fill, or dredge of wetlands on a case-by-case basis, or by a general permit. General permits are handled through a Nationwide Permit (NWP) process. These permits allow specific activities that generally create minimal environmental effects. Projects that qualify under the NWP program must fulfill several general and specific conditions under each applicable NWP. If a proposed project cannot meet the conditions of each applicable NWP, an individual permit would likely be required from the USACE."[10]

State Agencies & Regulations

California Department of Fish and Wildlife (formerly Department of Fish and Game)

The California Department of Fish and Wildlife (DFW) regulates the modification of the bed, bank, or channel of a waterway under Sections 1601-1607 of the California Fish and Game Code. Also included are modifications that divert, obstruct, or change the natural flow of a waterway. Any party who proposes an activity that may modify a feature regulated by the Fish and Game Code must notify DFW before project construction. DFW will then decide whether to enter into a Streambed Alteration Agreement with the project applicant either under Section 1601 (for public entities) or Section 1603 (for private entities) of the Fish and Game Code.

California Endangered Species Act

DFW administers the California Endangered Species Act of 1984 (Fish and Game Code Section 2080), which regulates the listing and "take" of endangered and threatened State-listed species. A "take" may be permitted by California Department of Fish and Game through implementing a management agreement. "Take" is defined by the California Endangered Species Act as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill" a State-listed species (Fish and Game Code Sec. 86). Under State laws, DFW is empowered to review projects

[8] Ibid. Page 3.11-3
[9] Ibid.
[10] Ibid. Pages 3.11-1 to 3.11.2

for their potential impacts to State-listed species and their habitats.

The DFW maintains lists for Candidate-Endangered Species (SCE) and Candidate-Threatened Species (SCT). California candidate species are afforded the same level of protection as State-listed species. California also designates Species of Special Concern (CSC) that are species of limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value. These species do not have the same legal protection as listed species, but may be added to official lists in the future. The CSC list is intended by DFW as a management tool for consideration in future land use decisions (Fish and Game Code Section 2080).

All State lead agencies must consult with DFW under the California Endangered Species Act when a proposed project may affect State-listed species. DFW would determine if a project under review would jeopardize or result in taking of a State-listed species, or destroy or adversely modify its essential habitat, also known as a "jeopardy finding" (Fish and Game Code Sec. 2090). For projects where DFW has made a jeopardy finding, DFW must specify reasonable and prudent alternatives to the proposed project to the State lead agency (Fish and Game Code Sec. 2090 et seq.).

Natural Communities Conservation Planning Act

The Natural Communities Conservation Planning Act allows a process for developing natural community conservation plans (NCCPs) under DFW direction. NCCPs allow for regional protection of wildlife diversity, while allowing compatible development. DFW may permit takings of State-listed species whose conservation and management are provided in a NCCP, once a NCCP is prepared (Fish and Game Code Secs. 2800 et seq.).

Federally and State-Protected Lands

Ownership of California's wildlands are divided primarily between federal, state, and private entities. State-owned land is managed under the leadership of the Departments of Fish and Game (DFW), Parks and Recreation, and Forestry and Fire Protection (CDF). Tulare County has protected lands in the form of wildlife refuges, national parks, and other lands that have large limitations on appropriate land uses. Some areas are created to protect special status species and their ecosystems.

California Wetlands Conservation Policy

The California Wetlands Conservation Policy's goal is to establish a policy framework and strategy that will ensure no overall net loss and achieve a long-term net gain in the quantity, quality, and permanence of wetlands acreage and values in California. Additionally, the policy aims to reduce procedural complexity in the administration of State and federal wetlands conservation programs and to encourage partnerships with a primary focus on landowner incentive programs and cooperative planning efforts. These objectives are achieved through three policy means: statewide policy initiatives, three geographically based regional strategies in

which wetland programs can be implemented, and creation of interagency wetlands task force to direct and coordinate administration and implementation of the policy. Leading agencies include the Resources Agency and the California Environmental Protection Agency (Cal/EPA) in cooperation with Business, Transportation and Housing Agency, Department of Flood and Agriculture, Trade and Commerce Agency, Governor's Office of Planning and Research, Department of Fish and Game, Department of Water Resources, and the State Water Resources Control Board.

Birds of Prey

Birds of Prey are protected under the California Fish and Game Code Section 3503.5, which states:

> *"It is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto."*

This includes any construction disturbance which could lead to nest abandonment, which is considered a "taking" by the DFW.

CEQA and Oak Woodland Protection

CEQA Statute Section 21083.4, "Counties; Conversion of Oak Woodlands; Mitigation Alternatives," requires that counties determine whether a development will have potential impacts on oak woodlands:

> 21083.4(a): "For purposes of this section, "oak" means a native tree species in the genus Quercus, not designated as Group A or Group B commercial species pursuant to regulations adopted by the State Board of Forestry and Fire Protection pursuant to Section 4526, and that is 5 inches or more in diameter at breast height."
>
> 21083.4(b): " …a county shall determine whether a project within its jurisdiction may result in a conversion of oak woodlands that will have a significant effect on the environment. If a county determines that there may be a significant effect to oak woodlands, the county shall require one or more of the…[listed] oak woodlands mitigation alternatives…"

Local Policy & Regulations

Tulare County General Plan Policies

The Tulare County General Plan has a number of policies that apply to projects within County of Tulare. General Plan policies that relate to the proposed Project are listed below.

ERM-1.1 Protection of Rare and Endangered Species
The County shall ensure the protection of environmentally sensitive wildlife and plant life, including those species designated as rare, threatened, and/or endangered by State and/or Federal government, through compatible land use development.

ERM-1.2 Development in Environmentally Sensitive Areas
The County shall limit or modify proposed development within areas that contain sensitive habitat for special status species and direct development into less significant habitat areas. Development in natural habitats shall be controlled so as to minimize erosion and maximize beneficial vegetative growth.

ERM-1.4 Protect Riparian Areas
The County shall protect riparian areas through habitat preservation, designation as open space or recreational land uses, bank stabilization, and development controls.

ERM-1.5 Riparian Management Plans and Mining Reclamation Plans
The County shall require mining reclamation plans and other management plans to include measures that protect, maintain, and restore riparian resources and habitats.

ERM-1.6 Management of Wetlands
The County shall support the preservation and management of wetland and riparian plant communities for passive recreation, groundwater recharge, and wildlife habitats.

ERM-1.7 Planting of Native Vegetation
The County shall encourage the planting of native trees, shrubs, and grasslands in order to preserve the visual integrity of the landscape, provide habitat conditions suitable for native vegetation and wildlife, and ensure that a maximum number and variety of well-adapted plants are maintained.

ERM-1.12 Management of Oak Woodland Communities
The County shall support the conservation and management of oak woodland communities and their habitats.

ERM-1.16 Cooperate with Wildlife Agencies
The County shall cooperate with State and federal wildlife agencies to address linkages between habitat areas.

ERM-1.17 Conservation Plan Coordination
The County shall coordinate with local, State, and federal habitat conservation planning efforts (including Section 10 Habitat Conservation Plan) to protect critical habitat areas that support endangered species and other special-status species.

IMPACT EVALUATION

Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Project Impact Analysis: ***Less than Significant Impact***

As biological scoping report was prepared in 2004. This report noted only a marginal probability for the following species:

- California tiger salamander (very low risk)
- San Joaquin adobe sunburst (very low risk)
- San Joaquin kit fox (very low risk)
- Western burrowing owl (moderate to low risk)

An addendum report was prepared in 2005. Within this report, it was noted that these four species would not be adversely impacted by the currently operation project. It was noted that the Ewan's larkspur was observed on the property. Although it is listed as a rare plant by the California Native Plant Society, this species is not listed at the state or federal level.

In 2008, the US Fish and Wildlife Service noted in a letter that existing operations are not likely to result in take of the San Joaquin Kit Fox, the California Tiger Salamander, San Joaquin Valley Orcutt grass, and Hoover's spurge. This letter also noted that incidental takes were not authorized.

On October 4, 2013, Aaron Bock, MCRP, JD, LEED AP, went on site to inspect for any changes to the existing conditions that could warrant further biological investigation. The existing Project site is already an existing gravel mining operation in full production. It is highly developed and the ground disturbance implications from noise and traffic do not lend themselves to the creation or use of this Project site for nesting, foraging, or aestivation habitat. There are no wetlands, grasslands, or any other depressions or burrows that could be used for mating, aestivation, or foraging habitat. In addition, mitigation measures are already in place that require the Project applicant to keep and maintain visual and noise buffers that also do not allow any species to cross the property boundaries to the west and north. In addition, there is a mitigation measure for an orange grove that has been planted on the south side of the Project site that would act as an additional boundary to any species wanting to enter the site from the south. To the east is an existing orange grove and gravel road that also serves as a deterrent to species migrating to and across the property.

As the proposed Project does not involve expansions into another site or an expansion of the Project site, no additional biological evaluations, analysis or assessments are warranted. ***Less Than Significant Project-specific Impacts*** related to this Checklist item will occur.

Cumulative Impact Analysis: ***Less than Significant Impact***

The geographic area of this cumulative analysis is the San Joaquin Valley. While the study area is limited to Tulare County, sensitive species with similar habitat requirements may exist in other portions of the San Joaquin Valley; and therefore, cumulative impacts would extend beyond Tulare County political boundaries.

The proposed Project would only contribute to cumulative impacts related to this Checklist item if Project-specific impacts were to occur. As the proposed Project does not result in significant loss of habitat or direct impact to these special status species, ***Less Than Significant Cumulative Impacts*** related to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***Less than Significant Impact***

As noted earlier, ***Less Than Significant Project-specific and Cumulative Impacts*** related to this Checklist item will occur.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?

Project Impact Analysis: ***No Impact***

As noted in the Response to Item 3.4 a), a biological scoping report was prepared in 2004 and an addendum report was prepared in 2005. It was noted that no lakes, rivers, streams, mudflats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds occurred on the project site. In addition, no candidate, sensitive, or special status species would be adversely impacted. Due to the lack of riparian habitat, ***No Project-specific Impacts*** related to this Checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is the San Joaquin Valley. While the study area is limited to Tulare County, sensitive species with similar habitat requirements may exist in other portions of the San Joaquin Valley; and therefore, cumulative impacts will extend beyond Tulare County political boundaries.

The proposed Project would only contribute to cumulative impacts related to this Checklist item if Project-specific impacts were to occur. As the proposed Project does not result in loss of habitat or direct impact to these special status species, ***No Cumulative Impacts*** will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***No Impact***

As noted earlier, ***No Project-specific or Cumulative Impacts*** related to this Checklist item will occur.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Project Impact Analysis: ***No Impact***

As noted earlier in the Response to Checklist item 3.4 b), no wetlands exist on the Project site. ***No Project-specific Impacts*** related to this Checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is the western U.S. While the study area is limited to Tulare County, federally protected wetlands exist in other portions of the U.S., and therefore cumulative impacts will extend beyond Tulare County political boundaries.

The proposed Project would only contribute to cumulative impacts related to this Checklist item if Project-specific impacts were to occur. As the proposed Project would not impact federally protected wetlands, ***no cumulative impacts*** will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***No Impact***

As noted earlier, ***No Project-specific or Cumulative Impacts*** related to this Checklist item will occur.

d) Interfere substantially 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?

Project Impact Analysis: ***No Impact***

As noted in the Response to Checklist item 3.4 b), no riparian habitat is located on the site. Additionally, mining operations will not impact any federal or state listed species. No wildlife or wildlife nurseries were identified on the Project site. As such, no Project-specific impacts related to this Checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is the San Joaquin Valley. While the study area is limited to Tulare County, corridors for fish and wildlife species with similar habitat requirements may exist in other portions of the San Joaquin Valley, and therefore cumulative impacts will extend beyond Tulare County political boundaries.

The proposed Project would only contribute to cumulative impacts related to this Checklist item if Project-specific impacts were to occur. As the proposed Project does not impact federally protected wetlands, wildlife corridors or wildlife nurseries, ***No Cumulative Impacts*** will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***No Impact***

As noted earlier, ***No Project-specific or Cumulative Impacts*** related to this Checklist item will occur.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Project Impact Analysis: ***No Impact***

The proposed Project will not conflict with any policies or ordinances protecting biological resources. ***No Project-specific Impacts*** related to this Checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County.

There will be no impacts to policies or ordinances relating to biological resources, and therefore there will be ***No Cumulative Impacts*** related to this Checklist item.

Mitigation Measure(s):

None Required.

Conclusion: ***No Impact***

As noted earlier, no Project-specific or cumulative impacts related to this Checklist item will occur.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Project Impact Analysis: ***No Impact***

As note earlier, there are two habitat conservation plans that apply in Tulare County. The Kern Water Habitat Conservation Plan only applies to an area in Allensworth (near the southwest quadrant of the County) and the Project site is not subject to this plan. The Recovery Plan for Upland Species in the San Joaquin Valley outlines a number of species that are important to the San Joaquin Valley. None of these species were identified on the project site. As such, no Project-specific impacts related to this Checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is California. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

There are no impacts related to habitat conservation plans, and therefore there are ***No Cumulative Impacts*** that will conflict with local policies or ordinances.

Mitigation Measure(s):

None Required.

Conclusion: ***No Impact***

As noted earlier, ***No Project-specific or Cumulative Impacts*** related to this Checklist item will occur.

REFERENCES

Tulare County General Plan 2030 Update: Background Report (February 2010)

Tulare County General Plan 2030 Update: Goals and Policies Report (Part 1) (August 2012)

Tulare County General Plan 2030 Update, Recirculated Draft Environmental Impact Report (February 2010).

Recovery Plan for Upland Species of the San Joaquin Valley, California, U.S. Fish and Wildlife Service, 1998.

Kern Water Bank, Habitat Conservation Plan/Natural Community Conservation Plan, Kern Water Bank Authority, October 2, 1997

Biological Scoping Report, Gray Consulting, September 2004

Addendum Report – Biological Survey, GCON, March 2005

United States Department of the Interior Fish and Wildlife Service, Letter from Peter A. Cross – Deputy Assistant Field Supervisor, December 13, 2006

Initial Study/Mitigated Negative Declaration, White Rock Sand & Gravel, Tulare County Resource Management Agency, August 15, 2005

Cultural Resources
Chapter 3.5

SUMMARY OF FINDINGS

The proposed Project will result in less than significant impacts to Cultural Resources with mitigation. A detailed review of potential impacts is provided in the following analysis.

INTRODUCTION

California Environmental Quality Act (CEQA) Requirements

Several CEQA statutes and guidelines address requirements for cultural resources, including historic and archaeological resources.[1] If a proposed Project may cause a substantial adverse effect on the significance of a historical resource, then the project may be considered to have a significant effect on the environment, and the impacts must be evaluated under CEQA (Section 21084.1). The definition of "historical resources" is included in Section 15064.5 of CEQA Guidelines, and includes both historical and archaeological resources. "Substantial adverse change" is defined as "physical demolition, destruction, relocation, or alteration of the resource…"

Section 15064.5 also provides guidelines when there is a probable likelihood of Native American remains existing in the project site. Provisions for the accidental discovery of historical or unique archaeological resources accidentally discovered during construction include a recommendation for evaluation by a qualified archaeologist, with follow-up as necessary.

Public Resources Code Section 5097.5 prohibits excavation or removal of any "vertebrate paleontological site…or any other archaeological, paleontological or historical feature, situated on public lands, except with express permission of the public agency having jurisdiction over such lands."

This section of the DEIR for the proposed Project meets CEQA requirements by addressing potential impacts to cultural resources on the proposed Project site. The "Environmental Setting" section provides a description of cultural resources in the region, with special emphasis on the proposed Project site and vicinity. The "Regulatory Setting" section provides a description of applicable State and local regulatory policies. Results of cultural resources field study and reports from CHRIS are included. A description of potential impacts is provided, along with feasible mitigation measures to reduce the impacts to less than significant.

[1] "CEQA and Historical Resources" CEQA Technical Advice Series" http://ceres.ca.gov/ceqa/more/tas/page3.html

CEQA Thresholds of Significance

Under CEQA Guidelines Section 15064.5. (b) "A project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.

(1) Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.

(2) The significance of an historical resource is materially impaired when a project:

(A) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; or

(B) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or

(C) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

(3) Generally, a project that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (1995), Weeks and Grimmer, shall be considered as mitigated to a level of less than a significant impact on the historical resource.

(4) A lead agency shall identify potentially feasible measures to mitigate significant adverse changes in the significance of an historical resource. The lead agency shall ensure that any adopted measures to mitigate or avoid significant adverse changes are fully enforceable through permit conditions, agreements, or other measures.

(5) When a project will affect state-owned historical resources, as described in Public Resources Code Section 5024, and the lead agency is a state agency, the lead agency shall consult with the State Historic Preservation Officer as provided in Public Resources Code Section 5024.5. Consultation should be coordinated in a timely fashion with the preparation of environmental documents."[2]

"Tulare County lies within a culturally rich province of the San Joaquin Valley. Studies of the prehistory of the area show inhabitants of the San Joaquin Valley maintained fairly dense populations situated along the banks of major waterways, wetlands, and streams. Tulare County was inhabited by aboriginal California Native American groups consisting of the Southern

[2] 2013 CEQA Guidelines, Section 15064.5 (b)

Valley Yokuts, Foothill Yokuts, Monache, and Tubatulabal. Of the main groups inhabiting the Tulare County area, the Southern Valley Yokuts occupied the largest territory."[3]

"California's coast was initially explored by Spanish (and a few Russian) military expeditions during the late 1500s. However, European settlement did not occur until the arrival into southern California of land-based expeditions originating from Spanish Mexico starting in the 1760s. Early settlement in the Tulare County area focused on ranching. In 1872, the Southern Pacific Railroad entered Tulare County, connecting the San Joaquin Valley with markets in the north and east. About the same time, valley settlers constructed a series of water conveyance systems (canals, dams, and ditches) across the valley. With ample water supplies and the assurance of rail transport for commodities such as grain, row crops, and fruit, a number of farming colonies soon appeared throughout the region."[4]

"The colonies grew to become cities such as Tulare, Visalia, Porterville, and Hanford. Visalia, the County seat, became the service, processing, and distribution center for the growing number of farms, dairies, and cattle ranches. By 1900, Tulare County boasted a population of about 18,000. New transportation links such as SR 99 (completed during the 1950s), affordable housing, light industry, and agricultural commerce brought steady growth to the valley. The California Department of Finance estimated the 2007 Tulare County population to be 430,167"[5]

"Cutler and Orosi are two unincorporated communities located in northern Tulare County, approximately 16 miles east of State Highway 99 and 15 miles north of Visalia. The communities are situated on relatively level terrain with a slight fall towards the southwest. The major natural features include the Sierra foothills, located two miles to the east, and Sand Creek, which flows between the two communities. Cutler is located approximately one half mile south of Orosi, with both communities located along State Highway 63."[6]

The combined populations for Cutler and Orosi from the 2010 census are 18,269 (these combine census data for Orosi, East Orosi, and Cutler/Yettem). Cutler and Orosi are primarily rural, agriculturally-related service centers. The area serves agriculturally-oriented enterprises such as packing houses and storage facilities, in addition to providing a residential area for many of the areas farm workers.[7]

Existing Cultural and Historic Resources

"Tulare County's known and recorded cultural resources were identified through historical records, such as those found in the National Register of Historic Places, the Historic American Building Survey/Historic American Engineering Record (HABS/HAER), the California Register of Historic Resources, California Historical Landmarks, and the Tulare County Historical Society list of historic resources."[8]

[3] Tulare County General Plan Update 2030, page 8-5.
[4] Ibid.
[5] Ibid. Page 8-6
[6] Cutler-Orosi Community Plan, Chapter 2, page 3
[7] 2010 Census data for Cutler, Orosi and Yettem
[8] General Plan Background Report pages 9-56

Due to the sensitivity of many prehistoric, ethnohistoric, and historic archaeological sites, locations of these resources are not available to the general public. The Information Center at California State University Bakersfield houses records associated with reported cultural resources surveys, including the records pertinent to sensitive sites, such as burial grounds, important village sites, and other buried historical resources protected under state and federal laws.

Cutler-Orosi Area Historic, Archaeological, Paleontological Resources

The Orosi Branch Library (12662 Avenue 416, built 1900-1924) is currently the sole historic resource listed on the National or State Registers of Historic Places in the vicinity of Cutler and Orosi. No local landmarks are listed in the proposed Project or Cutler-Orosi vicinity by the Tulare County Historical Society. No paleontological resources have been identified in the proposed Project vicinity.

REGULATORY SETTING

Federal Agencies & Regulations

The National Historic Preservation Act

The National Historic Preservation Act of 1966 (NHPA) established federal regulations for the purpose of protecting significant cultural resources. The legislation established the National Register of Historic Places and the National Historic Landmarks Program. It mandated the establishment of the State Historic Preservation Office (SHPO), responsible for implementing statewide historic preservation programs in each state. A key aspect of SHPO responsibilities include surveying, evaluating and nominating significant historic buildings, sites, structures, districts and objects to the National Register. The NHPA also established requirements federal agencies to consider the effects of proposed federal projects on historic properties (Section 106, NHPA). Federal agencies and recipients of federal funding are required to initiate consultation with the State Historic Preservation Officer (SHPO) as part of the Section 106 review process.[9]

State Agencies & Regulations

California State Office of Historic Preservation (OHP)

The California State Office of Historic Preservation (OHP) is responsible for administering federally and state mandated historic preservation programs to further the identification, evaluation, registration and protection of California's irreplaceable archaeological and historical resources under the direction of the State Historic Preservation Officer (SHPO), appointed by the governor, and the State Historical Resources Commission, a nine-member state review board appointed by the governor.[10]

[9] Advisory Council on Historic Preservation, http://www.achp.gov/nrcriteria.html Updated March 11, 2008)
[10] Advisory Council on Historic Preservation, State Historic Preservation Officers, http://www.achp.gov/shpo.html, updated Feb. 24, 2009

Among OHP's responsibilities are identifying, evaluating, and registering historic properties; and ensuring compliance with federal and state regulations. The OHP administers the State Register of Historical Resources and maintains the California Historical Resources Information System (CHRIS) database. The CHRIS database includes a statewide Historical Resources Inventory (HRI) database. The records are maintained and managed under contract by eleven independent regional Information Centers. Tulare, Fresno, Kern, Kings and Madera counties are served by the Southern San Joaquin Valley Historical Resources Information Center (Center), located in Bakersfield, CA. The Center provides information on known historic and cultural resources to governments, institutions and individuals.[11]

A historical resource may be eligible for inclusion in the California Register of Historical Resources (CRHR) if it:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Is associated with the lives of persons important to our past;
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- Has yielded, or may be likely to yield, information important in prehistory or history.[12]

CEQA Guidelines: Historical Resources Definition

CEQA Guidelines Section 15064.5(a) defines a historical resource as:

"(1) A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code §5024.1, Title 14 CCR, Section 4850 et seq.).

(2) A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

(3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code, § 5024.1, Title 14 CCR, Section 4852) including the following:

(A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

(B) Is associated with the lives of persons important in our past;

[11] California Office of Historic Preservation, About OHP, http://ohp.parks.ca.gov/?page_id=1066
[12] California Register: Criteria for Designation, http://www.ohp.parks.ca.gov/?page_id=21238

(C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

(D) Has yielded, or may be likely to yield, information important in prehistory or history.

(4) The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1."[13]

CEQA Guidelines: Archaeological Resources

Section 15064.5(c) of CEQA Guidelines provides specific guidance on the treatment of archaeological resources as noted below.

"(1) When a project will impact an archaeological site, a lead agency shall first determine whether the site is an historical resource, as defined in subdivision (a).

(2) If a lead agency determines that the archaeological site is an historical resource, it shall refer to the provisions of Section 21084.1 of the Public Resources Code, and this section, Section 15126.4 of the Guidelines, and the limits contained in Section 21083.2 of the Public Resources Code do not apply.

(3) If an archaeological site does not meet the criteria defined in subdivision (a), but does meet the definition of a unique archeological resource in Section 21083.2 of the Public Resources Code, the site shall be treated in accordance with the provisions of section 21083.2. The time and cost limitations described in Public Resources Code Section 21083.2 (c-f) do not apply to surveys and site evaluation activities intended to determine whether the project location contains unique archaeological resources.

(4) If an archaeological resource is neither a unique archaeological nor an historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment. It shall be sufficient that both the resource and the effect on it are noted in the Initial Study or EIR, if one is prepared to address impacts on other resources, but they need not be considered further in the CEQA process."[14]

CEQA Guidelines: Human Remains

Public Resources Code Sections 5097.94 and 5097.98 provide guidance on the disposition of Native American burials (human remains), and fall within the jurisdiction of the Native American Heritage Commission:

"(d) When an initial study identifies the existence of, or the probable likelihood, of Native American human remains within the project, a lead agency shall work with the appropriate Native Americans as identified by the Native American Heritage

[13] 2013 CEQA Guidelines, 15064.5(a)
[14] 2013 CEQA Guidelines, 15064.5(c)

Commission as provided in Public Resources Code Section 5097.98. The applicant may develop an agreement for treating or disposing of, with appropriate dignity, the human remains and any items associated with Native American burials with the appropriate Native Americans as identified by the Native American Heritage Commission. Action implementing such an agreement is exempt from:

(1) The general prohibition on disinterring, disturbing, or removing human remains from any location other than a dedicated cemetery (Health and Safety Code Section 7050.5).

(2) The requirements of CEQA and the Coastal Act."[15]

"(e) In the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps should be taken:

(1) There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:

(A) The coroner of the county in which the remains are discovered must be contacted to determine that no investigation of the cause of death is required, and

(B) If the coroner determines the remains to be Native American:

1. The coroner shall contact the Native American Heritage Commission within 24 hours.

2. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American.

3. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98, or

(2) Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance.

(A) The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission.

(B) The descendant identified fails to make a recommendation; or

(C) The landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner."[16]

"(f) As part of the objectives, criteria, and procedures required by Section 21082 of the Public Resources Code, a lead agency should make provisions for historical or unique archaeological resources accidentally discovered during construction. These provisions

[15] 2013 CEQA Guidelines, 15064.5 (d)
[16] Ibid. Section 15064.5 (e)

should include an immediate evaluation of the find by a qualified archaeologist. If the find is determined to be an historical or unique archaeological resource, contingency funding and a time allotment sufficient to allow for implementation of avoidance measures or appropriate mitigation should be available. Work could continue on other parts of the building site while historical or unique archaeological resource mitigation takes place."[17]

CEQA Guidelines: Paleontological Resources

Public Resources Code Section 5097.5 prohibits excavation or removal of any "vertebrate paleontological site…or any other archaeological, paleontological or historical feature, situated on public lands, except with express permission of the public agency having jurisdiction over such lands."

Tribal Consultation Requirements: SB 18 (Burton, 2004)

On September 29, 2004, Governor Schwarzenegger signed Senate Bill 18, Tribal Consultation Guidelines, into law. SB 18, enacted March 1, 2005, creates a mechanism for California Native American Tribes to identify culturally significant sites that are located within public or private lands within the city or county's jurisdiction. SB 18 requires cities and counties to contact, and offer to consult with, California Native American Tribes before adopting or amending a General Plan, a Specific Plan, or when designating land as Open Space, for the purpose of protecting Native American Cultural Places (PRC 5097.9 and 5097.993). The Native American Heritage Commission (NAHC) provides local governments with a consultation list of tribal governments with traditional lands or cultural places located within the Project Area of Potential Effect. Tribes have 90 days from the date on which they receive notification to request consultation, unless a shorter timeframe has been agreed to by the tribe (Government Code §65352.3).

Local Policy & Regulations

Tulare County General Plan Policies

The Tulare County General Plan has a number of policies that apply to projects within County of Tulare. General Plan policies that relate to the proposed Project are listed below.

ERM-6.2 Protection of Resources with Potential State or Federal Designations
The County shall protect cultural and archaeological sites with demonstrated potential for placement on the National Register of Historic Places and/or inclusion in the California State Office of Historic Preservation's California Points of Interest and California Inventory of Historic Resources. Such sites may be of Statewide or local significance and have anthropological, cultural, military, political, architectural, economic, scientific, religious, or other values as determined by a qualified archaeological professional.

[17] Ibid. Section 15064.5 (f)

ERM-6.3 Alteration of Sites with Identified Cultural Resources
When planning any development or alteration of a site with identified cultural or archaeological resources, consideration should be given to ways of protecting the resources. Development can be permitted in these areas only after a site specific investigation has been conducted pursuant to CEQA to define the extent and value of resource, and Mitigation Measures proposed for any impacts the development may have on the resource.

ERM-6.4 Mitigation
If preservation of cultural resources is not feasible, every effort shall be made to mitigate impacts, including relocation of structures, adaptive reuse, preservation of facades, and thorough documentation and archival of records.

IMPACT EVALUATION

Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?

Project Impact Analysis: ***No Impact***

An archeological reconnaissance was conducted on the site in 2004. During this survey, a small prehistoric milling station and quartz quarry was discovered. This impact is addressed in Response to Checklist Item 3.5 b). No historic resources were discovered on the site. In addition, another reconnaissance was conducted on August 14, 2008, and no cultural resources were discovered.

An updated Cultural and Historic Resource Impact Study (CHRIS) was conducted on October 14, 2013 through October 16, 2013 (RS# 13-416), and based on the San Joaquin Southern San Joaquin Valley Information Center, California State University, Bakersfield, since the Project will not affect vacant grounds no further investigation is required. (See Appendix C). In addition, per the CHRIS no additional historical findings have been made in the vicinity since 2004, except for the Friant Kern Canal which is now listed as a State Landmark, which this Project is not impacting. On October 4, 2013, Aaron Bock, MCRP, JD, LEED AP, went on site to inspect for any changes to the existing conditions that could warrant further cultural investigation. The existing Project site is already an existing gravel mining operation in full production. It is highly developed and the ground disturbance and mining of gravel continues to occur. There are no rock outcroppings, artifacts (including arrowheads, fire or grinding pits, drawings, or caves), buildings or other structures that could have any cultural values. In addition, previous mitigation measures and Mitigation Measure 5-1 are already in place that requires the Project applicant to stop any construction, if cultural artifacts are found. In addition, there is no portions of the site that have not already been disturbed, and any disturbances in those areas would have most likely revealed cultural artifacts, if they existed on this site. As part of the previous mitigation measures an orange grove has been planted on the south side of the Project site. Its planting did not reveal any artifacts.

No Project-specific Impacts related to this Checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County.

The proposed Project would only contribute to cumulative impacts related to this Checklist item, if Project-specific impacts were to occur. As the proposed Project will not have any Project-specific impacts, ***No Cumulative Impacts*** will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***No Impact***

No Project-specific or Cumulative Impacts related to this Checklist item will occur.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

Project Impact Analysis: ***Less than Significant Impact with Mitigation***

An archeological reconnaissance was performed on the site in 2004. During this survey, a small prehistoric milling station and quartz quarry was discovered. To address this impact, the existing operations require an archeologist to be present during excavation of the impacted areas and demarcation of sensitive areas. The proposed Project does not eliminate this requirement. In addition, another reconnaissance was performed on August 14, 2008 and no cultural resources were discovered. Mitigation Measure 5-1 (noted below) is required to reaffirm the necessary steps in the event that cultural resources are discovered. With mitigation, ***Less Than Significant Project-specific Impacts*** related to this Checklist item will occur.

Cumulative Impact Analysis: ***Less than Significant Impact with Mitigation***

The geographic area of this cumulative analysis is Tulare County.

The proposed Project would only contribute to cumulative impacts related to this Checklist item, if Project-specific impacts were to occur. As the proposed Project will be mitigated, cumulative impacts will also be ***Less Than Significant***.

Mitigation Measure(s):

5-1 In the event that archaeological or paleontological resources are discovered during site excavation, the County shall require that grading and construction work on the project site be suspended until the significance of the features can be determined by a qualified archaeologist or paleontologist. In this event, the property owner shall retain a qualified archaeologist/ paleontologist to make recommendations for measures necessary to protect any site determined to contain or constitute an historical resource, a unique archaeological resource, or a unique paleontological resource or to undertake data recover, excavation analysis, and curation of archaeological or paleontological materials. County staff shall consider such recommendations and implement them where they are feasible in light of project design as previously approved by the County.

Conclusion: ***Less than Significant Impact with Mitigation***

With implementation of Mitigation Measure 5-1, potential Project-specific and cumulative impacts related to this Checklist item will be reduced to a level considered ***Less Than Significant***.

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Project Impact Analysis: ***Less than Significant Impact with Mitigation***

As noted earlier, a cultural resources reconnaissance of the site was conducted in 2004. No paleontological resources were discovered on the Project site. The Project site has no natural streams or rivers on or near the site which may suggest the existence of paleontological resources. In addition, another reconnaissance was performed on August 14, 2008 and no cultural resources were discovered. Although it cannot conclusively be demonstrated that no subsurface paleontological resources are present, it is possible to mitigate potentially significant impacts with the following mitigation measure. With implementation of Mitigation Measure 5-2, Project-specific impacts related to this Checklist item would be reduced to a ***Less Than Significant Impacted***.

Cumulative Impact Analysis: ***Less than Significant Impact with Mitigation***

The geographic area of this cumulative analysis is Tulare County.

The proposed Project would only contribute to cumulative impacts related to this Checklist item, if Project-specific impacts were to occur. As the proposed Project will be mitigated, cumulative impacts will also be ***Less Than Significant***.

Mitigation Measure(s):

5-2 The property owner shall avoid and minimize impacts to paleontological resources. If a potentially significant paleontological resource is encountered during ground disturbing activities, all construction within a 100-foot radius of the find shall immediately cease until a qualified paleontologist determines whether the resources requires further study. The owner shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. The paleontologist shall notify the Tulare County Resource Management Agency and the project proponent of the procedures that must be followed before construction is allowed to resume at the location of the find. If the find is determined to be significant and the Tulare County Resource Management Agency determines avoidance is not feasible, the paleontologist shall design and implement a data recovery plan consistent with applicable standards. The plan shall be submitted to the Tulare County Resource Management Agency for review and approval. Upon approval, the plan shall be incorporated into the project.

Conclusion: ***Less than Significant with Mitigation***

With implementation of Mitigation Measure 5-2, potential Project-specific and cumulative impacts related to this Checklist item will be reduced a ***Less Than Significant*** level.

d) Disturb any human remains, including those interred outside of formal cemeteries?

Project Impact Analysis: ***Less than Significant Impact with Mitigation***

An archeological reconnaissance was performed on the site in 2004. During this survey, a small prehistoric milling station and quartz quarry was discovered; however, no human remains were discovered. In addition, another reconnaissance was performed on August 14, 2008 and no cultural resources were discovered.

In addition to the mitigation measures outlined in the Mitigated Negative Declaration adopted for the existing operations, Mitigation Measure 5-3 is required to reaffirm the necessary steps in the unlikely event that human remains are discovered. With mitigation, ***Less Than Significant Project-specific Impacts*** related to this Checklist item will occur.

Cumulative Impact Analysis: ***Less than Significant Impact with Mitigation***

The geographic area of this cumulative analysis is Tulare County.

The proposed Project would only contribute to cumulative impacts related to this Checklist item, if Project-specific impacts were to occur. As the proposed Project will be mitigated, cumulative impacts will also result in a ***Less Than Significant Impact***.

Mitigation Measure(s):

5-3 Consistent with Section 7050.5 of the California Health and Safety Code and (CEQA Guidelines) Section 15064.5, if human remains of Native American origin are discovered during project construction, it is necessary to comply with State laws relating to the disposition of Native American burials, which fall within the jurisdiction of the Native American Heritage Commission (Public Resources Code Sec. 5097). In the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps should be taken:

1. There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:
- **a. The Tulare County Coroner/Sheriff must be contacted to determine that no investigation of the cause of death is required; and**
- **b. If the coroner determines the remains to be Native American:**
  - **i. The coroner shall contact the Native American Heritage Commission within 24 hours.**
  - **ii. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American.**
  - **iii. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code section 5097.98, or**

2. Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance.
- **a. The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission.**
- **b. The descendant fails to make a recommendation; or**
- **c. The landowner or his authorized representative rejects the recommendation of the descendent.**

Conclusion: ***Less than Significant Impact with Mitigation***

With implementation of Mitigation Measure 5-3, potential Project-specific and cumulative impacts related to this Checklist item will be reduced a ***Less Than Significant*** level.

DEFINITIONS/ACRONYMS

Acronyms

(CHRIS)	California Historic Resources Information System
(CRHR)	California Register of Historical Resources
(HABS/HAER)	Historic American Building Survey/Historic American Engineering Record
(NAHC)	The Native American Heritage Commission
(NHPA)	National Historic Preservation Act of 1966
(OHP)	California State Office of Historic Preservation
(SHPO)	State Historic Preservation Officers
(SVP)	Society of Vertebrate Paleontologists
(UCMP)	University of California Museum of Paleontology

REFERENCES

Advisory Council on Historic Preservation, State Historic Preservation Officers, http://www.achp.gov/ shpo.html, updated Feb. 24, 2009

Advisory Council on Historic Preservation, http://www.achp.gov/nrcriteria.html, updated March 11, 2008

CEQA Guidelines 2013

California Office of Historic Preservation, http://ohp.par+ks.ca.gov/?page_id=1066

CEQA and Historical Resources: CEQA Technical Advice Series, http://ceres.ca.gov/ceqa/more/tas/page1.html

National Park Service Program: State Historic Preservation Officers, http://www.cr.nps.gov/nr/shpolist.htm

Tulare County 2030 General Plan, August 2012

Cutler-Orosi Community Plan, Tulare County, 1988

2010 Census data for Cutler, Orosi and Yettem

Geology and Soils
Chapter 3.6

SUMMARY OF FINDINGS

The proposed Project will result in less than significant impacts related to Geology and Soils. A detailed review of potential impacts is provided in the following analysis.

INTRODUCTION

California Environmental Quality Act (CEQA) Requirements

This section of the ~~Draft~~ Final Environmental Impact Report (~~DEIR~~FEIR) addresses potential impacts to Geology and Soils. As required in Section 15126, all phases of the proposed Project will be considered as part of the potential environmental impact.

As noted in Section 15126.2 (a), "[a]n EIR shall identify and focus on the significant environmental effects of the proposed project. In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced. Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, the human use of the land (including commercial and residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services. The EIR shall also analyze any significant environmental effects the project might cause by bringing development and people into the area affected. For example, an EIR on a subdivision astride an active fault line should identify as a significant effect the seismic hazard to future occupants of the subdivision. The subdivision would have the effect of attracting people to the location and exposing them to the hazards found there. Similarly, the EIR should evaluate any potentially significant impacts of locating development in other areas susceptible to hazardous conditions (e.g., floodplains, coastlines, wildfire risk areas) as identified in authoritative hazard maps, risk assessments or in land use plans addressing such hazards areas."[1]

The environmental setting provides a description of the Geology and Soils in the County. The regulatory setting provides a description of applicable Federal, State and Local regulatory policies that were developed in part from information contained in the Tulare County 2030

[1] 2013 CEQA Guidelines, Section 15126.2 (a)

General Plan, Tulare County General Plan Background Report, and/or Tulare County 2030 General Plan EIR incorporated by reference and summarized below. Additional documents utilized are noted as appropriate. A description of the potential impacts of the proposed Project is provided and includes the identification of feasible mitigation measures (if necessary and feasible) to avoid or lessen the impacts.

Thresholds of Significance

The thresholds of significance for this section are established by the CEQA Checklist item.

- Located on a Fault line
- Hazard to people or property
- Project subject to landslides
- Located on a liquefaction zone

ENVIRONMENTAL SETTING

"Seismicity varies greatly between the two major geologic provinces represented in Tulare County. The Central Valley is an area of relatively low tectonic activity bordered by mountain ranges on either side. The Sierra Nevada Mountains, partially located within Tulare County, are the result of movement of tectonic plates which resulted in the creation of the mountain range. The Coast Range on the west side of the Central Valley is also a result of these forces, and the continued uplifting of Pacific and North American tectonic plates continues to elevate these ranges. The remaining seismic hazards in Tulare County generally result from movement along faults associated with the creation of these ranges."[2]

"Earthquakes are typically measured in terms of magnitude and intensity. The most commonly known measurement is the Richter Scale, a logarithmic scale which measures the strength of a quake. The Modified Mercalli Intensity Scale measures the intensity of an earthquake as a function of the following factors:

- Magnitude and location of the epicenter;
- Geologic characteristics;
- Groundwater characteristics;
- Duration and characteristic of the ground motion;
- Structural characteristics of a building."[3]

"Faults are the indications of past seismic activity. It is assumed that those that have been active most recently are the most likely to be active in the future. Recent seismic activity is measured in geologic terms. Geologically recent is defined as having occurred within the last two million years (the Quaternary Period). All faults believed to have been active during Quaternary time are considered "potentially active."[4]

[2] General Plan Background Report, page 8-5
[3] Ibid.
[4] Ibid.

"Settlement can occur in poorly consolidated soils during groundshaking. During settlement, the soil materials are physically rearranged by the shaking and result in reduced stabling alignment of the individual minerals. Settlement of sufficient magnitude to cause significant structural damage is normally associated with rapidly deposited alluvial soils, or improperly founded or poorly compacted fill. These areas are known to undergo extensive settling with the addition of irrigation water, but evidence due to groundshaking is not available. Fluctuating groundwater levels also may have changed the local soil characteristics. Sufficient subsurface data is lacking to conclude that settlement would occur during a large earthquake; however, the data is sufficient to indicate that the potential exists in Tulare County."[5]

"Liquefaction is a process whereby soil is temporarily transformed to a fluid form during intense and prolonged groundshaking. Areas most prone to liquefaction are those that are water saturated (e.g., where the water table is less than 30 feet below the surface) and consist of relatively uniform sands that are low to medium density. In addition to necessary soil conditions, the ground acceleration and duration of the earthquake must be of sufficient energy to induce liquefaction. Scientific studies have shown that the ground acceleration must approach 0.3g before liquefaction occurs in a sandy soil with relative densities typical of the San Joaquin alluvial deposits. Liquefaction during major earthquakes has caused severe damage to structures on level ground as a result of settling, tilting, or floating. Such damage occurred in San Francisco on bay-filled areas during the 1989 Loma Prieta earthquake, even though the epicenter was several miles away. If liquefaction occurs in or under a sloping soil mass, the entire mass may flow toward a lower elevation, such as that which occurred along the coastline near Seward, Alaska during the 1964 earthquake. Also of particular concern in terms of developed and newly developing areas are fill areas that have been poorly compacted."[6]

Earthquake Hazards

"Groundshaking is the primary seismic hazard in Tulare County because of the county's seismic setting and its record of historical activity. Thus, emphasis focuses on the analysis of expected levels of groundshaking, which is directly related to the magnitude of a quake and the distance from a quake's epicenter. Magnitude is a measure of the amount of energy released in an earthquake, with higher magnitudes causing increased groundshaking over longer periods of time, thereby affecting a larger area. Groundshaking intensity, which is often a more useful measure of earthquake effects than magnitude, is a qualitative measure of the effects felt by population. The valley portion of Tulare County is located on alluvial deposits, which tend to experience greater groundshaking intensities than areas located on hard rock. Therefore, structures located in the valley will tend to suffer greater damage from groundshaking than those located in the foothill and mountain areas. However, existing alluvium valleys and weathered or decomposed zones are scattered throughout the mountainous portions of the county which could also experience stronger intensities than the surrounding solid rock areas. The geologic characteristics of an area can therefore be a greater hazard than its distance to the epicenter of the quake."[7]

[5] Ibid., page 8-9
[6] Ibid.
[7] Ibid., page 8-7

"There are three faults within the region that have been, and will be, principal sources of potential seismic activity within Tulare County. These faults are described below:

- **San Andreas Fault.** The San Andreas Fault is located approximately 40 miles west of the Tulare County boundary. This fault has a long history of activity, and is thus the primary focus in determining seismic activity within the county. Seismic activity along the fault varies along its span from the Gulf of California to Cape Mendocino. Just west to Tulare County lies the "Central California Active Area," where many earthquakes have originated.
- **Owens Valley Fault Group.** The Owens Valley Fault Group is a complex system containing both active and potentially active faults, located on the eastern base of the Sierra Nevada Mountains. The Group is located within Tulare and Inyo Counties and has historically been the source of seismic activity within Tulare County.
- **Clovis Fault.** The Clovis Fault is considered to be active within the Quaternary Period (within the past two million years), although there is no historic evidence of its activity, and is therefore classified as "potentially active." This fault lies approximately six miles south of the Madera County boundary in Fresno County. Activity along this fault could potentially generate more seismic activity in Tulare County than the San Andreas or Owens Valley fault systems. In particular, a strong earthquake on the Fault could affect northern Tulare County. However, because of the lack of historic activity along the Clovis Fault, inadequate evidence exists for assessing maximum earthquake impacts."[8]

"Older buildings constructed before current building codes were in effect, and even newer buildings constructed before earthquake resistance provisions were included in the current building codes, are most likely to suffer damage in an earthquake. Most of Tulare County's buildings are no more than one or two stories in height and are of wood frame construction, which is considered the most structurally resistant to earthquake damage. Older masonry buildings (without earthquake-resistance reinforcement) are the most susceptible to structural failure, which causes the greatest loss of life. The State of California has identified unreinforced masonry buildings as a safety issue during earthquakes. In high risk areas (Bay Area) inventories and programs to mitigate this issue are required. Because Tulare County is not a high risk area, state law only recommends that programs to retrofit URMs are adopted by jurisdictions."[9]

Soils and Liquefaction

"The San Joaquin Valley portion of Tulare County is located on alluvial deposits, which tend to experience greater groundshaking intensities than areas located on hard rock. Therefore, structures located in the valley will tend to suffer greater damage from groundshaking than those located in the foothill and mountain areas. However, existing alluvium valleys and weathered or decomposed zones are scattered throughout the mountainous portions of the county which could also experience stronger intensities than the surrounding solid rock areas. The geologic characteristics of an area can therefore be a greater hazard than its distance to the epicenter of the

[8] Ibid., pages 8-6 and 8-7
[9] Ibid., page 8-8

quake."[10]

"No specific countywide assessments to identify liquefaction hazards have been performed in Tulare County. Areas where groundwater is less than 30 feet below the surface occur primarily in the valley. However, soil types in the area are not conducive to liquefaction because they are either too coarse or too high in clay content. Areas subject to 0.3g acceleration or greater are located in a small section of the Sierra Nevada Mountains along the Tulare-Inyo County boundary. However, the depth to groundwater in such areas is greater than in the valley, which would minimize liquefaction potential as well. Detailed geotechnical engineering investigations would be necessary to more accurately evaluate liquefaction potential in specific areas and to identify and map the areal extent of locations subject to liquefaction."[11]

Landslides

"Landslides are a primary geologic hazard and are influenced by four factors:

- Strength of rock and resistance to failure, which is a function of rock type (or geologic formation);
- Geologic structure or orientation of a surface along which slippage could occur;
- Water (can add weight to a potentially unstable mass or influence strength of a potential failure surface); and,
- Topography (amount of slope in combination with gravitation forces)."[12]

Soils in Cutler-Orosi

"The Cutler and Orosi area is composed of primarily two soils: Exeter loam and Greenfield sandy loam… Both soils are considered to be "prime" agricultural soils (class I, II, or III). Exeter loam comprises 85 percent of the planning area and Greenfield sandy loam the other 15 percent.

Exeter loam is a class III agricultural soil. Its primary limitation for urbanization and agriculture is the existence of hardpan at a depth of about 30 inches. Typically for agricultural uses, the soil is "ripped" to provide for root and water penetration. The moderately slow permeability and existence of hardpan create "severe" conditions for septic tanks and drainage. The soil is "moderately" suited for building sites and "poorly" suited for streets and roads due to a high clay content.

Greenfield sandy loam is located in the northwest quadrant of Orosi. It is a class I agricultural soil which is well-suited for urbanization, including buildings, streets and roads, and septic tanks."[13]

[10] Ibid., page 8-7
[11] Ibid., page 8-9
[12] Ibid., page 8-10
[13] Cutler-Orosi Community Plan, page 26

REGULATORY SETTING

Federal Agencies & Regulations

None that apply to the proposed Project.

State Agencies & Regulations

California Building Code

"The California Building Code is another name for the body of regulations known as the California Code of Regulations (C.C.R.), Title 24, Part 2, which is a portion of the California Building Standards Code. Title 24 is assigned to the California Building Standards Commission, which, by law, is responsible for coordinating all building standards."[14]

Alquist-Priolo Earthquake Fault Zoning Act

"The Alquist- Priolo Earthquake Fault Zoning Act (formerly the Alquist- Priolo Special Studies Zone Act), signed into law December 1972, requires the delineation of zones along active faults in California. The purpose of the Alquist-Priolo Act is to regulate development on or near active fault traces to reduce the hazards associated with fault rupture and to prohibit the location of most structures for human occupancy across these traces."[15]

Local Policy & Regulations

Tulare County General Plan Policies

The Tulare County General Plan has a number of policies that apply to projects within County of Tulare. General Plan policies that relate to the proposed Project are listed below.

ERM-7.2 Soil Productivity
The County shall encourage landowners to participate in programs that reduce soil erosion and increase soil productivity. To this end, the County shall promote coordination between the Natural Resources Conservation Service, Resource Conservation Districts, UC Cooperative Extension, and other similar agencies and organizations.

ERM-7.3 Protection of Soils on Slopes
Unless otherwise provided for in this General Plan, building and road construction on slopes of more than 30 percent shall be prohibited, and development proposals on slopes of 15 percent or more shall be accompanied by plans for control or prevention of erosion, alteration of surface water runoff, soil slippage, and wildfire occurrence.

[14] General Plan Background Report, page 8-3
[15] Ibid., page 8-3

HS-2.1 Continued Evaluation of Earthquake Risks
The County shall continue to evaluate areas to determine levels of earthquake risk.

HS-2.4 Structure Siting
The County shall permit development on soils sensitive to seismic activity permitted only after adequate site analysis, including appropriate siting, design of structure, and foundation integrity.

HS-2.7 Subsidence
The County shall confirm that development is not located in any known areas of active subsidence. If urban development may be located in such an area, a special safety study will be prepared and needed safety measures implemented. The County shall also request that developments provide evidence that its long-term use of ground water resources, where applicable, will not result in notable subsidence attributed to the new extraction of groundwater resources for use by the development.

HS-2.8 Alquist-Priolo Act Compliance
The County shall not permit any structure for human occupancy to be placed within designated Earthquake Fault Zones (pursuant to and as determined by the Alquist-Priolo Earthquake Fault Zoning Act; Public Resource code, Chapter 7.5) unless the specific provision of the Act and Title 14 of the California Code of Regulations have been satisfied.

IMPACT EVALUATION

Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

ii) Strong seismic ground shaking?

iii) Seismic-related ground failure, including liquefaction?

iv) Landslides?

Project Impact Analysis: ***Less than Significant Impact***

The proposed Project does not include any new permanent structures. As noted in the Mitigated Negative Declaration, the Project site is located on solid rock formation and is not at risk from subsidence, liquefaction, or sliding. Brett Lehman, Professional Geologist noted that mining is appropriate with 2:1 (H:V) pit walls, and 10 feet spacing between benches.

(See Appendix F). ***Less Than Significant Project-specific Impacts*** related to the Checklist item will occur.

Cumulative Impact Analysis: ***Less than Significant Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

The Project site is appropriate for mining. The proposed Project will not impact other neighboring properties. Mining operations will include pitwalls that go further from the property line as the depth of the mining operation increases. ***Less Than Significant Cumulative Impacts*** related to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***Less than Significant Impact***

As noted earlier, ***Less Than Significant Project-specific and Cumulative Impacts*** to this Checklist item will occur.

b) Result in substantial soil erosion or the loss of topsoil?

Project Impact Analysis: ***Less than Significant Impact***

The proposed Project is comprised~~s~~ of bedrock. Although topsoil will be removed during the mining operation, the Project includes a Reclamation Plan that will allow for open space/grazing. ***Less Than Significant Project-specific Impacts*** related to this Checklist item will occur.

Cumulative Impact Analysis: ***Less than Significant Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

The proposed Project includes a Reclamation Plan that will allow for open space/grazing land. ***Less Than Significant Cumulative Impacts*** related to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***Less than Significant Impact***

As noted earlier, ***Less Than Significant Project-specific and Cumulative Impacts*** to this Checklist item will occur.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Project Impact Analysis: ***Less than Significant Impact***

As noted in the Response to Item 3.6 a), the Project site is located on solid rock formation and is not at risk from subsidence, liquefaction, or sliding. Therefore, Project-specific impacts will be ***Less Than Significant***.

Cumulative Impact Analysis: ***Less than Significant Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

The Project site is appropriate for mining. The proposed Project will not impact other neighboring properties. Mining operations will include pitwalls that go further from the property line as the depth of the mining operation increases. ***Less Than Significant Cumulative Impacts*** related to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***Less than Significant Impact***

As noted earlier, ***Less Than Significant Project-specific and Cumulative Impacts*** to this Checklist item will occur.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Project Impact Analysis: ***Less than Significant Impact***

The Project site is solid bedrock and is not considered expansive soil. ***Less Than Significant Project-specific Impacts*** related to this Checklist item will occur.

Cumulative Impact Analysis: ***Less than Significant Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

The Project site is appropriate for mining. The proposed Project will not cause soil to become expansive. ***Less Than Significant Cumulative Impacts*** related to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***Less than Significant Impact***

As noted earlier, ***Less Than Significant Project-specific and Cumulative Impacts*** to this Checklist item will occur.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

Project Impact Analysis: ***Less than Significant Impact***

There is an existing septic tank and leach field on the Project site. A replacement leach field is proposed as part of the Project adjacent to the existing leach field. The new leach field will be reviewed by Tulare County Environmental Health. ***Less Than Significant Project-specific Impacts*** related to this Checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

The proposed Project will not affect the soil capabilities of other sites. ***No Cumulative Impacts*** will occur related to this Checklist item.

Mitigation Measure(s):

None Required.

Conclusion: ***Less than Significant Impact***

As noted earlier, ***Less Than Significant Project-specific and Cumulative Impacts*** to this Checklist item will occur.

DEFINITIONS/ACRONYMS

Definitions

Fault - A fault is a fracture in the Earth's crust that is accompanied by displacement between the two sides of the fault. An active fault is defined as a fracture that has shifted in the last 10,000 to 12,000 years (Holocene Period). A potentially active fault is one that has been active in the past 1.6 million years (Quaternary Period). A sufficiently active fault is one that shows evidence of Holocene displacement on one or more of its segments or branches (Hart, 1997).

Liquefaction - Liquefaction in soils and sediments occurs during earthquake events, when soil material is transformed from a solid state to a liquid state, generated by an increase in pressure between pore space and soil particles. Earthquake-induced liquefaction typically occurs in low-lying areas with soils or sediments composed of unconsolidated, saturated, clay-free sands and silts, but it can also occur in dry, granular soils or saturated soils with partial clay content.

Magnitude - Earthquake magnitude is measured by the Richter scale, indicated as a series of Arabic numbers with no theoretical maximum magnitude. The greater the energy released from the fault rupture, the higher the magnitude of the earthquake. Magnitude increases logarithmically in the Richter scale; thus, an earthquake of magnitude 7.0 is thirty times stronger than one of magnitude 6.0. Earthquake energy is most intense at the point of fault slippage, the epicenter, which occurs because the energy radiates from that point in a circular wave pattern. Like a pebble thrown in a pond, the increasing distance from an earthquake's epicenter translates to reduced groundshaking.

REFERENCES

Tulare County 2030 General Plan, August 2012

Tulare County 2030 General Plan Background Report, February 2010

2013 CEQA Guidelines

Short & Associates Letter, November 12, 2011

Brett Lehman (Professional Geologist) Letter, March 15, 2012

Greenhouse Gas Emissions
Chapter 3.7

SUMMARY OF FINDINGS

The proposed Project will not have any significant impacts related to Greenhouse Gas (GHG) Emissions with mitigation. A Greenhouse Gas Emissions Study prepared by consultant Michael Brandman Associates is included as Appendix E of this document which is used as the basis for determining this Project will result in less that significant impacts.

INTRODUCTION

California Environmental Quality Act (CEQA) Requirements

Section 15064.4 Determining the Significance of Impacts from Greenhouse Gas Emissions

"(a) The determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in section 15064. A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to:

(1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use. The lead agency has discretion to select the model or methodology it considers most appropriate provided it supports its decision with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use; and/or

(2) Rely on a qualitative analysis or performance based standards.

(b) A lead agency should consider the following factors, among others, when assessing the significance of impacts from greenhouse gas emissions on the environment:

(1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;

(2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.

(3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the projects incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted

regulations or requirements, an EIR must be prepared for the project."[1]

Thresholds of Significance

"The San Joaquin Valley Air Pollution Control District proposes the following process… for determining the cumulative significance of project specific GHG emissions on global climate change when issuing permits for stationary source projects:"[2]

- "Projects complying with an approved GHG emission reduction plan or GHG mitigation program which avoids or substantially reduces GHG emissions within the geographic area in which the project is located would be determined to have a less than significant individual and cumulative impact for GHG emissions. Such plans or programs must be specified in law or approved by the lead agency with jurisdiction over the affected resource and supported by a CEQA compliant environmental review document adopted by the lead agency. Projects complying with an approved GHG emission reduction plan or GHG mitigation program would not be required to implement BPS."[3]
- "Projects not implementing Best Performance Standards would require quantification of project specific GHG emissions and demonstration that project specific GHG emissions would be reduced or mitigated by at least 29%, compared to BAU, including GHG emission reductions achieved since the 2002-2004 baseline period, consistent with GHG emission reduction targets established in ARB's AB 32 Scoping Plan. Projects achieving at least a 29% GHG emission reduction compared to BAU would be determined to have a less than significant individual and cumulative impact for GHG."[4]
- "Projects requiring preparation of an Environmental Impact Report would require quantification of project specific GHG emissions. Projects implementing BPS or achieving at least a 29% GHG emission reduction compared to BAU would be determined to have a less than significant individual and cumulative impact for GHG."[5]

ENVIRONMENTAL SETTING

"Gases that trap heat in the atmosphere are called greenhouse gases (GHGs). The major concern is that increases in GHGs are causing global climate change. Global climate change is a change in the average weather on earth that can be measured by wind patterns, storms, precipitation and temperature. The gases believed to be most responsible for global warming are water vapor, carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6)."[6]

"In 2007, Tulare County generated approximately 5.2 million tonnes of Carbon Dioxide Equivalent (CO_2e). The largest portion of these emissions (63 percent) is attributed to dairies/feedlots, while the second largest portion (16 percent) is from mobile sources."[7]

[1] 2013 CEQA Guidelines, Section 15064.4
[2] District Policy, Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as Lead Agency, page 8
[3] Ibid, page 8
[4] Ibid, page 9
[5] Ibid, page 9
[6] General Plan Background Report, page 6-17
[7] Ibid. Page 6-33

Table 3.7-1
Emissions by Sector in 2007[8]

Sector	CO_2e (tonnes/year)	% of Total
Electricity	542,690	11%
Natural Gas	321,020	6%
Mobile Sources	822,230	16%
Dairy/Feedlots	3,294,870	63%
Solid Waste	227,250	4%
Total	**5,208,060**	**100%**
Per Capita	**36.1**	

Source: General Plan Background Report

The Tulare County General Plan contains the following: "Enhancement of the greenhouse effect can occur when concentrations of GHGs exceed the natural concentrations in the atmosphere. Of these gases, CO_2 and methane are emitted in the greatest quantities from human activities. Emissions of CO_2 are largely by-products of fossil fuel combustion, whereas methane primarily results from off-gassing associated with agricultural practices and landfills. SF_6 is a GHG commonly used in the utility industry as an insulating gas in transformers and other electronic equipment. There is widespread international scientific agreement that human-caused increases in GHGs has and will continue to contribute to global warming, although there is much uncertainty concerning the magnitude and rate of the warming.

Some of the potential resulting effects in California of global warming may include loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (CARB, 2006). Globally, climate change has the potential to impact numerous environmental resources through potential, though uncertain, impacts related to future air temperatures and precipitation patterns. The projected effects of global warming on weather and climate are likely to vary regionally, but are expected to include the following direct effects (IPCC, 2001):

- Higher maximum temperatures and more hot days over nearly all land areas;
- Higher minimum temperatures, fewer cold days and frost days over nearly all land areas;
- Reduced diurnal temperature range over most land areas;
- Increase of heat index over land areas; and
- More intense precipitation events.

Also, there are many secondary effects that are projected to result from global warming, including global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity. While the possible outcomes and the feedback mechanisms involved

[8] Ibid., page 6-34

are not fully understood, and much research remains to be done, the potential for substantial environmental, social, and economic consequences over the long term may be great."[9]

REGULATORY SETTING

Federal Agencies & Regulations

US EPA United States Environmental Protection Agency

"The primary sources of greenhouse gas emissions in the United States are:

- **Electricity production** (34% of 2010 greenhouse gas emissions) - Electricity production generates the largest share of greenhouse gas emissions. Over 70% of our electricity comes from burning fossil fuels, mostly coal and natural gas. [2]
- **Transportation** (27% of 2010 greenhouse gas emissions) - Greenhouse gas emissions from transportation primarily come from burning fossil fuel for our cars, trucks, ships, trains, and planes. About 90% of the fuel used for transportation is petroleum based, which includes gasoline and diesel. [3]
- **Industry** (21% of 2010 greenhouse gas emissions) - Greenhouse gas emissions from industry primarily come from burning fossil fuels for energy as well as greenhouse gas emissions from certain chemical reactions necessary to produce goods from raw materials.
- **Commercial and Residential** (11% of 2010 greenhouse gas emissions) - Greenhouse gas emissions from businesses and homes arise primarily from fossil fuels burned for heat, the use of certain products that contain greenhouse gases, and the handling of waste.
- **Agriculture** (7% of 2010 greenhouse gas emissions) - Greenhouse gas emissions from agriculture come from livestock such as cows, agricultural soils, and rice production.
- **Land Use and Forestry** (offset of 15% of 2010 greenhouse gas emissions) - Land areas can act as a sink (absorbing CO_2 from the atmosphere) or a source of greenhouse gas emissions. In the United States, since 1990, managed forests and other lands have absorbed more CO_2 from the atmosphere than they emit."[10]

Greenhouse Gas Endangerment Finding

"On December 7, 2009, the EPA Administrator signed two distinct findings regarding greenhouse gases under Section 202(a) of the Clean Air Act: 1) Current and projected concentrations of the six key well-mixed greenhouse gases—carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride—in the atmosphere threaten the public health and welfare of current and future generations. 2) The combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution, which threatens public health and welfare."[11]

[9] General Plan Background Report, pages 6-27 to 6-28
[10] http://www.epa.gov/climatechange/ghgemissions/sources.html
[11] South County Detention Facility Air Quality and Greenhouse Gas Analysis Report, page 25

State Agencies & Regulations

California Air Resources Board

"The Air Resources Board (ARB or Board) has established State ambient air quality standards (State standards) to identify outdoor pollutant levels considered safe for the public. After State standards are established, State law requires ARB to designate each area as attainment, nonattainment, or unclassified for each State standard. The area designations, which are based on the most recent available data, indicate the healthfulness of air quality throughout the State."[12] The California Air Resources Board has prepared the 2004 Carbon Monoxide State Implementation Plan.

San Joaquin Valley Air Pollution Control District (Air District)

"The San Joaquin Valley Air District is a public health agency whose mission is to improve the health and quality of life for all Valley residents through efficient, effective and entrepreneurial air quality-management strategies."[13] "The San Joaquin Valley Air Pollution Control District is made up of eight counties in California's Central Valley: San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare and the San Joaquin Valley Air Basin portion of Kern."[14]

The San Joaquin Valley Air Pollution Control District (Air District) determined that the quantification of GHG Emissions is expected for all projects that require an Environmental Impact Report.[15]

California Clean Air Act

"The California CAA of 1988 establishes an air quality management process that generally parallels the federal process. The California CAA, however, focuses on attainment of the State ambient air quality standards,… which, for certain pollutants and averaging periods, are more stringent than the comparable federal standards. Responsibility for meeting California's standards is addressed by the CARB and local air pollution control districts (such as the eight county AIR DISTRICT, which administers air quality regulations for Tulare County). Compliance strategies are presented in district-level air quality attainment plans."[16]

Executive Order S-3-05

"In 2005, in recognition of California's vulnerability to the effects of climate change, Governor Schwarzenegger issued Executive Order S-3-05, which sets forth a series of target dates by which statewide emission of GHGs would be progressively reduced, as follows:

- By 2010, reduce GHG emissions to 2000 levels.

[12] Cal/EPA Air Resources Board, http://www.arb.ca.gov/desig/desig.htm
[13] http://www.valleyair.org/General_info/aboutdist.htm#Mission
[14] Ibid.
[15] District Policy, Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as Lead Agency, page 6
[16] Tulare County 2030 General Plan RDEIR, pages 3.3-2 to 3.3-3

- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

The Executive Order additionally ordered that the Secretary of the California Environmental Protection Agency (Cal EPA) would coordinate oversight of the efforts among state agencies made to meet the targets and report to the Governor and the State Legislature biannually on progress made toward meeting the GHG emission targets. Cal EPA was also directed to report biannually on the impacts to California of global warming, including impacts to water supply, public health, agriculture, the coastline, and forestry, and prepare and report on mitigation and adaptation plans to combat these impacts.

In response to the Executive Order, the Secretary of Cal EPA created the Climate Action Team (CAT), composed of representatives from the Air Resources Board; Business, Transportation, & Housing; Department of Food and Agriculture; Energy Commission; California Integrated Waste Management Board (CIWMB); Resources Agency; and the Public Utilities Commission (PUC). The CAT prepared a recommended list of strategies for the state to pursue to reduce climate change emission in the state (Climate Action Team, 2006)."[17]

Assembly Bill 32: California Global Warming Solutions Act of 2006

"In 2006, California passed the California Global Warming Solutions Act of 2006 (AB 32; California Health and Safety Code Division 25.5, Sections 38500, et seq.), which requires the CARB to design and implement emission limits, regulations, and other measures, such that feasible and cost-effective statewide GHG emissions are reduced to 1990 levels by 2020.
The bill also requires CARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG emission reductions. The bill authorizes CARB to adopt market-based compliance mechanisms. The bill additionally requires the state board to monitor compliance with and enforce any rule, regulation, order, emission limitation, emissions reduction measure, or market-based compliance mechanism adopted by the state board, pursuant to specified provisions of existing law. The bill also authorizes CARB to adopt a schedule of fees to be paid by regulated sources of GHG emissions. Because the bill requires CARB to establish emissions limits and other requirements, the violation of which would be a crime, this bill would create a state-mandated local program.

Under AB 32, by June 30, 2007, CARB was to identify a list of discrete early action GHG reductions that will be legally enforceable by 2010. By January 1, 2008, CARB was also to adopt regulations that will identify and require selected sectors to report their statewide GHG emissions. By January 1, 2011, CARB must adopt rules and regulations to achieve the maximum technologically feasible and cost-effective reductions in GHG reductions. CARB is authorized to enforce compliance with the program that it develops."[18]

Senate Bill 97

[17] General Plan Background Report, page 6-19
[18] Ibid. Page 6-20

"Governor Schwarzenegger signed Senate Bill (SB) 97 (Sutton), a CEQA and GHG emission bill, into law on August 24, 2007. SB 97 requires the Governor's Office of Planning and Research (OPR) to prepare CEQA guidelines for the mitigation of GHG emissions, including, but not limited to, effects associated with transportation or energy consumption. OPR must prepare these guidelines and transmit them to the Resources Agency by July 1, 2009. On April 13, 2009, OPR submitted to the Secretary for Natural Resources its proposed amendments to the state CEQA Guidelines for greenhouse gas emissions. The Resources Agency must then certify and adopt the guidelines by January 1, 2010. OPR and the Resources Agency are required to periodically review the guidelines to incorporate new information or criteria adopted by CARB pursuant to the Global Warming Solutions Act, scheduled for 2012.

The OPR published a Technical Advisory in June of 2008 that is an "informal guidance regarding the steps lead agencies should take to address climate change in their CEQA documents" to serve in the interim until guidelines are established pursuant to SB 97 (OPR, 2008). This Advisory recommends that CEQA documents include quantification of estimated GHG emissions associated with a proposed project and that a determination of significance be made. With regard to significance the Advisory states that "lead agencies must determine what constitutes a significant impact. In the absence of regulatory standards for GHG emissions or other scientific data to clearly define what constitutes a "significant impact", individual lead agencies may undertake a project-by-project analysis, consistent with the available guidance and current CEQA practice"."[19]

Climate Change Scoping Plan

"The CARB published a *Climate Change Scoping Plan* in December 2008 (CARB, 2008c) that outlines reduction measures to lower the state's GHG emissions to meet the 2020 limit. The *Scoping Plan* "proposes a comprehensive set of actions designed to reduce overall carbon emissions in California, improve our environment, reduce our dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health". Key elements for reducing California's GHG emissions to 1990 levels by 2020 include:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards;
- Achieving a statewide renewables energy mix of 33 percent;
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system;
- Establishing targets for transportation-related GHG emissions for regions throughout California and pursuing policies and incentives to achieve those targets;
- Adopting and implementing measures pursuant to existing State laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard; and
- Creating targeted fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund the administrative costs of the State's long-term commitment to AB 32 implementation."[20]

[19] General Plan Background Report, page 6-23 to 6-24
[20] Ibid., pages 6-24 to 6-25

Local Policy & Regulations

Tulare County General Plan Policies

The General Plan has a number of policies that apply to projects within Tulare County that support reduction efforts of GHG. General Plan policies that relate to the proposed Project are listed below.

AQ-1.7 Support Statewide Climate Change Solutions
The County shall monitor and support the efforts of Cal/EPA, CARB, and the SJVAPCD, under AB 32 (Health and Safety Code §38501 et seq.), to develop a recommended list of emission reduction strategies. As appropriate, the County will evaluate each new project under the updated General Plan to determine its consistency with the emission reduction strategies.

AQ-1.8 Greenhouse Gas Emissions Reduction Plan/Climate Action Plan
The County will develop a Greenhouse Gas Emissions Reduction Plan (Plan) that identifies greenhouse gas emissions within the County as well as ways to reduce those emissions. The Plan will incorporate the requirements adopted by the California Air Resources Board specific to this issue. In addition, the County will work with the Tulare County Association of Governments and other applicable agencies to include the following key items in the regional planning efforts.

1. Inventory all known, or reasonably discoverable, sources of greenhouse gases in the County,
2. Inventory the greenhouse gas emissions in the most current year available, and those projected for year 2020, and
3. Set a target for the reduction of emissions attributable to the County's discretionary land use decisions and its own internal government operations.

AQ-1.9 Support Off-Site Measures to Reduce Greenhouse Gas Emissions
The County will support and encourage the use of off-site measures or the purchase of carbon offsets to reduce greenhouse gas emissions.

AQ-1.10 Alternative Fuel Vehicle Infrastructure
County shall support the development of necessary facilities and infrastructure needed to encourage the use of low or zero-emission vehicles (e.g. electric vehicle charging facilities and conveniently located alternative fueling stations, including CNG filling stations.)

Tulare County Climate Action Plan

"The Tulare County Climate Action Plan (CAP) serves as a guiding document for County of Tulare ("County") actions to reduce greenhouse gas emissions and adapt to the potential effects of climate change. The CAP is an implementation measure of the 2030 General Plan Update. The General Plan provides the supporting framework for development in the County to produce fewer greenhouse gas emissions during Plan buildout. The CAP builds on the General Plan's framework with more specific actions that will be applied to achieve emission reduction targets consistent with California legislation."[21]

IMPACT EVALUATION

Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Project Impact Analysis: ***Less than Significant Impact with Mitigation***

"A Climate Action Plan was adopted for Tulare County in August 2012 (Tulare 2012). The Climate Action Plan states the following:

> Commercial and industrial development in Tulare County during the 2020 and 2030 planning timeframes will be subject to conditions of approval and mitigation measures that will reduce greenhouse gas emissions beyond State regulations in most projects. For industrial projects where the SJVAPCD is a Responsible Agency, the project will be expected to implement Best Performance Standards included in the SJVAPCD Guidelines for Addressing Greenhouse Gas Emissions on the processes and stationary equipment that emit greenhouse gases to levels that meet or exceed State targets . . . . To demonstrate consistency with the CARB Scoping Plan 2020 target of 26.2 percent reduction in land use related sectors compared with business as usual, new development in the County subject to discretionary approval would need to provide an overall reduction of 6 percent beyond that provided by State and SJVAPCD regulation. Based on this analysis, implementation of the policies contained in the General Plan 2030 Update and available project specific measures can achieve an overall reduction of 6 percent of development-related greenhouse gas emissions under Tulare County jurisdiction. When reductions from regulations and programs are included, new development would produce approximately 31 percent fewer greenhouse gas emissions compared with the 2020 business as usual scenario.

Operational or long-term emissions occur over the life of the project. For assumptions and descriptions for the emission sources, please refer to Section 4 of this report. **Table [3.7-2]** displays the existing emissions, the emissions with the project, and the net increase in emissions. As shown in the table, implementation of Mitigation Measure [7-1] would reduce emissions by more than 6 percent. Therefore, emissions are less than significant with

[21] Tulare County Climate Action Plan, page 1

mitigation. In addition, the project is required to implement the items in the District's Authority to Construct for the project..., which would reduce greenhouse gas emissions compared with existing conditions because the equipment required is newer and cleaner."[22]

Table 3.7-2
Operational Greenhouse Gases

Type	Source	Emissions ($MTCO_2e$/year)	
		Existing	With Project
Permitted	Equipment exhaust	63	228*
Non Permitted	Off road equipment exhaust	1,113	1,212
	Haul trucks offsite exhaust	336	1,209
	Haul trucks onsite exhaust	9	33
Offsite electricity generation		60	241
Total		**1,581**	**2,923**
Net Increase		—	**1,342**
Reduction from Mitigation Measure 7-1		—	**-180**
Emissions with Reductions		—	**1,162**
Percent Reduction		—	**13%**
Threshold		—	**>6%**
Significant Impact?		—	**No**

Notes:
$MTCO_2e$ = metric tons of carbon dioxide equivalents
* This assumes that all permitted units would be diesel, since the Authority to Construct allows either electric or diesel; if the project utilizes electric permitted equipment, emissions would be even lower.
Reduction from Mitigation Measure AQ-2 calculated as 228 from the permitted equipment minus an increased electricity usage of an estimated 20% (28), since some electricity increase was already assumed in the analysis = 180.
Source: CalEEMod output, spreadsheets contained in Appendix E.

The proposed Project will result in ***Less Than Significant Project-specific Impacts*** related to this Checklist item with mitigation.

Cumulative Impact Analysis: ***Less than Significant Impact with Mitigation***

The geographic area of this cumulative analysis is the San Joaquin Air Basin.

As the proposed Project will result in Less Than Significant Project-specific Impacts with mitigation, ***Less Than significant Cumulative Impacts*** will also occur with mitigation.

Mitigation Measure(s):

7-1 During operation of the project, stationary equipment permitted by the San Joaquin Valley Air Pollution Control District shall be electric.

[22] Orosi Rock Air Quality, Greenhouse Gas, and Health Risk Assessment Gravel Mine Expansion,, page 80

Conclusion: ***Less than Significant Impact with Mitigation***

The proposed Project will result in a ***Less Than Significant Project-specific and Cumulative Impact*** related to this Checklist item with mitigation.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Project Impact Analysis: ***Less than Significant Impact with Mitigation***

"This Project does not conflict with the Tulare Climate Action Plan, the Tulare County General Plan, or any Air District Regulations, for the purpose of reducing greenhouse gas emissions.

The California State Legislature adopted AB 32 in 2006. AB 32 focuses on reducing greenhouse gases (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride) to 1990 levels by the year 2020. Pursuant to the requirements in AB 32, the ARB adopted the Climate Change Scoping Plan (Scoping Plan) in 2008, which outlines actions recommended to obtain that goal. The Scoping Plan calls for an "ambitious but achievable" reduction in California's greenhouse gas emissions, cutting approximately 30 percent from business-as-usual emission levels projected for 2020, or about 10 percent from today's levels. On a per-capita basis, that means reducing annual emissions of 14 tons of carbon dioxide for every man, woman and child in California down to about 10 tons per person by 2020.

The Scoping Plan contains a variety of strategies to reduce the State's emissions. As shown in **Table [3.7-3],** the strategies are not applicable to the project."[23]

Table 3.7-3
Inapplicable Scoping Plan Reduction Measures

Scoping Plan Reduction Measure	Reason Why Not Applicable
1. California Cap-and-Trade Program Linked to Western Climate Initiative. Implement a broad-based California Cap-and-Trade program to provide a firm limit on emissions. Link the California cap-and-trade program with other Western Climate Initiative Partner programs to create a regional market system to achieve greater environmental and economic benefits for California. Ensure California's program meets all applicable AB 32 requirements for market-based mechanisms.	When this cap-and-trade system begins, products or services (such as electricity) would be covered and the cost of the cap-and-trade system would be transferred to the consumers.
2. California Light-Duty Vehicle Greenhouse Gas Standards. Implement adopted standards and	This is a statewide measure that cannot be implemented by a project applicant or lead agency. When this

[23] Orosi Rock Air Quality, Greenhouse Gas, and Health Risk Assessment Gravel Mine Expansion, pages 81 and 82.

planned second phase of the program. Align zero-emission vehicle, alternative and renewable fuel and vehicle technology programs with long-term climate change goals.	measure is initiated, the standards would be applicable to any light-duty vehicles that would access the project site.
3. Energy Efficiency. Maximize energy efficiency building and appliance standards; pursue additional efficiency including new technologies, policy, and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California.	This is a measure for the State to increase its energy efficiency standards. The project is not constructing buildings that would benefit from energy efficiency measures.
4. Renewable Portfolio Standard. Achieve 33 percent renewable energy mix statewide. Renewable energy sources include (but are not limited to) wind, solar, geothermal, small hydroelectric, biomass, anaerobic digestion, and landfill gas.	PG&E, which would provide power to the project, is in the process of increasing the percent of renewable energy in its portfolio. It is required to increase this percentage by the year 2020 pursuant to various regulations.
5. Low Carbon Fuel Standard. Develop and adopt the Low Carbon Fuel Standard.	This is a statewide measure that cannot be implemented by a project applicant or lead agency. When this measure is initiated, the standard would be applicable to the fuel used by vehicles that would access the project site.
6. Regional Transportation-Related Greenhouse Gas Targets. Develop regional greenhouse gas emissions reduction targets for passenger vehicles. This measure refers to SB 375.	The project is not related to developing greenhouse gas emission reduction targets.
7. Vehicle Efficiency Measures. Implement light-duty vehicle efficiency measures.	When this measure is initiated, the standards would be applicable to any light-duty vehicles that would access the project site.
8. Goods Movement. Implement adopted regulations for the use of shore power for ships at berth. Improve efficiency in goods movement activities.	The project does not propose any changes to maritime, rail, or intermodal facilities or forms of transportation.
9. Million Solar Roofs Program. Install 3,000 MW of solar-electric capacity under California's existing solar programs.	This measure is to increase solar throughout California, which is being done by various electricity providers and existing solar programs.
10. Medium/Heavy-Duty Vehicles. Adopt medium and heavy-duty vehicle efficiency measures.	This is a statewide measure that cannot be implemented by a project applicant or lead agency. When this measure is initiated, the standards would be applicable to the vehicles that access the project site.
11. Industrial Emissions. Require assessment of large industrial sources to determine whether individual sources within a facility can cost-effectively reduce greenhouse gas emissions and provide other pollution reduction co-benefits. Reduce greenhouse gas emissions from fugitive emissions from oil and gas extraction and gas transmission. Adopt and implement regulations to control fugitive	This measure applies to direct greenhouse gas emissions at major industrial facilities emitting more than 0.5 million $MTCO_2e$ per year. As shown in Table 20, the project would emit far less than that; therefore, this measure is not applicable.

methane emissions and reduce flaring at refineries.	
12. High Speed Rail. Support implementation of a high-speed rail system.	This is a statewide measure that cannot be implemented by a project applicant or lead agency.
13. Green Building Strategy. Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.	The state is to increase the use of green building practices. Green building measures are not applicable to the project.
14. High Global Warming Potential Gases. Adopt measures to reduce high global warming potential gases.	When this measure is initiated, it would be applicable to the high global warming potential gases. The project would not use high global warming potential gases.
15. Recycling and Waste. Reduce methane emissions at landfills. Increase waste diversion, composting, and commercial recycling. Move toward zero-waste.	The project would not contain a landfill. The State is to help increase waste diversion.
16. Sustainable Forests. Preserve forest sequestration and encourage the use of forest biomass for sustainable energy generation.	No forested lands exist on site.
17. Water. Continue efficiency programs and use cleaner energy sources to move and treat water.	This is a measure for state and local agencies.
18. Agriculture. In the near-term, encourage investment in manure digesters and at the five-year Scoping Plan update determine if the program should be made mandatory by 2020.	The project does not currently consist of agricultural uses.

Source of ARB Scoping Plan Reduction Measure: California Air Resources Board 2008.
Source of Project Consistency or Applicability: Michael Brandman Associates.

Less Than Significant Project-specific Impacts related to this Checklist item will occur.

Cumulative Impact Analysis: ***Less than Significant Impact with Mitigation***

The geographic area of this cumulative analysis is the San Joaquin Valley Air Basin.

As the proposed Project is consistent with aforementioned plans, policies, and regulations, ***Less Than Significant Cumulative Impacts*** related to this Checklist item will occur with Mitigation.

Mitigation Measure(s):

See Mitigation Measure 7-1.

Conclusion: ***Less than Significant Impact with Mitigation***

As the proposed Project is consistent with aforementioned plans, policies, and regulations, ***Less Than Significant Project-specific and Cumulative Impacts*** related to this Checklist item will occur.

DEFINITIONS/ACRONYMS

Definitions

Achieved-in-Practice - "Any equipment, technology, practice or operation available in the United States that has been installed and operated or used at stationary source site for a reasonable period of time sufficient to demonstrate that the equipment, technology, practice or operation is reliable when operated in a manner that is typical for the process. In determining whether equipment, technology, practice or operation is Achieved-in-Practice, the District will consider the extent to which grants, incentives or other financial subsidies influence the economic feasibility of its use."[24]

Approved Alternate Technology - "Any District approved, Non-Achieved-in- Practice GHG emissions reduction measure equal to or exceeding the GHG emission reduction percentage for a specific BPS."[25]

Baseline - "The three year average (2002-2004) of GHG emissions for a type of equipment or operation within an identified class and category, expressed as annual GHG emissions per unit."[26]

Best Performance Standard - "For a specific Class and Category, the most effective, District approved, Achieved-In-Practice means of reducing or limiting GHG emissions from a GHG emissions source, that is also economically feasible per the definition of Achieved-in-Practice. BPS includes equipment type, equipment design, and operational and maintenance practices for the identified service, operation, or emissions unit class and category."[27]

Business-as-Usual - "The emissions for a type of equipment or operation within an identified class and category projected for the year 2020, assuming no change in GHG emissions per unit of activity as established for the baseline period."

Category - "A District approved subdivision within a "class" as identified by unique operational or technical aspects."[28]

Class - "The broadest District approved division of stationary GHG sources based on

[24] District Policy, Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as Lead Agency, page 6
[25] Ibid, page 6
[26] Ibid, page 7
[27] Ibid, page 7
[28] Ibid, page 7

fundamental type of equipment or industrial classification of the source operation."[29]

Global Warming - "Global warming is an increase in the temperature of the Earth's troposphere. Global warming has occurred in the past as a result of natural influences, but the term is most often used to refer to the warming predicted by computer models to occur as a result of increased emissions of greenhouse gases."[30]

Greenhouse Gas - "Greenhouse gas (GHG) emissions are the release of any gas that absorbs infrared radiation in the atmosphere. Generally when referenced in terms of global climate they are considered to be harmful. Greenhouse gases include, but are not limited to, water vapor, carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrochlorofluorocarbons (HCFCs), ozone (O_3), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6)."[31]

Operational Boundaries - "Operational boundaries are defined as "[t]he boundaries that determine the direct and indirect emissions associated with operations owned or controlled by the reporting company. This assessment allows a company to establish which operations and sources cause direct and indirect emissions, and to decide which indirect emissions to include that are a consequence of its operations" (GHG Protocol, 2008)."[32]

Acronyms

(AB)	Assembly Bill
(ARB)	Air Resources Board (Short for CARB)
(BAU)	Business As Usual
(BPS)	Best Performance Standards
(CAA)	Clean Air Act
(Cal EPA)	California Environmental Protection Agency
(CARB)	California Air Resources Board
(CH_4)	Methane
(CO_2)	Carbon Dioxide
(GHG)	Greenhouse Gases
(HFCs)	Hydrofluorocarbons
(MRF/TS)	Material Recovery Facility/Transfer Station
(MSW)	Municipal Solid Waste
(N_2O)	Nitrous Oxide
(OPR)	Governor's Office of Planning and Research
(PFCs)	Perfluorocarbons
(SF_6)	Sulfur Hexafluoride
(AIR DISTRICT)	San Joaquin Valley Air Pollution Control District

[29] Ibid, page 7
[30] General Plan Background Report, page 6-3
[31] Ibid., page 6-3
[32] Ibid., page 6-29

REFERENCES

Tulare County 2030 General Plan, August 2012

Tulare County 2030 General Plan Background Report, February 2010

2012 CEQA Guidelines

District Policy, Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as Lead Agency, San Joaquin Valley Air Pollution Control District, December 17, 2009

EPA Waste Reduction Model (WARM), http://www.epa.gov/climatechange/waste/calculators/Warm_home.html

Cal/EPA Air Resources Board, http://www.arb.ca.gov/desig/desig.htm

San Joaquin Valley Air Pollution Control District Website, http://www.valleyair.org/General_info/aboutdist.htm#Mission

Tulare County 2030 General Plan, Recirculated Draft Environmental Impact Report (RDEIR), February 2010

Hazards and Hazardous Materials
Chapter 3.8

SUMMARY OF FINDINGS

The proposed Project will not have any significant impacts related to Hazards and Hazardous Materials with mitigation. A detailed review of potential impacts is provided in the following analysis.

INTRODUCTION

California Environmental Quality Act (CEQA) Requirements

This section of the ~~Draft~~ Final Environmental Impact Report (~~DEIR~~FEIR) addresses potential impacts to Hazards and Hazardous Materials. As required in Section 15126, all phases of the proposed Project will be considered as part of the potential environmental impact.

As noted in Section 15126.2 (a), "[a]n EIR shall identify and focus on the significant environmental effects of the proposed project. In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced. Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, the human use of the land (including commercial and residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services. The EIR shall also analyze any significant environmental effects the project might cause by bringing development and people into the area affected. For example, an EIR on a subdivision astride an active fault line should identify as a significant effect the seismic hazard to future occupants of the subdivision. The subdivision would have the effect of attracting people to the location and exposing them to the hazards found there. Similarly, the EIR should evaluate any potentially significant impacts of locating development in other areas susceptible to hazardous conditions (e.g., floodplains, coastlines, wildfire risk areas) as identified in authoritative hazard maps, risk assessments or in land use plans addressing such hazards areas."[1]

The environmental setting provides a description of the Hazards and Hazardous Materials in the County. The regulatory setting provides a description of applicable Federal, State and Local

[1] 2013 CEQA Guidelines, Section 15126.2 (a)

regulatory policies that were developed in part from information contained in the Tulare County 2030 General Plan, Tulare County General Plan Background Report, and/or Tulare County 2030 General Plan EIR incorporated by reference and summarized below. Additional documents utilized are noted as appropriate. A description of the potential impacts of the proposed Project is provided and includes the identification of feasible mitigation measures (if necessary and feasible) to avoid or lessen the impacts.

Thresholds of Significance

- Create a significant hazard
- Located within one-quarter mile of an existing or proposed school
- Located on a list of hazardous materials sites
- Located within an airport land use plan
- Located within the vicinity of a private airstrip
- Interfere adopted emergency response plan or emergency evacuation plan
- Wildland Fire Risk

ENVIRONMENTAL SETTING

"A hazardous material is defined by the California Code of Regulations (CCR) as a substance that, because of physical or chemical properties, quantity, concentration, or other characteristics, may either (1) cause an increase in mortality or an increase in serious, irreversible, or incapacitating, illness; or (2) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported or disposed of (CCR, Title 22, Division 4.5, Chapter 10, Article 2, Section 66260.10)."[2]

"Similarly, hazardous wastes are defined as materials that no longer have practical use, such as substances that have been discarded, discharged, spilled, contaminated, or are being stored prior to proper disposal. According to Title 22 of the CCR, hazardous materials and hazardous wastes are classified according to four properties: toxic, ignitable, corrosive, and reactive (CCR, Title 22, Chapter 11, Article 3)."[3]

Hazardous Waste Shipments Originating Within Tulare County

"A determination of the routes used to transport hazardous waste within Tulare County was performed by analysis of Hazardous Waste Tracking System (HWTS) data on hazardous shipments. Calendar year 2002 manifest data indicates that a total of 1,606 tons of hazardous waste was transported from all categories of generators in Tulare County."[4] The quantities of hazardous waste transported from facilities located within each zip code in Tulare County are shown in the table below.

[2] General Plan Background Report, page 8-19
[3] Ibid., pages 8-19 to 8-20
[4] Ibid., pages 8-31

Table 3.8-1
Transport of Hazardous Waste

Zip Code	Total Tons	Zip Code	Total Tons	Zip Code	Total Tons	Zip Code	Total Tons
93219	0.579	93221	19.100	93223	14.73	93227	6.792
93244	4.270	93247	36.370	93256	14.39	93257	155.000
93262	0.459	93271	4.463	93272	17.78	93274	146.700
93275	14.870	93277	407.80	93279	52.01	93286	7.152
93291	321.700	93292	25.600	93615	2.606	93618	139.100
93631	321.700	93647	65.630	93654	4.255	93673	4.915

Source: General Plan Background Report

Environmental Health Department Futures Assessment

"The Environmental Health Department [EHD], of which the CUPA is a part, anticipates a slight increase in the reported volume of hazardous waste generated within Tulare County in year 2003/04. However, EHD does not expect an increase in the actual volume of hazardous waste generated over the same period."[5]

REGULATORY SETTING

Federal Agencies & Regulations

Hazardous Materials Transportation Act

The Hazardous Materials Transportation Act of 1975 (HMTA) as amended, is the major transportation-related statute affecting DOE. The objective of the HMTA according to the policy stated by Congress is ". . .to improve the regulatory and enforcement authority of the Secretary of Transportation to protect the Nation adequately against risks to life and property which are inherent in the transportation of hazardous materials in commerce." The HMTA empowered the Secretary of Transportation to designate as hazardous material any "particular quantity or form" of a material that "may pose an unreasonable risk to health and safety or property."

Regulations apply to ". . .any person who transports, or causes to be transported or shipped, a hazardous material; or who manufactures, fabricates, marks, maintains, reconditions, repairs, or tests a package or container which is represented, marked, certified, or sold by such person for use in the transportation in commerce of certain hazardous materials.""[6]

Superfund

"Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), commonly referred to as "Superfund", was enacted on December 11, 1980. The purpose of CERCLA was to provide authorities with the ability to respond to uncontrolled releases of

[5] General Plan Background Report, page 8-32
[6] US Department of Energy, The Office of Health, Safety and Security, http://www.hss.doe.gov/sesa/environment/policy/hmta.html

hazardous substances from inactive hazardous waste sites that endanger public health and the environment. CERCLA established prohibitions and requirements concerning closed and abandoned hazardous waste sites, provided for liability of persons responsible for releases of hazardous waste at such sites, and established a trust fund to provide for cleanup when no responsible party could be identified. Additionally, CERCLA provided for the revision and republishing of the National Contingency Plan (NCP) that provides the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants. The NCP also provides for the National Priorities List, a list of national priorities among releases or threatened releases throughout the United States for the purpose of taking remedial action."[7]

"Superfund Amendments and Reauthorization Act SARA amended CERCLA on October 17, 1986. This amendment increased the size of the Hazardous Response Trust Fund to $8.5 billion, expanded EPA's response authority, strengthened enforcement activities at Superfund sites; and broadened the application of the law to include federal facilities. In addition, new provisions were added to the law that dealt with emergency planning and community right to know. SARA also required EPA to revise the Hazard Ranking System to ensure that the system accurately assesses the relative degree of risk to human health and the environment posed by sites and facilities subject to review for listing on the National Priorities List."[8]

Federal Aviation Regulations

Sec. 77.17 — Form and time of notice

(a) Each person who is required to notify the Administrator under §77.13(a) shall send one executed form set (four copies) of FAA Form 7460–1, Notice of Proposed Construction or Alteration, to the Manager, Air Traffic Division, FAA Regional Office having jurisdiction over the area within which the construction or alteration will be located. Copies of FAA Form 7460–1 may be obtained from the headquarters of the Federal Aviation Administration and the regional offices.

(b) The notice required under §77.13(a) (1) through (4) must be submitted at least 30 days before the earlier of the following dates:

(1) The date the proposed construction or alteration is to begin.

(2) The date an application for a construction permit is to be filed.

However, a notice relating to proposed construction or alteration that is subject to the licensing requirements of the Federal Communications Act may be sent to FAA at the same time the application for construction is filed with the Federal Communications Commission, or at any time before that filing.

(c) A proposed structure or an alteration to an existing structure that exceeds 2,000 feet in height above the ground will be presumed to be a hazard to air navigation and to result in an inefficient utilization of airspace and the applicant has the burden of overcoming that presumption. Each notice submitted under the pertinent provisions of this part 77 proposing a structure in excess of 2,000 feet above ground, or an alteration that will make an existing structure exceed that height, must contain a detailed showing, directed to

[7] General Plan Background Report, page 8-20
[8] Ibid., page 8-21

meeting this burden. Only in exceptional cases, where the FAA concludes that a clear and compelling showing has been made that it would not result in an inefficient utilization of the airspace and would not result in a hazard to air navigation, will a determination of no hazard be issued.

(d) In the case of an emergency involving essential public services, public health, or public safety that requires immediate construction or alteration, the 30-day requirement in paragraph (b) of this section does not apply and the notice may be sent by telephone, telegraph, or other expeditious means, with an executed FAA Form 7460–1 submitted within 5 days thereafter. Outside normal business hours, emergency notices by telephone or telegraph may be submitted to the nearest FAA Flight Service Station.

(e) Each person who is required to notify the Administrator by paragraph (b) or (c) of §77.13, or both, shall send an executed copy of FAA Form 117–1, Notice of Progress of Construction or Alteration, to the Manager, Air Traffic Division, FAA Regional Office having jurisdiction over the area involved.

State Agencies & Regulations

Hazardous Substance Account Act (1984), California Health and Safety Code Section 25300 ET SEQ (HSAA)

"This act, known as the California Superfund, has three purposes: 1) to respond to releases of hazardous substances; 2) to compensate for damages caused by such releases; and 3) to pay the state's 10 percent share in CERCLA cleanups. Contaminated sites that fail to score above a certain threshold level in the EPA's ranking system may be placed on the California Superfund list of hazardous wastes requiring cleanup."[9]

California Environmental Protection Agency (Cal/EPA) Department of Toxic Substance Control (DTSC)

"Cal/EPA has regulatory responsibility under Title 22 of the California Code of Regulations (CCR) for administration of the state and federal Superfund programs for the management and cleanup of hazardous materials. The DTSC is responsible for regulating hazardous waste facilities and overseeing the cleanup of hazardous waste sites in California. The Hazardous Waste Management Program (HWMP) regulates hazardous waste through its permitting, enforcement and Unified Program activities. HWMP maintains the EPA authorization to implement the RCRA program in California, and develops regulations, policies, guidance and technical assistance/ training to assure the safe storage, treatment, transportation and disposal of hazardous wastes. The State Regulatory Programs Division of DTSC oversees the technical implementation of the state's Unified Program, which is a consolidation of six environmental programs at the local level, and conducts triennial reviews of Unified Program agencies to ensure that their programs are consistent statewide and conform to standards."[10]

[9] General Plan Background Report, page 8-22
[10] General Plan Background Report, pages 8-22 and 8-23

California Occupational Safety and Health Administration (Cal/OSHA)

"Cal/OSHA and the Federal OSHA are the agencies responsible for assuring worker safety in the handling and use of chemicals in the workplace. Pursuant to the Occupational Safety and Health Act of 1970, Federal OSHA has adopted numerous regulations pertaining to worker safety, contained in the Code of Federal Regulations Title 29 (29 CFR). These regulations set standards for safe workplaces and work practices, including standards relating to hazardous material handling. Cal/OSHA assumes primary responsibility for developing and enforcing state workplace safety regulations. Because California has a federally General Plan Background Report December 2007 approved OSHA program, it is required to adopt regulations that are at least as stringent as those identified in 29 CFR. Cal/OSHA standards are generally more stringent than federal regulations."[11]

Hazardous Materials Transport Regulations

"California law requires that Hazardous Waste (as defined in California Health and Safety Code Division 20, Chapter 6.5) be transported by a California registered hazardous waste transporter that meets specific registration requirements. The requirements include possession of a valid Hazardous Waste Transporter Registration, proof of public liability insurance, which includes coverage for environmental restoration, and compliance with California Vehicle Code registration regulations required for vehicle and driver licensing."[12]

Cal/EPA Cortese List

"The provisions in Government Code Section 65962.5 are commonly referred to as the "Cortese List" (after the Legislator who authored the legislation that enacted it). The list, or a site's presence on the list, has bearing on the local permitting process as well as on compliance with the California Environmental Quality Act (CEQA)."[13] The Cortese List identifies the following:

- Hazardous Waster and Substance Sites
- Cease and desist order Sites
- Waste Constituents above Hazardous Waste Levels outside the Waste Management Unit Sites
- Leaking Underground Tank (LUST) Cleanup Sites
- Other Cleanup Sites
- Land Disposal Sites
- Military Sites
- WDR Sites
- Permitted Underground Storage Tank (UST) Facilities Sites
- Monitoring Wells Sites
- DTSC Cleanup Sites
- DTSC Hazardous Waste Permit Sites

[11] Ibid., pages 8-23 and 8-24
[12] Ibid., page 8-24
[13] Cal/EPA Cortese List background, http://www.calepa.ca.gov/sitecleanup/corteselist/Background.htm

Local Policy & Regulations

Tulare County Environmental Health Division

"The Tulare County Department of Public Health protects health, prevents disease, and promotes the health and well-being for all persons in Tulare County. Public Health focuses on the population as a whole, rather than individuals. We conduct our activities through a network of public health professionals throughout the community. Public health nurses make home visits to families with communicable diseases; epidemiologists investigate and analyze data on diseases; our emergency preparedness unit responds to health related emergencies and assists communities in recovery; environmental health specialists ensure safe food, water, and housing; health operations assures the quality and accessibility of health services; and all work with community coalitions to advocate for public policies to protect and improve health."[14]

Tulare County General Plan Policies

The General Plan has a number of policies that apply to projects within Tulare County. General Plan policies that relate to the proposed Project are listed as follows:

HS-4.1 Hazardous Materials
The County shall strive to ensure hazardous materials are used, stored, transported, and disposed of in a safe manner, in compliance with local, State, and Federal safety standards, including the Hazardous Waste Management Plan, Emergency Operations Plan, and Area Plan.

HS-4.3 Incompatible Land Uses
The County shall prevent incompatible land uses near properties that produce or store hazardous waste.

HS-4.4 Contamination Prevention
The County shall review new development proposals to protect soils, air quality, surface water, and groundwater from hazardous materials contamination.

ERM-3.1 Environmental Contamination
All mining operations in the County shall be required to take precautions to avoid contamination from wastes or incidents related to the storage and disposal of hazardous materials, or general operating activity at the site.

[14] Tulare County Environmental Health Webpage, http://www.tularehhsa.org/index.cfm/public-health/about-phd/

IMPACT EVALUATION

Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Project Impact Analysis: ***Less than Significant Impact***

The existing operations include the storage of 20,000 gallons of diesel fuel for mobile equipment typical of mining operations. The existing operations also have lubricating and equipment maintenance oils. The proposed Project; however, includes utilizing non-mobile equipment that uses electricity rather than diesel fuel and there will be a lower need for diesel fuel. In addition, the amount of lubricating oils will not create a significant hazard as the amount stored is typical of a mining/rock crushing operation.[HG1] The project includes efficiency improvements to build surge and feed the plant with less equipment in the new operation. This includes fewer and more efficient mobile equipment utilized on the project site. The equipment used in the proposed project is found in Table 8 of the Air Quality, Greenhouse Gas, and Health Risk Assessment (Appendix E). The applicant is also required to obtain a Hazardous Materials Business Plan from the Tulare County Environmental Health Services.

Potential Project-specific impacts related to this Checklist item will be ***Less Than Significant***.

Cumulative Impact Analysis: ***Less than Significant Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

With less than significant Project-specific impacts, less than significant cumulative impacts related to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***Less than Significant Impact***

Potential Project-specific and cumulative impacts related to this Checklist item are ***Less Than Significant***.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials

into the environment?

Project Impact Analysis: ***Less than Significant Impact***

The existing operation includes fuel deliveries for the diesel fuel stored on the site. As the equipment that will be used as part of proposed Project will be electricity driven, there will be less fuel deliveries as there will be a large reduction in the use of diesel fuel used for operations. [HG2]Conditions of approval have been established that require no truck maintenance or washing to occur at the site. Heavy equipment maintenance[HG3] (such as a loader) is required to occur on a concrete surface or at an offsite location. If such a surface is unavailable or impractical[HG4], a drop cloth or other impermeable surface shall be utilized to prevent surface waste discharge that would contribute to soil and groundwater contamination, with any spills ~~promptly~~[HG5] immediately cleaned up. Project-specific impacts related to this Checklist item will be ***Less Than Significant***.

Cumulative Impact Analysis: ***Less than Significant Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

With less than significant Project-specific impacts, ***Less Than Significant Cumulative Impacts*** related to this Checklist item will also occur.

Mitigation Measure(s):

None Required[HG6]**.**

Conclusion: ***Less than Significant Impact***

Potential Project-specific and cumulative impacts related to this Checklist item are ***Less Than Significant***.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Project Impact Analysis: ***No Impact***

The Project site is not located within 0.25 mile of an existing or proposed school. Therefore, ***No Project-specific Impacts*** to this Checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

The Project site is not located within 0.25 mile of an existing or proposed school. Therefore, ***No Cumulative Impacts*** to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***No Impact***

As noted earlier, ***No Project-specific or Cumulative Impacts*** to this Checklist item will occur.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Project Impact Analysis: ***No Impact***

As of the preparation date of this document, the Project site was not located on a Cortese List site. ***No Project-specific Impacts*** to this Checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

The Project site is not located on any Cortese List of hazardous materials. As such ***No Cumulative Impacts*** related to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***No Impact***

As noted earlier, ***No Project-specific or Cumulative Impacts*** to this Checklist item will occur.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

Project Impact Analysis: ***No Impact***

The nearest airport (Alta Airport) is located more than 2 miles from the Project site. As this private airport is permanently closed, ***No Project-specific Impacts*** related to this Checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

As the nearest airport is permanently closed, ***No Cumulative Impacts*** to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***No Impact***

As noted earlier, ***No Project-specific or Cumulative Impacts*** to this Checklist item will occur.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

Project Impact Analysis: ***No Impact***

The nearest airport to the Project site is Alta Airport. However, this private airport is permanently closed. ***No Project-specific Impacts*** related to this Checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

As the nearest airport is permanently closed, ***No Cumulative Impacts*** to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***No Impact***

As noted earlier, ***No Project-specific or Cumulative Impacts*** related to this Checklist item will occur.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Project Impact Analysis: ***No Impact***

"Tulare County has in place an emergency plan to cope with natural disasters that are statewide or happen locally. The County Fire Department and local stationed California Department of Forestry (CDF) are well prepared to fight fires locally as well as statewide. The United States Forest Service (USFS) is in charge of fires that happen in the national parks and Tulare County assists with the fire management process as needed."[15]

"In the event of a disaster, certain facilities are critical to serve as evacuation centers, provide vital services, and provide for emergency response. Existing critical facilities in Tulare County include hospitals, county dispatch facilities, electrical, gas, and telecommunication facilities, water storage and treatment systems, wastewater treatment systems, schools, and other government facilities. This plan also addresses evacuation routes, which include all freeways, highways, and arterials that are located outside of the 100-year flood plain."[16]

The proposed Project does not involve a change to any emergency response plan. There is an existing driveway that can allow large transport trucks. As such emergency vehicles will be able to access the site. ***No Project-specific Impacts*** related to this Checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

The proposed Project does not include alterations to an emergency plan or include reductions of site accessibility by emergency vehicles. ***No Cumulative Impacts*** to this Checklist item will occur.

[15] TCAG Regional Transportation Plan, Page 1-11
[16] General Plan Background Report, page 8-35 to 8-36

Mitigation Measure(s):

None required.

Conclusion: ***No Impact***

As noted earlier, ***No Project-specific or Cumulative Impacts*** related to this Checklist item will occur.

h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Project Impact Analysis: ***No Impact***

The Project site is already developed. In addition, there are agricultural uses surrounding the site. With this environmental context, the Project site will not be considered to be located within a wildlands area. Therefore, the Project will not expose people or structure to wildland fires. ***No Project-specific Impacts*** related to this Checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

The Project site in not located in wildland and will not impact the growth of wildlands. ***No Cumulative Impacts*** related to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***No Impact***

As noted earlier, ***No Project-specific or Cumulative Impacts*** to this Checklist item will occur.

DEFINITIONS and ACRONYMS

Definitions

Hazardous Waste Generators - Hazardous waste generators can be classified in three groups

depending on the quantity of waste generated in any month. A Conditionally Exempt Small Quantity Generator (CESQG) is defined in regulation as a generator of less than 100 kilograms of hazardous waste in a calendar month. A Small Quantity Generator (SQG) is a generator of greater than 100 kg and less than 1000 kg of hazardous waste in a calendar month. A Large Quantity Generator (LQG) generates greater than 1000 kg of hazardous waste in a calendar month. Determination of whether a facility is a CESQG, SQG, or LQG is the responsibility of the generator. The designation may change during the year, based on the quantity of hazardous waste produced during a particular month. Specific hazardous waste materials may also be exempt from the monthly total quantity. Therefore, the Certified Unified Program Agencies (CUPA) cannot authoritatively designate the number of generators within each of the earlier categories.

Small Quantity Generators - CUPA has designated 58 active and 30 inactive small quantity generators (SQG's). The total estimated quantities of hazardous waste generated within Tulare County by active and inactive SQG's during calendar year 2002 were 121.7 and 56.3 tons, respectively.

Large Hazardous Waste Producers - CUPA has designated 23 active and 3 inactive large quantity generators (LQG's). The total estimated quantities of hazardous waste generated within Tulare County by active and inactive LQG's during calendar year 2002 were 559.7 and 121.6 tons, respectively.

Storage Facilities - According to available information from the agencies (Department of Toxic Substances Control [DTSC] and RWQCB) that oversee treatment, storage and disposal facilities (TSDFs), there are no facilities authorized for the storage of hazardous waste in Tulare County.

Disposal Facilities - According to available information from the agencies (DTSC and RWQCB) that oversee treatment, storage and disposal facilities (TSDFs), there are no facilities authorized for the disposal of hazardous waste in Tulare County.

Planned Treatment, Storage and Disposal Facilities - According to information available to the CUPA, there are no new treatment, storage and disposal facilities proposed in Tulare County.

Acronyms

(CDF/CalFire)	California Department of Forestry
CERCLA)	Comprehensive Environmental Response, Compensation and Liability Act
(DOE)	Department of Energy
(DTSC)	Cal/EPA Department of Toxic Substance Control
(HMTA)	Hazardous Materials Transportation Act of 1975
(HWMP	Hazardous Waste Management Program
(HWTS)	Hazardous Waste Tracking System
(LUST)	Leaking Underground Tank
(NCP)	National Contingency Plan
(SARA)	Superfund Amendments and Reauthorization Act

(USFS) United States Forest Service

REFERENCES

2011 Regional Transportation Plan, Tulare County Association of Governments (TCAG)

Tulare County 2030 General Plan, August 2012

Tulare County 2030 General Plan Background Report, February 2010

US Department of Energy, The Office of Health, Safety and Security, http://www.hss.doe.gov/sesa/environment/policy/hmta.html

Cal/EPA Cortese List, http://www.calepa.ca.gov/sitecleanup/corteselist/Background.htm

Tulare County Environmental Health Webpage, http://www.tularehhsa.org/index.cfm/public-health/about-phd/

2013 CEQA Guidelines

Cal/EPA Cortese List, http://www.calepa.ca.gov/sitecleanup/corteselist/Background.htm

Hydrology and Water Quality
Chapter 3.9

SUMMARY OF FINDINGS

The proposed Project will result in less than significant impacts related to Hydrology and Water Quality with mitigation. A detailed review of potential impacts is provided in the following analysis.

INTRODUCTION

California Environmental Quality Act (CEQA) Requirements

This section of the ~~Draft~~Final Environmental Impact Report (~~DEIR~~FEIR) addresses potential impacts to Hydrology and Water Quality. As required in Section 15126, all phases of the proposed Project will be considered was part of the potential environmental impact.

As noted in 15126.2 (a), "[a]n EIR shall identify and focus on the significant environmental effects of the proposed project. In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area, as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced. Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, the human use of the land (including commercial and residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services. The EIR shall also analyze any significant environmental effects the project might cause by bringing development and people into the area affected. For example, an EIR on a subdivision astride an active fault line should identify as a significant effect the seismic hazard to future occupants of the subdivision. The subdivision would have the effect of attracting people to the location and exposing them to the hazards found there. Similarly, the EIR should evaluate any potentially significant impacts of locating development in other areas susceptible to hazardous conditions (e.g., floodplains, coastlines, wildfire risk areas) as identified in authoritative hazard maps, risk assessments or in land use plans addressing such hazards areas."[1]

[1] 2013 CEQA Guidelines, Section 15126.2 (a)

The environmental setting provides a description of the Hydrology and Water Quality in the County. The regulatory setting provides a description of applicable Federal, State and Local regulatory policies that were developed in part from information contained in the Tulare County 2030 General Plan, Tulare County General Plan Background Report and/or Tulare County General Plan Revised DEIR incorporated by reference and summarized below. Additional documents utilized are noted as appropriate. A description of the potential impacts of the proposed Project is provided and includes the identification of feasible mitigation measures (if necessary and feasible) to avoid or lessen the impacts.

Thresholds of Significance

The thresholds of significance for this section are established by the CEQA checklist item questions. The following are potential thresholds for significance.

- Project not in compliance with the regulations outlined by the State Water Resources Control Board.
- Project not in compliance with the regulations by the Regional Water Quality Control Board.
- Design of stormwater facilities will not adequately protect surface water quality.
- Project will cause erosion.
- Project will alter watercourse and increase flooding impacts.
- Project's water usage not assessed in the Tulare County 2030 General Plan (General Plan Amendment, Zone Change, etc.).
- Project that will impact service levels of a Water Services District.
- Project includes or requires an expansion of a Water Service District.
- Project in flood zone.
- Project will create a flood safety hazard.
- Project located immediately downstream of a dam.
- Project violate any water quality standards or waste discharge requirements.
- Project will 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 (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).
- Project will 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.
- Project will 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.
- Project will create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.
- Project will otherwise substantially degrade water quality; 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.

- Project will place within a 100-year flood hazard area structures which would impede or redirect flood flows.
- Project will 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; and/or be subject to inundation by seiche, tsunami, or mudflow.

ENVIRONMENTAL SETTING

"The Tulare Lake Hydrologic Region covers approximately 10.9 million acres (17,050 square miles) and includes all of Kings and Tulare counties and most of Fresno and Kern counties... The southern portion of the San Joaquin Valley is subdivided into two separate basins, the San Joaquin and the Tulare, by a rise in the valley floor resulting from an accumulation of alluvium between the San Joaquin River and the Kings River fan. The valley floor in this region had been a complex series of interconnecting natural sloughs, canals, and marshes."[2]

> *"The Basin is one of the most important agricultural centers of the world. Industries related to agriculture, such as food processing and packaging (including canning, drying, and wine making), are prominent throughout the area. Producing and refining petroleum lead non-agricultural industries in economic importance."*[3]

The Tulare Lake Hydrologic Region has watershed areas (surface water) and groundwater sub-basin areas. See **Figure 3.9-1**.

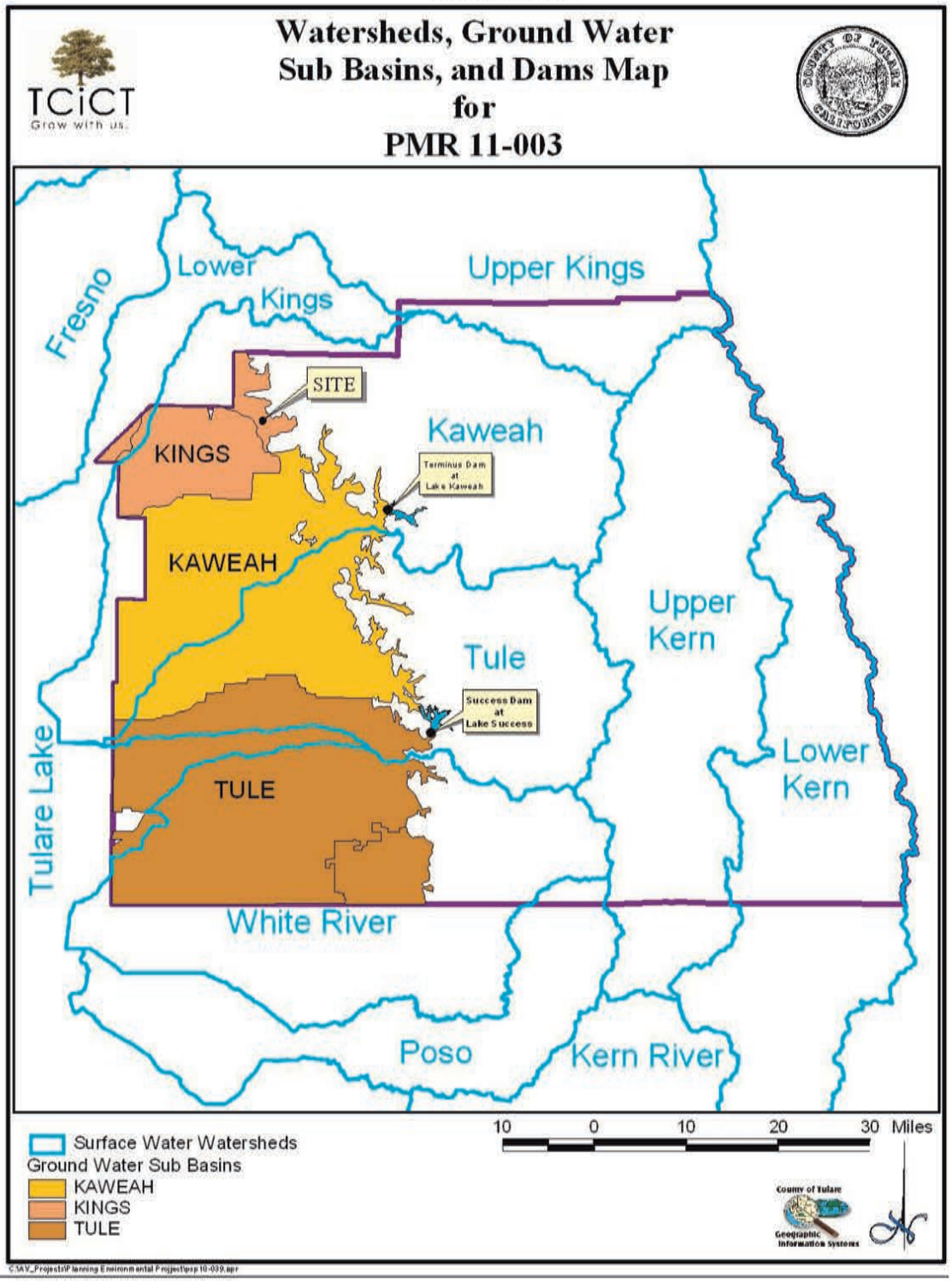
Watershed (Surface Water)

"The Tulare Lake region is divided into several main hydrologic subareas: the alluvial fans from the Sierra foothills and the basin subarea (in the vicinity of the Kings, Kaweah, and Tule rivers and their distributaries); the Tulare Lake bed; and the southwestern uplands. The alluvial fan/basin subarea is characterized by southwest to south flowing rivers, creeks, and irrigation canal systems that convey surface water originating from the Sierra Nevada. The dominant hydrologic features in the alluvial fan/basin subarea are the Kings, Kaweah, Tule, and Kern rivers and their major distributaries."[4]

"Surface water from the Tulare Lake Basin only drains north into the San Joaquin River in years of extreme rainfall. This essentially closed basin is situated in the topographic horseshoe formed by the Diablo and Temblor Ranges on the west, by the San Emigdio and Tehachapi Mountains on the south, and by the Sierra Nevada Mountains on the east and southeast."[5]

[2] California Water Plan Update 2009, Tulare Lake, page TL-5
[3] Water Quality Control Plan for the Tulare Lake Basin, page I-1
[4] California Water Plan Update 2009, Tulare Lake, page TL-8
[5] Ibid., page I-1

Figure 3.9-1
Watershed Map



Surface Water Quality

"Surface water quality in the Basin is generally good, with excellent quality exhibited by most eastside streams. The Regional Water Board intends to maintain this quality."[6] Specific objectives outlined in the Water Quality Control Plan are listed below: [7]

- **Ammonia:** Waters shall not contain un-ionized ammonia in amounts which adversely affect beneficial uses. In no case shall the discharge of wastes cause concentrations of un-ionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters.
- **Bacteria:** In waters designated REC-1, the fecal coliform concentration based on a minimum of not less than five samples for any 30-day period shall not exceed a geometric mean of 200/100 ml, nor shall more than ten percent of the total number of samples taken during any 30-day period exceed 400/100 ml.
- **Biostimulatory Substances:** Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.
- **Chemical Constituents:** Waters shall not contain chemical constituents in concentrations that adversely affect beneficial uses.
- **Color:** Waters shall be free of discoloration that causes nuisance or adversely affects beneficial uses.
- **Dissolved Oxygen:** Waste discharges shall not cause the monthly median dissolved oxygen concentrations (DO) in the main water mass (at centroid of flow) of streams and above the thermocline in lakes to fall below 85 percent of saturation concentration, and the 95 percentile concentration to fall below 75 percent of saturation concentration.
- **Floating Material:** Waters shall not contain floating material, including but not limited to solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses.
- **Oil and Grease:** Waters shall not contain oils, greases, waxes, or other materials in concentrations that cause nuisance, result in a visible film or coating on the surface of the water or on objects in the water, or otherwise adversely affect beneficial uses.
- **pH:** The pH of water shall not be depressed below 6.5, raised above 8.3, or changed at any time more than 0.3 units from normal ambient pH.
- **Pesticides:** Waters shall not contain pesticides in concentrations that adversely affect beneficial uses.
- **Radioactivity:** Radionuclides shall not be present in concentrations that are deleterious to human, plant, animal, or aquatic life nor which result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life
- **Salinity:** Waters shall be maintained as close to natural concentrations of dissolved matter as is reasonable considering careful use of the water resources.
- **Sediment:** The suspended sediment load and suspended sediment discharge rate of waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.

[6] Water Quality Control Plan for the Tulare Lake Basin, page III-3
[7] Ibid. Page III-2 to III-7

- **Settleable Material:** Waters shall not contain substances in concentrations that result in the deposition of material that causes nuisance or adversely affects beneficial uses.
- **Tastes and Odors:** Waters shall not contain taste- or odor-producing substances in concentrations that cause nuisance, adversely affect beneficial uses, or impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin or to domestic or municipal water supplies.
- **Temperature:** Natural temperatures of waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Water Board that such alteration in temperature does not adversely affect beneficial uses.
- **Toxicity:** All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life…
- **Turbidity:** Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses.

Surface Water Supply

"Surface water supplies for the Tulare Lake Basin include developed supplies from the [Central Valley Project] CVP, the [State Water Project] SWP, rivers, and local projects. Surface water also includes the supplies for required environmental flows. Required environmental flows are comprised of undeveloped supplies designated for wild and scenic rivers, supplies used for instream flow requirements, and supplies used for Bay-Delta water quality and outflow requirements. Finally, surface water includes supplies available for reapplication downstream. Urban wastewater discharges and agricultural return flows, if beneficially used downstream, are examples of reapplied surface water."[8]

"Along the eastern edge of the valley, the Friant-Kern Canal is used to divert San Joaquin River water from Millerton Lake for delivery to agencies extending into Kern County. All of the Tulare Lake region's streams are diverted for irrigation or other purposes, except in the wettest years. Historically, they drained into Tulare Lake, Kern Lake, or adjacent Buena Vista Lake. The latter ultimately drained to Tulare Lake, which is about 30 feet lower in elevation."[9]

"The Kings, Kaweah, Tule, and Kern Rivers, which drain the west face of the Sierra Nevada Mountains, are of excellent quality and provide the bulk of the surface water supply native to the Basin. Imported surface supplies, which are also of good quality, enter the Basin through the San Luis Canal/California Aqueduct System, Friant-Kern Canal, and the Delta- Mendota Canal. Adequate control to protect the quality of these resources is essential, as imported surface water supplies contribute nearly half the increase of salts occurring within the Basin."[10]

Ground Water Sub Basin

"The Tulare Lake Hydrologic Region has 12 distinct groundwater basins and seven subbasins of the San Joaquin Valley Groundwater Basin, which crosses north into the San Joaquin River

[8] General Plan Background Report, page 10-7
[9] California Water Plan Update 2009, Tulare Lake, page TL-5
[10] Water Quality Control Plan for the Tulare Lake Basin, page I-1

Hydrologic Region (Figure TL-2). These basins underlie approximately 5.33 million acres (8,330 square miles) or 49 percent of the entire hydrologic region. Groundwater has historically been important to both urban and agricultural uses, accounting for 41 percent of the region's total annual supply and 35 percent of all groundwater use in the state. Groundwater use in the region represents about 10 percent of the state's overall water supply for agricultural and urban uses."[11]

"Water agencies in the Tulare Lake region have been practicing conjunctive use for many years to manage groundwater and assist dry year supplies. Groundwater recharge is primarily from rivers and natural streambeds, irrigation water percolating below the root zone of irrigated fields, direct recharge from developed ponding basins and water banks, and in-lieu recharge where surface water is made available in-lieu of groundwater pumping. Some water agencies accomplish recharge by directing available water into existing natural streambeds and sloughs, and others encourage application of water, when available, on farmed fields. The Deer Creek and Tule River Authority provides an example of how groundwater management activities can be coordinated with other resources. The authority, in conjunction with the US Bureau of Reclamation, has constructed more than 200 acres of recharge basins as part of its Deer Creek Recharge-Wildlife Enhancement Project. When available, the project takes surplus water during winter months and delivers it to the basins, which serve as winter habitat for migrating waterfowl, creating a significant environmental benefit. Most of the water also recharges into the underlying aquifer, thereby benefiting the local groundwater system."[12]

"Generally, the quality of the ground water in the Cutler and Orosi area is good. One well in Orosi has been abandoned because it exceeded the U.S. Health Department's drinking standards for nitrates, 45 milligrams per liter (mg/1). Another well in Orosi has a high concentration of nitrates but it is within the drinking standards. The high nitrate concentrations are mostly associated with shallow wells. The existence of this salt is generally thought to be related with natural geologic conditions associated with the nearby foothills, effluent from septic tanks and nutrients which have leached from agricultural lands.

The most recent water quality tests for the Cutler water system were conducted in 1983. The tests revealed that all water constituents are within safe drinking water standards. The only constituent which came close to exceeding U.S. standards involved nitrates. One of Cutler's four wells had a measurement of 35 mg/1. The U.S. standard is 45 mg/1. With the existence of high nitrate counts in this well, and two wells in Orosi, the accepted method of correcting the problem is to abandon the well or drill the existing well deeper, thereby drawing from deeper stratas which are free of nitrates. Each district will continue to monitor the quality of its water. If nitrate problems persist or increase, the affected district will be responsible for correcting the problem using one of the previously mentioned mitigation methods."[13]

Groundwater Quality

Specific objectives outlined in the Water Quality Control Plan are listed as follows:

[11] California Water Plan Update 2009, Tulare Lake, page TL-9 to TL-10
[12] Ibid. Page TL-10
[13] Culter-Orosi Community Plan, page 27 and 28

- **"Bacteria:** In ground waters designated MUN, the concentration of total coliform organisms over any 7-day period shall be less than 2.2/100 ml.
- **Chemical Constituents:** Ground waters shall not contain chemical constituents in concentrations that adversely affect beneficial uses.
- **Pesticides:** No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
- **Radioactivity:** Radionuclides shall not be present in ground waters in concentrations that are deleterious to human, plant, animal, or aquatic life, or that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal or aquatic life.
- **Salinity:** All ground waters shall be maintained as close to natural concentrations of dissolved matter as is reasonable considering careful use and management of water resources.
- **Tastes and Odors:** Ground waters shall not contain taste- or odor producing substances in concentrations that cause nuisance or adversely affect beneficial uses.
- **Toxicity:** Ground waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life associated with designated beneficial use(s)."[14]

According to the California Water Plan, the key ground water quality issues include the following.

> **"Salinity:** Salinity is the primary contaminant affecting water quality and habitat in the Tulare Lake region. Because the groundwater basin in the San Joaquin Valley portion of the region is an internally drained and closed basin, salts, much of which are introduced into the basin with imported water supplies, build up in the soil and groundwater. Salt contained in the imported water supply is the primary source of salt circulating in the Tulare Lake region. The California Aqueduct, Friant-Kern Canal, and to a less extent Delta Mendota Canal supply most of the higher quality surface irrigation water in the Tulare Lake region. The quality of this supply may be impaired by the recirculation of salts from the San Joaquin River to the Delta Mendota Canal intake pump, leading to a greater net accumulation of salts in the basin. Delivery data from the two major water projects in California indicate there is a substantial amount of salt being transported from the Delta to other basins throughout the state. Annual import of salt into the Tulare Lake region is estimated to be 1,206 thousand tons of salt. In situ dissolution of salts and pumping from the underlying confined aquifer are important secondary sources.
>
> **Sedimentation and Erosion:** In the Central Valley, erosion is occurring from the headwaters down to the valley floor. Although naturally occurring, erosion can be accelerated by timber harvest activities, land use conversion, rural development, and grazing. Excessive soil erosion and sediment delivery can impact the beneficial uses of water by (1) silting over fish spawning habitats; (2) clogging drinking water intakes; (3) filling in pools creating shallower, wider, and warmer streams and increasing

[14] Water Quality Control Plan for the Tulare Lake Basin, pages III-7 and III-8

downstream flooding; (4) creating unstable stream channels; and (5) losing riparian habitat. Timber harvesting in the riparian zone can adversely affect stream temperatures by removing stream shading, a concern for spawning and rearing habitat for salmonids. Thousands of miles of streams are potentially impacted, and the lack of resources has prevented a systematic evaluation of these impacts.

Nitrates and Groundwater Contaminates: Groundwater is a primary water supply, but in many places it is impaired or threatened because of elevated levels of nitrates and salts that are derived principally from irrigated agriculture, dairies, discharges of wastewater to land, and from disposal of sewage from both community wastewater systems and septic tanks. As population has grown, many cities have struggled to fund improvements in wastewater systems. High TDS content of west-side water is due to recharge of streamflow originating from marine sediments in the Coast Range.

Naturally occurring arsenic and human-made organic chemicals—pesticides and industrial chemicals—in some instances have contaminated groundwater that is used as domestic water supplies in this region. In some cases, nitrates are from natural sources. Agricultural pesticides and herbicides have been detected throughout the valley, but primarily along the east side where soil permeability is higher and depth to groundwater is shallower. The most notable agricultural contaminant is DBCP, a now-banned soil fumigant and known carcinogen once used extensively on grapes."[15]

Groundwater Supply

"Surface water supplies tributary to or imported for use within the Basin are inadequate to support the present level of agricultural and other development. Therefore, ground water resources within the valley are being mined to provide additional water to supply demands."[16]

"Tulare Lake region's groundwater use rises and falls contingent on the availability of both local and imported surface supplies. The management of water resources within this region is a complex activity and critical to the region's agricultural operations. Local annual surface supplies are determined by the amount of runoff from the Sierra Nevada watersheds, the flows captured in local reservoirs, and carryover storage over a series of years. Imported surface supply availability is contingent not only on runoff in any year or series of years but also by regulations determining the amount of water that can be pumped month to month from the Sacramento-San Joaquin River Delta due to fishery and other concerns. The recent San Joaquin River settlement will reduce the overall volume of water available for diversion into the Friant-Kern Canal. The new biological opinion on the Operating Criteria and Plan (OCAP) for the SWP and CVP will impact surface water supplies to south-of-Delta water users."[17]

"Groundwater in Tulare County occurs in an unconfined state throughout, and in a confined state beneath its western portion. Extensive alluvial fans associated with the Kings, Kaweah, and Tule

[15] California Water Plan Update 2009, Tulare Lake, page TL-22 to TL-24
[16] Water Quality Control Plan for the Tulare Lake Basin, page I-1
[17] California Water Plan Update 2009, Tulare Lake, page TL-15 to TL-17

Rivers provide highly permeable areas in which groundwater in the unconfined aquifer system is readily replenished. Interfan areas between the streams contain less permeable surface soils and subsurface deposits, impeding groundwater recharge and causing well yields to be relatively low. The mineral quality of groundwater in Tulare County is generally satisfactory for all uses."[18] "Groundwater recharge is primarily from natural streams, other water added to streambeds, from deep percolation of applied irrigation water, and from impoundment of surface water in developed water bank/percolation ponds."[19]

"The Tulare Lake region has experienced water-short conditions for more than 100 years, which has resulted in a water industry that has consciously developed—through careful planning, management and facility design—the possibility of a shortage occurring in any year. Water demand is more or less controlled by available, reliable long-term water supplies. Over the years, agricultural acreage has risen and dropped largely based on water supplies. The region initially developed with surface water supplies; but local water users learned these supplies could widely vary in volume from year to year and drought conditions could quickly develop. The introduction of deep well turbines resulted in a dramatic rise in groundwater use in the early 1900s, subsequently resulting in dropping groundwater levels and land subsidence. Surface water storage and conveyance systems built to alleviate the overuse of groundwater provided an impounded supply of water that could be used during years with deficient surface water. This resulted in a regional reliance on conjunctive water use in the development of the local water economy. Efforts to address Delta environmental issues and the subsequent loss of surface water to the region is increasing groundwater use and creating concern that additional pumping will increase subsidence."[20]

According to the 2009 California Water Plan, water storage has fluctuated between 1998 and 2005. The data suggests that variations occur as a result of changing precipitation levels. See **Table 3.9-1** and **Chart 3.9-1**.

Table 3.9-1
Tulare Lake Hydrologic water balance for 1998-2005 (thousand acre-feet)

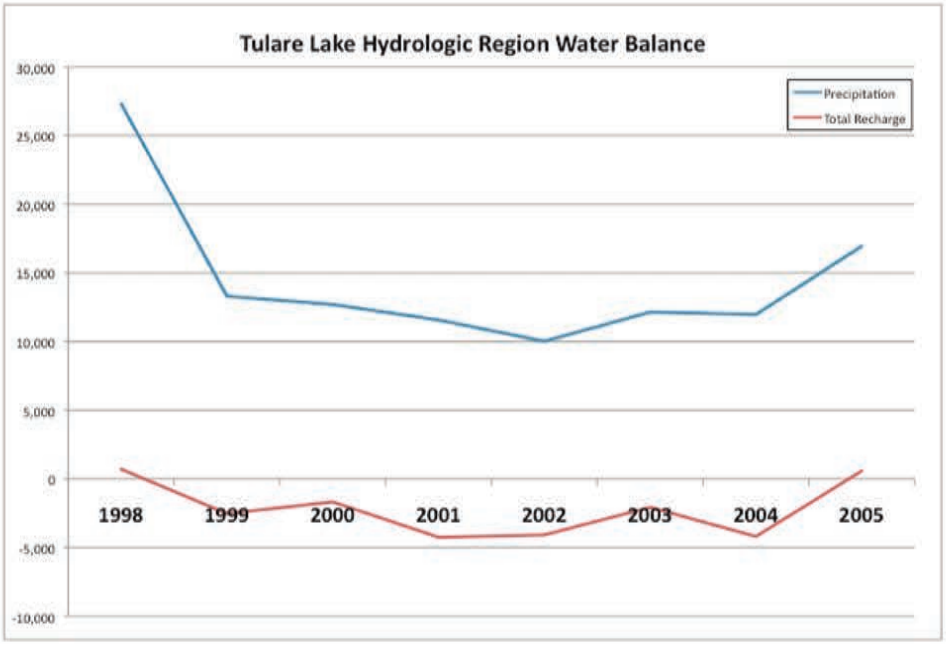
Tulare Lake Region	Water Year							
	1998	1999	2000	2001	2002	2003	2004	2005
Water Entering the Region								
Precipitation	27,306	13,298	12,693	11,564	10,021	12,137	11,964	16,939
Inflow from Oregon/Mexico	0	0	0	0	0	0	0	0
Inflow from Colorado River	0	0	0	0	0	0	0	0
Imports from Other Regions	3,716	4,817	5,627	3,696	4,239	5,174	4,816	5,909
Total	**31,022**	**18,115**	**18,320**	**15,260**	**14,260**	**17,311**	**16,780**	**22,848**
Water Leaving the Region								
Consumptive Use of Applied Water	5,401	7,486	7,427	7,591	7,938	7,430	8,031	6,655
Outflow to Oregon/Nevada/Mexico	0	0	0	0	0	0	0	0
Exports to Other Regions	1,857	821	1,540	1,093	1,643	1,898	1,961	1,724
Statutory Required Outflow to Salt Sink	0	0	0	0	0	0	0	0
Additional Outflow to Salt Sink	457	456	457	458	305	458	457	300
Evaporation, Evapotranspiration of Native Vegetation, Groundwater Subsurface Outflows, Natural and Incidental Runoff, Ag Effective Precipitation & Other Outflows	22,606	11,885	10,578	10,374	8,462	10,327	10,532	13,596

[18] General Plan Background Report, page 10-11
[19] California Water Plan Update 2009, Tulare Lake, page TL-17
[20] California Water Plan Update 2009, Tulare Lake, page TL-19

Total	**30,321**	**20,648**	**20,002**	**19,516**	**18,348**	**20,113**	**20,981**	**22,274**
Storage Changes in Region: [+] Water added to storage, [-] Water removed from storage								
Change in Surface Reservoir Storage	438	-595	-57	-141	-161	173	-199	680
Change in Groundwater Storage	263	-1,938	-1,625	-4,115	-3,927	-2,975	-4,002	-106
Total	**701**	**-2,533**	**-1,682**	**-4,256**	**-4,088**	**-2,802**	**-4,201**	**574**

Source: California Water Plan Update 2009, Tulare Lake, Department of Water Resources (This table does not include dairy usage)

Figure 3.9-2
Tulare Lake Hydrologic Region Water Balance



Source: California Water Plan Update 2009, Tulare Lake, Department of Water Resources

"Groundwater overdraft is expected to decline statewide by 2020. The reduction in irrigated acreage in drainage problem areas on the west side of the San Joaquin Valley is expected to reduce groundwater demands in the Tulare Lake region by 2020."[21] According to the 2009 California Water Plan Update, it is anticipated that there will be a 550,000 acre-feet reduction in the water demand in the Tulare Lake Hydrologic Area under Current Growth trends. Slow & Strategic Growth trends may further decrease water demand, while Expansive Growth trends may increase water demand.

"There are 19 entities in Tulare County with active programs of groundwater management. These management programs include nearly all types of direct recharge of surface water. Groundwater recovery is accomplished primarily through privately owned wells. Among the larger programs of groundwater management are those administered by the Kaweah Delta Water Conservation District, the Kings River Water Conservation District, the Tulare Irrigation District, the Lower Tule Water Users Association, and the Alta Irrigation District, utilizing water from the Friant-Kern Canal and local streams. The Kings River Water Conservation District

[21] General Plan Background Report, page 10-11b

covers the western county."[22]

Irrigation Districts in Tulare County

"The Tulare County Resource Management Agency maintains a list of special districts that provide sewer and/or water service that cannot currently meet the demand of new development projects. The list provided by Tulare County RMA (last updated April 30, 2007) indicates that following water and/or sewer districts are either under a temporary cease and desist order by the Regional Water Control Board prohibiting any new connections, or have other limitations for water and sewer connections."[23]

Table 3.9-2
Irrigation Districts in Tulare County

Entity	Surface Water	Imported Water Source	Groundwater Extraction
Alpaugh Irrigation District	NA	Friant-Kern Canal (1,000af average)	19,000 af
Alta Irrigation District	King River	Friant-Kern Canal (surplus)	230,000 af
Delano-Earlimart Irrigation District	NA	Friant-Kern Canal (146,050 af average)	8,000 af
Exeter Irrigation District	NA	Friant-Kern Canal (1,000 af average)	14,000 af
Hills Valley Irrigation District	NA	Cross Valley Canal (2,000 af average)	1,000 af
Ivanhoe Irrigation District	Kaweah River	Friant-Kern Canal (11,650 af average)	15,000 af
Kaweah Delta Water Cons. District	Kaweah River	Friant-Kern Canal (24,000 af average)	130,000 af
Kern-Tulare Water District	Kern River	Cross Valley Canal (41,000 af average)	33,000 af
Lindmore Irrigation District	NA	Friant-Kern Canal (44,000 af average)	28,000 af
Lower Tulare River Irrigation Dist.	Tule River	Friant-Kern Canal (180,200 af average) Cross Valley Canal (31,000 af average)	NA
Lindsay-Strathmore Irrigation District	NA	Friant-Kern Canal (24,150 af average)	NA
Orange Cove Irrigation District	NA	Friant-Kern Canal (39,200 af average)	30,000 af
Pioneer Water Irrigation District	Tule River		3,000 af
Pixley Irrigation District	NA	Friant-Kern Canal (1,700 af average) Cross Valley Canal (31,000 af average)	130,000 af
Porterville Irrigation District	Tule River	Friant-Kern Canal (31,000 af average)	15,000 af
Rag Gulch Water District	Kern River	Friant-Kern Canal (3,700 af average) Cross Valley Canal (13,300 af average)	
Saucelito Irrigation District	Tule River	Friant-Kern Canal (37,600 af average)	15,000 af
Stone Corral Irrigation District	NA	Friant-Kern Canal (10,000 af average)	5,000 af
Teapot Dome Irrigation District	NA	Friant-Kern Canal (5,600 af average)	
Terra Bella Irrigation District	NA	Friant-Kern Canal (29,000 af average)	2,000 af
Tulare Irrigation District	Kaweah River	Friant-Kern Canal (100,500 af average)	65,000 af

Source: Bookman-Edmonston Engineering Inc. Water Resources Management in the Southern San Joaquin Valley, Table A-1.

[22] General Plan Background Report, page 10-12
[23] California Water Plan Update 2009, Tulare Lake, page TL-17

Flooding

"Flooding is a natural occurrence in the Central Valley because it is a natural drainage basin for thousands of watershed acres of Sierra Nevada and Coast Range foothills and mountains. Two kinds of flooding can occur in the Central Valley: general rainfall floods occurring in the late fall and winter in the foothills and on the valley floor; and snowmelt floods occurring in the late spring and early summer. Most floods are produced by extended periods of precipitation during the winter months. Floods can also occur when large amounts of water (due to snowmelt) enter storage reservoirs, causing an increase in the amount of water that is released."[24]

"Flood events in the Tulare Lake region are caused by rainfall, snowmelt, and the resultant rising of normally dry lakes. Although significant progress has been made to contain floodwaters in the region, improvements to the flood control system are still needed to lessen the flood risk to life and property."[25]

"Official floodplain maps are maintained by the Federal Emergency Management Agency (FEMA). FEMA determines areas subject to flood hazards and designates these areas by relative risk of flooding on a map for each community, known as the Flood Insurance Rate Map (FIRM). A 100-year flood is considered for purposes of land use planning and protection of property and human safety. The boundaries of the 100-year floodplain are delineated by FEMA on the basis of hydrology, topography, and modeling of flow during predicted rainstorms."[26]

"The flood carrying capacity in rivers and streams has decreased as trees, vegetation, and structures (e.g., bridges, trestles, buildings) have increased along the Kaweah, Kings, and Tule Rivers. Unsecured and uprooted material can be carried down a river, clogging channels and piling up against trestles and bridge abutments that can, in turn, give way or collapse, increasing blockage and flooding potential. Flooding can force waters out of the river channel and above its ordinary floodplain. Confined floodplains can result in significantly higher water elevations and higher flow rates during high runoff and flood events."[27]

"Dam failure can result from numerous natural or human activities, such as earthquakes, erosion, improper siting, rapidly rising flood waters, and structural and design flaws. Flooding due to dam failure can cause loss of life, damage to property, and other ensuing hazards. Damage to electric-generating facilities and transmission lines associated with hydro-electric dams could also affect life support systems in communities outside the immediate hazard area."[28]

[24] General Plan Background Report, page 8-13
[25] California Water Plan Update 2009, Tulare Lake, page TL-28 to TL-29
[26] General Plan Background Report, page 8-14
[27] Ibid. Page 8-14
[28] Ibid. Page 8-17

REGULATORY SETTING

Federal Agencies & Regulations

Clean Water Act/NPDES

"The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. The basis of the CWA was enacted in 1948 and was called the Federal Water Pollution Control Act, but the Act was significantly reorganized and expanded in 1972. "Clean Water Act" became the Act's common name with amendments in 1972… Under the CWA, EPA has implemented pollution control programs such as setting wastewater standards for industry. We have also set water quality standards for all contaminants in surface waters… The CWA made it unlawful to discharge any pollutant from a point source into navigable waters, unless a permit was obtained. EPA's National Pollutant Discharge Elimination System (NPDES) permit program controls discharges. Point sources are discrete conveyances such as pipes or man-made ditches. Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need an NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters."[29]

Safe Drinking Water Act

"The Safe Drinking Water Act (SDWA) is the main federal law that ensures the quality of Americans' drinking water. Under SDWA, EPA sets standards for drinking water quality and oversees the states, localities, and water suppliers who implement those standards… SDWA was originally passed by Congress in 1974 to protect public health by regulating the nation's public drinking water supply. The law was amended in 1986 and 1996 and requires many actions to protect drinking water and its sources: rivers, lakes, reservoirs, springs, and ground water wells. (SDWA does not regulate private wells which serve fewer than 25 individuals.)"[30]

Environmental Protection Agency

The mission of EPA is to protect human health and the environment.
"EPA's purpose is to ensure that:

- all Americans are protected from significant risks to human health and the environment where they live, learn and work;
- national efforts to reduce environmental risk are based on the best available scientific information;
- federal laws protecting human health and the environment are enforced fairly and effectively;
- environmental protection is an integral consideration in U.S. policies concerning natural resources, human health, economic growth, energy, transportation, agriculture, industry, and international trade, and these factors are similarly considered in establishing environmental policy;

[29] EPA summary of the Clean Water Act – http://www.epa.gov/lawsregs/laws/cwa.html
[30] EPA summary of the Safe Drinking Water Act – http://water.epa.gov/lawsregs/rulesregs/sdwa/index.cfm

- all parts of society -- communities, individuals, businesses, and state, local and tribal governments -- have access to accurate information sufficient to effectively participate in managing human health and environmental risks;
- environmental protection contributes to making our communities and ecosystems diverse, sustainable and economically productive; and
- the United States plays a leadership role in working with other nations to protect the global environment."[31]

Army Corps of Engineers (Corps)

"The Department of the Army Regulatory Program is one of the oldest in the Federal Government. Initially it served a fairly simple, straightforward purpose: to protect and maintain the navigable capacity of the nation's waters. Time, changing public needs, evolving policy, case law, and new statutory mandates have changed the complexion of the program, adding to its breadth, complexity, and authority.

The Regulatory Program is committed to protecting the Nation's aquatic resources, while allowing reasonable development through fair, flexible and balanced permit decisions. The Corps evaluates permit applications for essentially all construction activities that occur in the Nation's waters, including wetlands."[32]

National Flood Insurance Program

"In 1968, Congress created the National Flood Insurance Program (NFIP) to help provide a means for property owners to financially protect themselves. The NFIP offers flood insurance to homeowners, renters, and business owners if their community participates in the NFIP. Participating communities agree to adopt and enforce ordinances that meet or exceed FEMA requirements to reduce the risk of flooding."[33]

State Agencies & Regulations

The Porter-Cologne Water Quality Control Act

"Under the Porter-Cologne Water Quality Control Act (Porter-Cologne), the State Water Resources Control Board (State Board) has the ultimate authority over State water rights and water quality policy. However, Porter-Cologne also establishes nine Regional Water Quality Control Boards (Regional Boards) to oversee water quality on a day-to-day basis at the local/regional level."[34]

State Water Quality Control Board

"The State Water Resources Control Board (State Water Board) was created by the Legislature

[31] http://www.epa.gov/aboutepa/whatwedo.html
[32] Army Corps of Engineers http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits.aspx
[33] Flood Insurance Program Summary: http://www.floodsmart.gov/floodsmart/pages/about/nfip_overview.jsp
[34] Porter-Cologne Water Quality Control Act Summary, http://ceres.ca.gov/wetlands/permitting/Porter_summary.html

in 1967. The joint authority of water allocation and water quality protection enables the State Water Board to provide comprehensive protection for California's waters. The State Water Board consists of five full-time salaried members, each filling a different specialty position. Board members are appointed to four-year terms by the Governor and confirmed by the Senate."[35]

Regional Water Quality Control Board

"There are nine Regional Water Quality Control Boards (Regional Boards). The mission of the Regional Boards is to develop and enforce water quality objectives and implementation plans that will best protect the State's waters, recognizing local differences in climate, topography, geology and hydrology. Each Regional Board has seven part-time members appointed by the Governor and confirmed by the Senate. Regional Boards develop "basin plans" for their hydrologic areas, issue waste discharge requirements, take enforcement action against violators, and monitor water quality."[36]

"The primary duty of the Regional Board is to protect the quality of the waters within the Region for all beneficial uses. This duty is implemented by formulating and adopting water quality plans for specific ground or surface water basins and by prescribing and enforcing requirements on all agricultural, domestic and industrial waste discharges. Specific responsibilities and procedures of the Regional Boards and the State Water Resources Control Board are contained in the Porter-Cologne Water Quality Control Act."[37]

California Department of Water Resources

"This Department's primary mission is to manage the water resources of California in cooperation with other agencies, to benefit the State's people, and to protect, restore, and enhance the natural and human environments. Other goals include:
Goal 1 - Develop and assess strategies for managing the State's water resources, including development of the California Water Plan Update.
Goal 2 - Plan, design, construct, operate, and maintain the State Water Project to achieve maximum flexibility, safety, and reliability.
Goal 3 - Protect and improve the water resources and dependent ecosystems of statewide significance, including the Sacramento-San Joaquin Bay-Delta Estuary.
Goal 4 - Protect lives and infrastructure as they relate to dams, floods, droughts, watersheds impacted by fire and disasters, and assist in other emergencies.
Goal 5 - Provide policy direction and legislative guidance on water and energy issues and educate the public on the importance, hazards, and efficient use of water.
Goal 6 - Support local planning and integrated regional water management through technical and financial assistance.
Goal 7 - Perform efficiently all statutory, legal, and fiduciary responsibilities regarding management of State long-term power contracts and servicing of power revenue bonds.

[35] State Water Board Website, http://www.waterboards.ca.gov/about_us/water_boards_structure/mission.shtml
[36] Ibid.
[37] Central Valley Water Quality Control Board, http://www.swrcb.ca.gov/centralvalley/about_us/

Goal 8 - Provide professional, cost-effective, and timely services in support of DWR's programs, consistent with governmental regulatory and policy requirements.[38]

SB 610 (Costa, 2001)

This Bill requires additional information to be included as part of an urban water management plan if groundwater is identified as a source of water available to the supplier. This law also requires an urban water supplier to include in the plan a description of all water supply projects and programs that may be undertaken to meet total projected water use.

SB 221 (Kuehl, 2001)

This Bill prohibits approval of a tentative subdivision map, or a parcel map for which a tentative subdivision map is not required, or a development agreement for a subdivision of property of more than 500 dwelling units unless the city or county provides written verification from the applicable public water system that a sufficient water supply is available. In addition, the law requires the city or county make a finding that sufficient water supplies are, or will be, available prior to completion of the project.

Local Policy & Regulations

Tulare County Environmental Health Services

"The Environmental Health Services Division regulates retail food sales and hazardous waste storage and disposal; inspects contaminated sites and monitors public water systems, which protects and reduces the degradation of groundwater. The Division regulates the production and shipping of milk for Tulare and Kings Counties and also serves as staff to the Tulare County Water Commission appointed by the Board of Supervisors. The goal of HHSA's Environmental Health division is to protect Tulare County's residents and visitors by ensuring that our environment is kept clean and healthy."[39] This division requires water quality testing of public water systems.

Any project that involves septic tanks and water wells within Tulare County is subject to approval by this Agency. In addition, all recommendations provided by this Agency will be added as Mitigation Measures to ensure reduction of environmental impacts.

Tulare County General Plan Policies

The Tulare County General Plan has a number of policies that apply to projects within County of Tulare. General Plan policies that relate to the proposed Project are listed below.

PF-4.14 Compatible Project Design
The County may ensure proposed development within CACUABs is compatible with future

[38] California Department of Water Resources website, http://www.water.ca.gov/about/mission.cfm
[39] Tulare County Environmental Health Division, http://www.tularehhsa.org/index.cfm/public-health/environmental-health/

sewer and water systems, and circulation networks as shown in city plans.

AG-1.17 Agricultural Water Resources
The County shall seek to protect and enhance surface water and groundwater resources critical to agriculture.

HS-4.4 Contamination Prevention
The County shall review new development proposals to protect soils, air quality, surface water, and groundwater from hazardous materials contamination.

HS-5.2 Development in Floodplain Zones
The County shall regulate development in the 100-year floodplain zones as designated on maps prepared by FEMA in accordance with the following:

1. Critical facilities (those facilities which should be open and accessible during emergencies) shall not be permitted.
2. Passive recreational activities (those requiring non-intensive development, such as hiking, horseback riding, picnicking) are permissible.
3. New development and divisions of land, especially residential subdivisions, shall be developed to minimize flood risk to structures, infrastructure, and ensure safe access and evacuation during flood conditions.

HS-5.4 Multi-Purpose Flood Control Measures
The County shall encourage multipurpose flood control projects that incorporate recreation, resource conservation, preservation of natural riparian habitat, and scenic values of the County's streams, creeks, and lakes. Where appropriate, the County shall also encourage the use of flood and/or stormwater retention facilities for use as groundwater recharge facilities.

HS-5.9 Floodplain Development Restrictions
The County shall ensure that riparian areas and drainage areas within 100-year floodplains are free from development that may adversely impact floodway capacity or characteristics of natural/riparian areas or natural groundwater recharge areas.

HS-5.11 Natural Design
The County shall encourage flood control designs that respect natural curves and vegetation of natural waterways while retaining dynamic flow and functional integrity.

WR-1.1 Groundwater Withdrawal
The County shall cooperate with water agencies and management agencies during land development processes to help promote an adequate, safe, and economically viable groundwater supply for existing and future development within the County. These actions shall be intended to help the County mitigate the potential impact on ground water resources identified during planning and approval processes.

WR-1.5 Expand Use of Reclaimed Wastewater
To augment groundwater supplies and to conserve potable water for domestic purposes, the

County shall seek opportunities to expand groundwater recharge efforts.

WR-1.6 Expand Use of Reclaimed Water
The County shall encourage the use of tertiary treated wastewater and household gray water for irrigation of agricultural lands, recreation and open space areas, and large landscaped areas as a means of reducing demand for groundwater resources.

WR-2.1 Protect Water Quality
All major land use and development plans shall be evaluated as to their potential to create surface and groundwater contamination hazards from point and non-point sources. The County shall confer with other appropriate agencies, as necessary, to assure adequate water quality review to prevent soil erosion; direct discharge of potentially harmful substances; ground leaching from storage of raw materials, petroleum products, or wastes; floating debris; and runoff from the site.

WR-2.2 National Pollutant Discharge Elimination System (NPDES) Enforcement
The County shall continue to support the State in monitoring and enforcing provisions to control non-point source water pollution contained in the U.S. EPA NPDES program as implemented by the Water Quality Control Board.

WR-2.3 Best Management Practices (BMPs)
The County shall continue to require the use of feasible BMPs and other mitigation measures designed to protect surface water and groundwater from the adverse effects of construction activities, agricultural operations requiring a County Permit and urban runoff in coordination with the Water Quality Control Board.

WR-2.4 Construction Site Sediment Control
The County shall continue to enforce provisions to control erosion and sediment from construction sites.

WR-2.5 Major Drainage Management
The County shall continue to promote protection of each individual drainage basin within the County based on the basins unique hydrologic and use characteristics.

WR-2.6 Degraded Water Resources
The County shall encourage and support the identification of degraded surface water and groundwater resources and promote restoration where appropriate.

WR-2.8 Point Source Control
The County shall work with the Regional Water Quality Control Board to ensure that all point source pollutants are adequately mitigated (as part of the California Environmental Quality Act review and project approval process) and monitored to ensure long-term compliance.

WR-3.3 Adequate Water Availability
The County shall review new development proposals to ensure the intensity and timing of

growth will be consistent with the availability of adequate water supplies. Projects must submit a Will-Serve letter as part of the application process, and provide evidence of adequate and sustainable water availability prior to approval of the tentative map or other urban development entitlement.

WR-3.5 Use of Native and Drought Tolerant Landscaping
The County shall encourage the use of low water consuming, drought-tolerant and native landscaping and emphasize the importance of utilizing water conserving techniques, such as night watering, mulching, and drip irrigation.

WR-3.6 Water Use Efficiency
The County shall support educational programs targeted at reducing water consumption and enhancing groundwater recharge.

WR-3.10 Diversion of Surface Water
Diversions of surface water or runoff from precipitation should be prevented where such diversions may cause a reduction in water available for groundwater recharge.

IMPACT EVALUATION

Would the project:

a) Violate any water quality standards or waste discharge requirements?

Project Impact Analysis: ***Less than Significant Impact***

Septic System

The existing facility currently has a septic system. Environmental Health reviewed the plans for a new septic tank and had no comments, as long as the conditions from the existing use remains in place.

Drainage Basin

No water will be used on-site except for that used to wet down loads and roads. The amount of water used will be minimal and will either be imported by truck to the excavation area or provided by on site well. Sheet 1 of the Site Plan indicates a proposed drainage basin, which is also shown on the Reclamation Plan. The purpose of the drainage basin will be to collect both off-site run off entering the proposed excavation area and any run off contributed from the excavation area and provide a silting basin prior to discharge of the water to the drainage swale.

Test cores to a depth of approximately 90 feet have not revealed the presence of groundwater, and the finished grade of the proposed excavation is above the elevations of the surrounding major drainage courses. Therefore, no groundwater is expected to be

encountered. Compliance with the proposed operational and reclamation plans, County Extractive Standards and Regional Water Quality Control Board requirements (reference Regional Board letter dated 2/29/08, attached) will ensure that potential impacts to surface or groundwater are reduced to insignificant levels.

Existing drainage patterns outside of the proposed excavation areas will be maintained. In addition, sediment will be retained on-site by the use of hay bales or other methods placed at locations where surface water runoff enters existing drainage swales at the westerly boundary of this excavation site. Compliance with the proposed operational and reclamation plans will reduce potential impacts to drainage patterns and surface water runoff to insignificant levels. The Project is located in the Kaweah Sub-basin, South Valley Floor Hydrologic Unit in the Alta HA. The Alta irrigation district manages the irrigation in the area and the East Orosi Community Service District manages the domestic water. The groundwater in the area is generally contaminated by Nitrates in exceedance of Maximum Level Contaminants (MCL's) allowed by law.[40] The fluctuations in groundwater in the area is limited and the closest ground water wells have not exceeded 320 feet since before 2010, with fluctuations of generally between 5 to 10 feet generally over the last 60 years.[41]

Mining discharges including surface impoundments, tailing ponds, and waste piles are regulated by the Central Valley Regional Water Quality Control Board under Title 27 with prescriptive and performance standards for waste containment, monitoring and closure. (See CCR Title 27). In-active mines (which include abandoned mines) that are threatening or impacting surface and groundwater are regulated primarily by Title 27, State Water Resources Control Board Resolution Order #92-49. This Project poses no threat to ground water as all water is collected in the drainage basin.

The impact to ground water from the Project will not include any contaminants or waste sumps, tailings, residual equipment, and refuse or hazards. (See Lane Engineering Notes, Sheet C2.1 in Appendix H). Any pollutants from the mechanical equipment will be collected in the drainage basin. The drainage basin is designed to collect the 10-year, 10 day event for the entire site, preventing flooding, and erosion. This amounts to approximately 4.17 inches of rain over 10 days over the entire site. Rain water will run down the slopes of the pit from elevation 408' to elevation 363' and collect in a +/- 200 foot by +/- 200 foot drainage basin. The drainage basin elevation is proposed to be at elevation 358', with a water surface of 362' feet. The Mitigated Negative Declaration (Whiterock 2005, Section 2, page 2) identified depth to groundwater at this location as approximately 65 feet (+/- 343 feet) below surface level.

The Project site is located east of any published groundwater level contour maps. There are depths to groundwater records for three individual wells within approximately two miles of the subject site in the Department of Water Resources database (See Table 2). The average depth to groundwater for the years 1976-1980 ranged from 17 to 28 feet.

[40] East Orosi CSD, Tulare County LAFCO, MSR Group 4 Final Report pages 5-4 to 5-5

[41] Department of Water Resources, Water Data Library Groundwater Levels in Well 17S25E01D001M http://www.water.ca.gov/waterdatalibrary/groundwater/hydrographs/report_html.cfm

Table 3.9-3
Depth to Groundwater

Well #	Maximum (ft.)	Year of Max. Reading	Minimum (ft.)	Year of Min. Reading
22s28e03h001m	67.0	1996	27.4	1999
22s28e11m001m	55.4	1992	-0.3	1999
22s28e12n001m	36.5	1991	2.0	1999

Source: California Department of Water Resources

The depth was based on measurements taken in August, 2004, and likely represents an average between the end of the previous rainy season (high water mark) and the start of the next rainy season (low water mark). On October 28, 2011, groundwater depth was estimated based on testing the static water level in the current well on site, located at the northeast corner of Avenue 420 and Road 144. The static water level was determined to be 62 feet below surface. (John E. Woodcock Pump Service & Repair Inspection Report Oct 28, 2011). As stated previously, more recent readings suggest it is generally as low as 320 feet. According to the Site Plan, the finish grade elevation of the site at this location is +/- 408 feet meaning the basin bottom elevation depth (358 feet) to groundwater (348 feet) is approximately 10 feet. With 10 feet or more of cover over the groundwater basin, the impact from oils or diesel fuels will be ***Less Than Significant***.

Cumulative Impact Analysis: ***Less Than Significant Impact***

The geographic area of this cumulative analysis is the Tulare Lake Basin. This cumulative analysis is based on information provided from the Regional Water Quality Control Board in the Water Quality Control Plan for the Tulare Lake Basin and the requirements of Tulare County Environmental Health.

The proposed Project will be required to comply with the all requirements of the Regional Water Quality Control Board. Therefore, the proposed Project will result in ***Less Than Significant Cumulative Impacts*** related to this Checklist item.

Mitigation Measure(s):

None Required

Conclusion: ***Less than Significant Impact***

Project-specific and cumulative impacts related to this Checklist item will be reduced to a ***Less Than Significant Impact*** because the existing one acre detention basin site is sufficient in size to accommodate any additional run-off.

b) 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 (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

Project Impact Analysis: ***Less than Significant Impact***

There will be a less than significant impact related to this Checklist. The proposed project will consume groundwater. According to the Tulare Lake Basin Plan, Agriculture consumes 30% of the water in the Basin, and 69% from ground water sources.[42] At peak periods of demand during the reclamation phase (full operation on a hot summer day), this project could consume as much as 29,000 gallons each day, as the permitted level of water usage under the SMARA plan and Conditions of Approval. According to Dave Mitchell at MBA, typical water trucks operates twice daily at 4,000 gallons a in each operation. On a typical day, according to the Surface Mining Application for the Project, the Project will use 4 truckloads of water, or less, of water, at 2,000 gallons per truck load. During cooler periods, when there is less water, this figure would be lower. In fact, the applicant has various operational days when no water is used. Averaging this use out over the 150 days of warm operational days requiring dust control, at 8,000 gallons a day, the Project will use 1.2 million gallons a year. According to the SMARA permit, employees will use 200 gallons a day, or 600,000 gallons a year. This total 1.26 million gallons a year.

Depending on crop type, mining projects use less water than agricultural uses on the same amount of land, depending on which crop is cultivated, according to the California Water Plan Update 2009 for the Tulare Basin. According to the UC Cooperative Extension Office, a typical citrus orchard will require just slightly over three acre-feet of water during the course of one year (or 977,553 gallons of water) and according to a 1998 UC Cooperative Extension Best Management Report for grape crops between 2.0 and 4.5 acre feet a year, or 3.25 Acre Feet a year on average.[43] According to David Mitchell of Michael Brandman Associates (MBA) the environmental consultant for this Project, the use for agricultural land in Kings County around the area of Selma is 3.05 acre feet a year, so 3.5 acre feet a year for orange orchards (which according to the UC Cooperative use about .5 more acre feet of water than field crops) is a safe assumption. This suggests that a crop on this land would use 3.5 acre feet or 1,140,480 gallons per year.— The applicant expects to use ~~more~~ less water than the SMARA permit and Conditions of Approval allow, with uses as low as no water on wet or cooler days. Therefore, the amount consumed will remain below the surrounding uses, and the existing permitted use during operational periods. Thus, the impact to the ground water aquifer will be Less than Significant.

[42] Water Quality Control Plan for the Tulare Lake Basin, page I-1
[43] UC Extension Publication: http://ucanr.edu/freepubs/finalpage.cfm?s=8230&cat=11&subcat=14 (

Cumulative Impact Analysis: ***Less than Significant Impact***

The geographic area of this cumulative analysis is the Tulare Lake Basin. This cumulative analysis is based on the information provided in the California Water Plan Update 2009, Tulare Lake.

As noted in the California Water Plan 2009, Regional Report 3, Tulare Lake, is estimated the future water demand will be reduced by 550,000 acre-feet in future conditions. The proposed increase in production will create a need for an increase in the amount of water usage; however, as shown earlier, this usage is less than the water usage of a typical agricultural activity. The proposed Project is part of an overall reduction of water use versus agricultural activities.

Additionally, as seen in Table 39-2, the County has available surface water storage facilities to allow for futures recharge areas should they be required. Therefore, development of the proposed Project will not significantly impact groundwater recharge in the cumulative, and impacts will be ***Less Than Significant.***

Mitigation Measure(s):

None Required.

Conclusion: ***Less than Significant Impact***

The proposed Project will not have a significant Project-specific or cumulative impact to this resource.

c) 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?

Project Impact Analysis: ***Less than Significant Impact***

The Project site is not located along a natural water feature such as a lake, river or stream. The existing use includes erosion control/slope stabilization. As noted in the Response to Checklist item 3.6 a), the pitwall design is sufficient to minimize impacts related to erosion and soil stabilization. "The embankments for the Orosi Rock mine will be stepped down in the following manner: The rock face will be a vertical cut 10 feet deep followed by a level bench 20 feet wide. As the mine goes deeper the slope will be extended downwards in the same manner as described above with a 10 high rock face cut followed by a 20 foot wide level bench, until the maximum permitted mine depth is reached. Due to the unweathered nature of the rock and the lack of continuous fracture planes parallel to the cut slope face and other rock defects, it is concluded that the rock faces will stand vertically for a height of 10

feet without undue difficulty. As a safety precaution, no heavy equipment should be allowed within 10 feet of the rock slope edge.

All loose soil found at the surface of the mining area will be removed and stockpiled on-site prior to the actual mining of the granitic rock. This will be done to conserve topsoil for future use and to reduce the potential for erosion at the top of the slope faces. Since the rest of the slope will be constructed of fresh, unweathered granitic rock the possibility for erosion on the pit face will be very minimal.[44]"

Therefore, ***No Project-specific Impacts*** related to this Checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. The proposed Project will not affect the drainage pattern of any off-site parcels, ***No Cumulative Impacts*** related to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***Less than Significant Impact***

As noted earlier, no Project-specific impacts related to this Checklist item will occur. ***No Cumulative Impacts*** would occur.

d) 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?

Project Impact Analysis: ***No Impact***

The Project site is not located along a natural water feature such as a lake, river or stream. There is an adjacent irrigation ditch adjacent to the site, however, the changes to the drainage pattern would not impact the irrigation ditch. As such ***No Project-specific Impacts*** related to this Checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. The proposed Project will not affect the drainage pattern of any off-site parcels, ***No Cumulative Impacts*** related to this Checklist item will occur.

[44] Geotechnical Engineering Rock Slope Stability Letter Dated November 12, 2011, Short & Associates (See Appendix F)

Mitigation Measure(s):

None Required.

Conclusion: ***No Impact***

As noted earlier, ***No Project-specific or Cumulative Impacts*** related to this Checklist item will occur.

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Project Impact Analysis: ***No Impact***

The existing use includes a stormwater detention basin. It also includes an existing SWPPP used for the original construction of the site. (See Exhibit H). As discussed under Item 3.9(a), the drainage basin is designed to collect the 10-year, 10 hour day event for the entire site, preventing flooding, and erosion. This amounts to 4.17 inches of rain over 10 days over the entire site. Rain water will run down the slopes of the pit from elevation 408' to elevation 363' and collect in a +/- 200 foot by +/- 200 foot drainage basin. The drainage basin elevation is proposed to be at elevation 358', with a water surface of 362 feet. The site is currently surrounded by berms that will further not allow water to flow off site and impact any neighboring water ways. Therefore, there will be *No **Impact*** to stormwater drainage systems by this Project.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the requirements of the Central Valley Regional Water Quality Control Board.

As noted in the SWPPP, storm water will be retained on site. As such, ***No Cumulative Impacts*** related to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***No Impact***

As noted earlier, ***No Project-specific or Cumulative Impacts*** related to this Checklist item will occur.

f) Otherwise substantially degrade water quality?

Project Impact Analysis: ***No Impact***

According the EPA, granite quarries are not a known source of water pollution and monitoring from existing granite quarries is

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the requirements of the Central Valley Regional Water Quality Control Board.

As noted earlier, the proposed Project does not include elements that could degrade water quality beyond what was discussed in Item 3.9 a). ***No Cumulative Impacts*** related to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***No Impact***

As noted earlier, ***No Project-specific or Cumulative Impacts*** related to this Checklist item will occur.

g) 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?

Project Impact Analysis: ***No Impact***

The Proposed Project does not include the construction of any housing units. ***No Project-specific Impacts*** related to this Checklist item will occur.

The Project site is in a rural area with no existing storm drain systems. The Project has minimal potential to contribute polluted runoff. The Federal Emergency Management Agency Flood Insurance Rate Map (065066 0365 E, Map Item ID 06107C0345E) indicates that the site is not within a 100-year flood hazard area.[45] The project site is not located in a designated flood hazard area and no residential development is proposed.

For these reasons, the Project's potential impacts are determined to be ***Less Than Significant***.

[45] FEMA MAP SERVICE CENTER:
https://msc.fema.gov/webapp/wcs/stores/servlet/MapSearchResult?storeId=10001&catalogId=10001&langId=-1&panelIDs=06107C0345E$&Type=pbp&nonprinted=&unmapped=

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

The proposed Project does not include any housing units. Therefore, no cumulative impacts related to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***No Impact***

As noted earlier, ***No Project-specific or Cumulative Impacts*** related to this Checklist item will occur.

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

Project Impact Analysis: ***No Impact***

The proposed Project site is not located with in the 100 year flood zone. Project-specific impacts related to this Checklist item will be ***Less Than Significant***.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

The proposed Project will not result in off-site impacts related to flooding. In addition, the proposed Project will not induce additional flooding hazards. Therefore, ***No Cumulative Impacts*** related to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***No Impact***

No Project-specific or Cumulative Impacts related to this Checklist item will occur

i) 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?

Project Impact Analysis: ***No Impact***

"Two major dams could cause substantial flooding in Tulare County in the event of a failure: Terminus Dam and Success Dam. In addition, there are many smaller dams (including the Sand Creek Dam in Fresno County) and throughout the county that would cause localized flooding in the event of their failing."[46] The proposed Project is not located near a major levee or dam, and is outside the area potentially affected by a failure of Sand Creek Dam.[47]

In addition, the proposed Project does not involve significant water storage or changing the alignment of an established watercourse. ***No Project-specific Impacts*** related to this Checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

As noted earlier, the proposed Project is not located near a major levee or dam. The proposed Project will not have any impacts related to this Checklist item on other off-site parcels. Therefore, ***No Cumulative Impacts*** related to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***No Impact***

As noted earlier, ***No Project-specific or Cumulative Impacts*** related to this Checklist item will occur.

j) Inundation by seiche, tsunami, or mudflow?

Project Impact Analysis: ***No Impact***

[46] General Plan Background Report, page 8-17
[47] General Plan Page 255 Flood Hazard and Faults Map

The Project site is relatively flat and is not located near a large body of water, the coast or hillsides. As such, the proposed Project is not subject to inundation by seiche, tsunami, or mudflow. ***No Project-specific Impacts*** related to this Checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

As noted earlier, the proposed Project is not located near a large body of water, the coast or hillsides. The proposed Project will not have any impacts related to this Checklist item on other off-site parcels. ***No Cumulative Impacts*** related to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***No Impact***

As noted earlier, ***No Project-specific or Cumulative Impacts*** related to this Checklist item will occur.

DEFINITIONS/ACRONYMS

Acronyms

(AF)	Acre-feet
(AMP)	Agricultural Management Plan
(CIMIS)	California Irrigation Management Information System
(DWR)	Department of Water Resources
(M&I)	Municipal and Industrial
(MW)	Megawatts
(O&M)	Operation and Maintenance
(TDS)	Total Dissolved Solids
(UWMP)	Urban Water Management Plan
(WSA)	Water Supply Assessment

REFERENCES

California Department of Water Resources, http://www.water.ca.gov/

California Water Plan Update 2009, Volume 3 Tulare Lake, California Department of Water Resources

EPA summary of the Safe Drinking Water Act:
http://water.epa.gov/lawsregs/rulesregs/sdwa/index.cfm

EPA summary of the Clean Water Act:
http://www.epa.gov/lawsregs/laws/cwa.html

FEMA Flood Zone Designations:
https://msc.fema.gov/webapp/wcs/stores/servlet/info?storeId=10001&catalogId=10001&langId=-1&content=floodZones&title=FEMA%2520Flood%2520Zone%2520Designations

Flood Insurance Program Summary:
http://www.floodsmart.gov/floodsmart/pages/about/nfip_overview.jsp

Tulare County General Plan Update 2030, Adopted August 28, 2012

Tulare County General Plan 2030 Update: Background Report (February 2010)

Water Quality Control Plan for the Tulare Lake Basin, California Regional Water Quality Control Board Central Valley Region, August 17, 2005

Land Use and Planning
Chapter 3.10

SUMMARY OF FINDINGS

The proposed Project will result in less than significant impacts to Land Use and Planning. A detailed review of potential impacts is provided in the following analysis.

INTRODUCTION

California Environmental Quality Act (CEQA) Requirements

This section of the ~~Draft~~ Final Environmental Impact Report (~~DEIR~~FEIR) addresses potential impacts to Land Use and Planning. As required in Section 15126, all phases of the proposed Project will be considered as part of the potential environmental impact.

As noted in Section 15126.2 (a), "[a]n EIR shall identify and focus on the significant environmental effects of the proposed Project. In assessing the impact of a proposed Project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced. Direct and indirect significant effects of the Project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, the human use of the land (including commercial and residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services. The EIR shall also analyze any significant environmental effects the Project might cause by bringing development and people into the area affected. For example, an EIR on a subdivision astride an active fault line should identify as a significant effect the seismic hazard to future occupants of the subdivision. The subdivision will have the effect of attracting people to the location and exposing them to the hazards found there. Similarly, the EIR should evaluate any potentially significant impacts of locating development in other areas susceptible to hazardous conditions (e.g., floodplains, coastlines, wildfire risk areas) as identified in authoritative hazard maps, risk assessments or in land use plans addressing such hazards areas."[1]

The environmental setting provides a description of the Land Use and Planning setting in the County. The regulatory setting provides a description of applicable Federal, State and Local regulatory policies that were developed in part from information contained in the Tulare County

[1] 2013 CEQA Guidelines, Section 15126.2 (a)

2030 General Plan, Tulare County General Plan Background Report and/or Tulare County General Plan Revised DEIR incorporated by reference and summarized below. Additional documents utilized are noted as appropriate. A description of the potential impacts of the proposed Project is provided and includes the identification of feasible mitigation measures (if necessary and feasible) to avoid or lessen the impacts.

Thresholds of Significance:

- Divide Community
- Conflict with Applicable land use pan policy, or regulation of an agency with jurisdiction over the Project
- Conflict with applicable habitat conservation plan

ENVIRONMENTAL SETTING

Tulare County is located in a geographically diverse region with the majestic peaks of the Sierra Nevada framing its eastern region, while its western portion includes the San Joaquin Valley floor, which is very fertile and extensively cultivated. In addition to its agricultural production, the County's economic base also includes agricultural packing and shipping operations. Small and medium size manufacturing plants are located in the western part of the county and are increasing in number. Tulare County contains portions of Sequoia National Forest, Sequoia National Monument, Inyo National Forest, and Kings Canyon National Park. Sequoia National Park is entirely contained within the county.

The County encompasses approximately 4,840 square miles of classified lands (lands with identified uses) and can be divided into three general topographical zones: a valley region; a foothill region east of the valley area; and a mountain region just east of the foothills. The eastern half of the county is generally comprised of public lands, including the Mountain Home State Forest, Golden Trout Wilderness area, and portions of the Dome Land and south Sierra Wilderness areas. Federal lands, which include wilderness, national forests, monuments and parks, along with County parks, make up 52 percent of the County, the largest percentage found in the County. Agricultural uses, which include row crops, orchards, dairies, and grazing lands on the Valley floor and in the foothills total over 2,020 square miles or about 43 percent of the entire County. Urban uses such as incorporated cities, communities, hamlets, other unincorporated urban uses, and infrastructure rights-of-way make up the remaining land in the County.

"Land use in Tulare County is predominately agriculture, and the County is committed to retaining the rich agricultural land. The foothill and mountain regions are controlled predominantly by the State and federal governments. However, as population increases, so does the demand for new housing, retail and commercial space. Agricultural land around the cities is being converted into urban uses. Housing, land, employment and economics are balanced to minimize the amount of agricultural land taken by development. Economic principles tend to take precedence over the conservation of land."[2]

[2] 2011 TCAG Regional Transportation Plan, page 1-11

"Tulare County has been one of the faster growing counties in the state. Since 1950, its annualized growth rate is 1.8% (2.0% since 1980). Population growth has been primarily in the incorporated cities versus the unincorporated county… As of January 2009, the Department of Finance (DOF) estimates the County population to be 441,481…"[3]

Land Use in Culter-Orosi

"Cutler and Orosi are surrounded by agricultural lands. Crops grown on these lands include field crops, deciduous fruit orchards and vineyards. Unlike many Valley communities, there is little rural residential development (1 to 5 acre homesites) surrounding either community.

Cutler is bisected north and south by Highway 63. It is bounded on the south by the Atchison Topeka Santa Fe Railroad and agricultural land, on the north and east by agricultural land, and on the west by the railroad, the waste water treatment plant and two major packing houses. The western half of Cutler is almost fully developed, whereas the eastern half is less than fifty percent urbanized. According to the Tulare County Planning and Development Department, there is a 91-lot single family subdivision pending on the east side of Cutler.

Most of the more recent residential development has occurred on the east side of Cutler. New development to the south and southeast has been restricted by a number of features, including the railroad tracks, the treatment plant, industry, and lands under the Williamson Act. To the north, development has historically been restricted by flooding from Sand Creek. Commercial development is concentrated along both sides of Highway 63, while industrial uses are situated along the railroad tracks. Cutler's one school, Cutler Elementary, and two parks are also located on Highway 63."[4]

"A land use survey conducted within Culter-Orosi's existing Urban Area Boundary (UAB) revealed several land use facts. The area has an abundance of vacant developable land. Within the UAB, 193 acres, or 61 percent of the land, is vacant or in agriculture and could support urban development if sewer and water were available.

Land use patterns in Cutler and Orosi are typical of other Valley communities. Commercial development and apartments are situated on the more heavily traveled streets, industrial development is located along railroads, schools and parks are integrated with residential districts, and the entire community is surrounded by agriculture."[5]

"Currently, industry in the Cutler and Orosi area is concentrated along the A.T. & S.F. Railroad. Included in this area are packing houses, cold storage facilities, a box manufacturing plant, and an agricultural chemical company. The Cutler and Orosi economy is almost totally based on agriculture or agriculturally-related industries. This sector is plagued with low incomes and unstable market conditions. To improve Cutler's and Orosi's low median family income and provide greater economic stability, nonagricultural industries, or agricultural industries that provide higher wages and non-seasonal employment are needed. To attract such industries,

[3] Ibid., page 1-4
[4] Culter-Orosi Community Plan, pages 3and 4
[5] Ibid. Ppages 4 and 5

suitable industrial sites are required. Industrial site locators are interested in a number of factors when they are seeking a site for a plant: cost of labor, land and utilities; rail and highway access; adequate infrastructure; and protection from conflicting land uses. From a County perspective, these industries should not conflict with existing land uses, nor should they cause air quality, noise or traffic problems. From the public utility perspective, the industries should be sited in a location which can be effectively served by utilities."[6]

REGULATORY SETTING

Federal Agencies & Regulations

Federal Endangered Species Act

"Through federal action and by encouraging the establishment of state programs, the 1973 Endangered Species Act provided for the conservation of ecosystems upon which threatened and endangered species of fish, wildlife, and plants depend. The Act:

- authorizes the determination and listing of species as endangered and threatened;
- prohibits unauthorized taking, possession, sale, and transport of endangered species;
- provides authority to acquire land for the conservation of listed species, using land and water conservation funds;
- authorizes establishment of cooperative agreements and grants-in-aid to States that establish and maintain active and adequate programs for endangered and threatened wildlife and plants;
- authorizes the assessment of civil and criminal penalties for violating the Act or regulations;
- authorizes the payment of rewards to anyone furnishing information leading to arrest and conviction for any violation of the Act or any regulation issued there under."[7]

State Agencies & Regulations

California Department of Fish and Game

"The Department of Fish and Game maintains native fish, wildlife, plant species and natural communities for their intrinsic and ecological value and their benefits to people. This includes habitat protection and maintenance in a sufficient amount and quality to ensure the survival of all species and natural communities. The department is also responsible for the diversified use of fish and wildlife including recreational, commercial, scientific and educational uses."[8]

California Endangered Species Act

"The California Endangered Species Act (CESA) states that all native species of fishes, amphibians, reptiles, birds, mammals, invertebrates, and plants, and their habitats, threatened with extinction and those experiencing a significant decline which, if not halted, would lead to a

[6] Culter-Orosi Community Plan, page 66
[7] Federal Endangered Species Act, http://www.fws.gov/laws/lawsdigest/esact.html
[8] California Department of Fish and Game website, http://www.dfg.ca.gov/about/

threatened or endangered designation, will be protected or preserved. The Department will work with all interested persons, agencies and organizations to protect and preserve such sensitive resources and their habitats."[9]

Local Policy & Regulations

Tulare County Association of Governments (TCAG)

"The Tulare County Association of Governments (TCAG) is responsible for overseeing and planning projects with the county and each of its cities, helping to bring tax money back home to fund bus service, road improvements, projects that will improve our air quality, and more."[10] TCAG's 2009 Regional Blueprint includes a goal of a 25% increase in land use densities facilitated with urban growth and expansion of transportation facilities.

Tulare County General Plan Policies

The Tulare County General Plan has a number of policies that apply to projects within County of Tulare. General Plan policies that relate to the proposed Project are listed below.

ED-2.2 Land Requirements
The County shall ensure there is capacity for new and expanding businesses by:

1. Reserving sufficient locations for industry, recognizing industry's need for greater land requirements;
2. Recognizing the need for a variety of locations to avoid creation of a monopoly of the industrial land market and to reflect varying requirements for transportation facilities and utility services; and
3. Reserving land for exclusive industrial use to encourage development of like industries that complement each other and to prevent encroachment on industrial areas by incompatible uses.

ED-2.11 Industrial Parks
As part of new or updated community plans, the County shall designate sites for industrial development to meet projected demand.

ED-3.1 Diverse Economic Base
The County shall actively promote the development of a diversified economic base by continuing to promote agriculture, recreation services, and commerce, and by expanding its efforts to encourage industrial development including the development of energy resources.

PF-1.1 Maintain Urban Edges
The County shall strive to maintain distinct urban edges for all unincorporated communities within the valley region or foothill region, while creating a transition between urban uses and agriculture and open space.

[9] California Endangered Species Act, http://www.dfg.ca.gov/habcon/cesa/
[10] Tulare County Council of Governments (TCAG) Website, http://www.tularecog.org/

PF-1.2 Location of Urban Development

The County shall ensure that urban development only takes place in the following areas:

1. Within incorporated cities and CACUDBs;
2. Within the UDBs of adjacent cities in other counties, unincorporated communities, planned community areas, and HDBs of hamlets;
3. Within foothill development corridors as determined by procedures set forth in Foothill Growth Management Plan;
4. Within areas set aside for urban use in the Mountain Framework Plan and the mountain sub-area plans; and
5. Within other areas suited for non-agricultural development, as determined by the procedures set forth in the Rural Valley Lands Plan.

PF-1.3 Land Uses in UDBs/HDBs

The County shall encourage those types of urban land uses that benefit from urban services to develop within UDBs and HDBs. Permanent uses which do not benefit from urban services shall be discouraged within these areas. This shall not apply to agricultural or agricultural support uses, including the cultivation of land or other uses accessory to the cultivation of land provided that such accessory uses are time-limited through Special Use Permit procedures.

PF-1.4 Available Infrastructure

The County shall encourage urban development to locate in existing UDBs and HDBs where infrastructure is available or may be established in conjunction with development. The County shall ensure that development does not occur unless adequate infrastructure is available, that sufficient water supplies are available or can be made available and that there are adequate provisions for long term management and maintenance of infrastructure and identified water supplies.

PF-2.1 Urban Development Boundaries – Communities

The County shall limit urban development to the area within the designated UDB for each community. Each community's UDB is defined as shown on Figures 2.2-2 thru 2.2-22.

PF-2.4 Community Plans

The County shall ensure that community plans are prepared, updated, and maintained for each of the communities. These plans shall include the entire area within the community's UDB and shall address the community's short and long term ability to provide necessary urban services.

PF-2.7 Improvement Standards in Communities

The County shall require development within the designated UDBs to meet an urban standard for improvements. Typical improvements shall include curbs, gutters, sidewalks, and community sewer and water systems.

PF-2.8 Inappropriate Land Use

Areas within UDBs are hereby set aside for those types of urban land uses which benefit from urban services. Permanent uses which do not benefit from such urban services shall be discouraged within the UDBs. This is not intended to apply to agricultural or agricultural

supported uses, including the cultivation of land or other uses accessory to the cultivation of land, provided that such accessory uses are time-limited through special use permit procedures.

LU-5.1 Industrial Developments
The County shall encourage a wide range of industrial development activities in appropriate locations to promote economic development, employment opportunities, and provide a sound tax base.

LU-5.4 Compatibility with Surrounding Land Use
The County shall encourage the infill of existing industrial areas and ensure that proposed industrial uses will not result in significant harmful impacts to adjacent land uses.

LU-5.7 Industrial Uses Allowed on Resource Land
The County shall allow asphalt batch plants and similar processing facilities that are directly associated with the development of a resource to be located at the site of the resource under the following criteria:

1. Any such site shall be developed under the Special Use Permit process, and
2. The Special Use Permit shall not permit any commercial or industrial uses that are not related to the processing of the resource.

LU-6.2 Buffers
The County shall ensure that residential and other non-compatible land uses are separated and buffered from major public facilities such as landfills, airports, and sewage treatment plants.

ED-2.3 New Industries
The County shall encourage new industries to locate within cities, unincorporated communities, hamlets, regional growth corridors, and other unincorporated County areas where appropriately zoned. The County, in cooperation with cities and communities will identify locations for industrial uses in unincorporated areas around cities consistent with the cities' economic development strategies, taking into account opportunities offered by variations in local environmental conditions.

LU-3.1 Residential Developments
The County shall encourage new major residential development to locate near existing infrastructure for employment centers, services, and recreation.

ERM-2.9 Compatibility
The County will encourage the development of mineral deposits in a manner compatible with surrounding land uses.

IMPACT EVALUATION

Would the project:

a) Physically divide an established community?

Project Impact Analysis: ***No Impact***

The proposed Project does not include the construction of a major highway or railroad track. Further, the proposed Project does not require any off-site construction. As such, ***No Project-specific Impacts*** related to this Checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

The proposed Project is not part of a new transportation facility that could divide a community. ***No cumulative Impacts*** related to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***No Impact***

As noted earlier, ***No Project-specific or Cumulative Impacts*** related to this Checklist item will occur.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Project Impact Analysis: ***Less than Significant Impact***

Tulare County is located in the Central Valley and does not border a coastline. As such, projects located within Tulare County will not impact a local coastal program.

Tulare County has recently updated the General Plan for the year 2030. The proposed General Plan amendment was not included in the General Plan Update because a project scale review was required. The proposed Project is located outside the boundaries of the Cutlter-Orosi Community Plan.

The proposed Project does not include any variances and the expanded use is appropriate for the site. As such, ***Less Than Significant*** Project-specific impacts related to this Checklist item will occur.

Cumulative Impact Analysis: ***Less than Significant Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

The expansion outlined in the proposed use permit request does not include any variances and will not conflict with a policy or plan. ***Less Than Significant Cumulative Impacts*** related to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***Less than Significant Impact***

As noted earlier, ***Less Than Significant Project-specific and Cumulative Impacts*** related to this Checklist item will occur.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

Project Impact Analysis: ***Less than Significant Impact***

As noted in Chapter 3.4, there are two habitat conservation plans that apply in Tulare County. The Kern Water Habitat Conservation Plan only applies to an area in Allensworth (located in the southwestern quadrant of Tulare County) thus the Project site is not subject to this Plan. The Recovery Plan for Upland Species in the San Joaquin Valley outlines a number of species that are important to the San Joaquin Valley. None of these species were identified on the Project site. As such, ***No Project-specific Impacts*** related to this Checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

There are no impacts related to habitat conservation plans, and therefore there are ***No Cumulative Impacts*** that will conflict with local policies or ordinances.

Mitigation Measure(s):

None Required.

Conclusion:

As noted earlier, ***No Project-specific or Cumulative Impacts*** related to this Checklist item will occur.

REFERENCES

2011 Regional Transportation Plan, Tulare County Association of Governments (TCAG), July 11, 2012

Tulare County Council of Governments (TCAG) Website, http://www.tularecog.org/

Culter-Orosi Community Plan, Tulare County, 1988

Tulare County 2030 General Plan, August 2012

2013 CEQA Guidelines

Mineral Resources
Chapter 3.11

SUMMARY OF FINDINGS

The proposed Project will not have any significant impacts related to Mineral Resources. No Mitigation Measures will be required.

INTRODUCTION

California Environmental Quality Act (CEQA) Requirements

This section of the ~~Draft~~ Final Environmental Impact Report (~~DEIR~~FEIR) addresses potential impacts to Mineral Resources. As required in Section 15126, all phases of the proposed Project will be considered as part of the potential environmental impact.

As noted in 15126.2 (a), "[a]n EIR shall identify and focus on the significant environmental effects of the proposed project. In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced. Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, the human use of the land (including commercial and residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services. The EIR shall also analyze any significant environmental effects the project might cause by bringing development and people into the area affected. For example, an EIR on a subdivision astride an active fault line should identify as a significant effect the seismic hazard to future occupants of the subdivision. The subdivision would have the effect of attracting people to the location and exposing them to the hazards found there. Similarly, the EIR should evaluate any potentially significant impacts of locating development in other areas susceptible to hazardous conditions (e.g., floodplains, coastlines, wildfire risk areas) as identified in authoritative hazard maps, risk assessments or in land use plans addressing such hazards areas."[1]

The environmental setting provides a description of the Mineral Resources in the County. The regulatory setting provides a description of applicable Federal, State and Local regulatory policies that were developed in part from information contained in the Tulare County 2030 General Plan, Tulare County General Plan Background Report, and/or Tulare

[1] 2013CEQA Guidelines, Section 15126.2 (a)

County 2030 General Plan EIR incorporated by reference and summarized below. Additional documents utilized are noted as appropriate. A description of the potential impacts of the proposed Project is provided and includes the identification of feasible mitigation measures (if necessary and feasible) to avoid or lessen the impacts.

Thresholds of Significance

The Tulare County 2030 General Plan identifies known Mineral Resource areas. The threshold of significance for this section will include the following:

- Impact a known Mineral Resource
- Site located in a Mineral Resource Zone area (as noted in the General Plan)

ENVIRONMENTAL SETTING

"There is estimated to be a total of 932 million tons of aggregate resources in Tulare County. This figure includes 219 million tons of reserves available for mining and 200 million tons that are located in the hard rock quarries southeast of Porterville. Of that total, 19 million tons are located in Northern Tulare County, which is expected to be depleted by the year 2010 unless new resources are permitted for mining. Lemon Cove has been the most highly extracted area for PCC quality aggregate supplies."[2]

"Economically, the most important minerals that are extracted in Tulare County are sand, gravel, crushed rock and natural gas. Other minerals that could be mined commercially include tungsten, which has been mined to some extent, and relatively small amounts of chromite, copper, gold, lead, manganese, silver, zinc, barite, feldspar, limestone, and silica. Minerals that are present but do not exist in the quantities desired for commercial mining include antimony, asbestos, graphite, iron, molybdenum, nickel, radioactive minerals, phosphate, construction rock, and sulfur... The majority of these activities appear to occur in the Sierra Foothill Area."[3]

"The following MRZ categories are used by the State Geologist in classifying the State's lands. The geologic and economic data and the arguments upon which each unit MRZ assignment is based are presented in the mineral land classification report transmitted by the State Geologist to the SMGB…

A. *MRZ-1*—Areas where adequate geologic information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence. This zone is applied where well developed lines of reasoning, based on economic-geologic principles and adequate data, indicate that the likelihood for occurrence of significant mineral deposits is nil or slight.

B. *MRZ-2a*—Areas underlain by mineral deposits where geologic data show that significant measured or indicated resources are present. As shown on the diagram of the California Mineral Land Classification System, MRZ-2 is divided on the basis of both degree of knowledge and economic factors. Areas classified MRZ-

[2] General Plan Background Report, pages 10-18
[3] General Plan Background Report, page 10-17

2a contain discovered mineral deposits that are either measured or indicated reserves as determined by such evidence as drilling records, sample analysis, surface exposure, and mine information. Land included in the MRZ-2a category is of prime importance because it contains known economic mineral deposits. A typical MRZ-2a area would include an operating mine, or an area where extensive sampling indicates the presence of a significant mineral deposit.

C. *MRZ-2b*—Areas underlain by mineral deposits where geologic information indicates that significant inferred resources are present. Areas classified MRZ-2b contain discovered deposits that are either inferred reserves or deposits that are presently sub-economic as determined by limited sample analysis, exposure, and past mining history. Further exploration work and/or changes in technology or economics could result in upgrading areas classified MRZ-2b to MRZ-2a. A typical MRZ-2b area would include sites where there are good geologic reasons to believe that an extension of an operating mine exists or where there is an exposure of mineralization of economic importance.

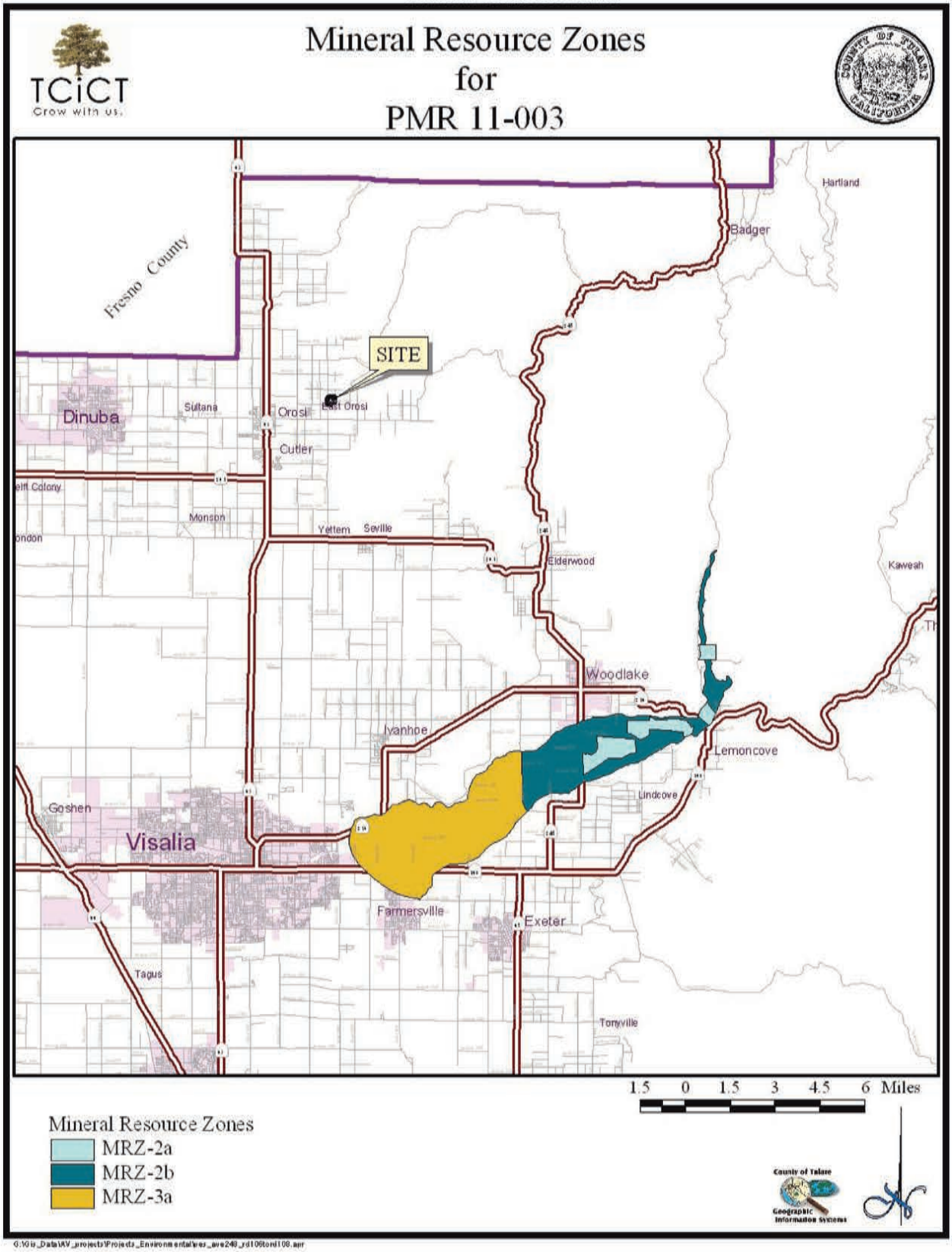
D. *MRZ-3a*—Areas containing known mineral deposits that may qualify as mineral resources. Further exploration work within these areas could result in the reclassification of specific localities into the MRZ-2a or MRZ-2b categories. MRZ-3a areas are considered to have a moderate potential for the discovery of economic mineral deposits. As shown on the diagram of the California Mineral Land Classification System, MRZ-3 is divided on the basis of knowledge of economic characteristics of the resources. An example of a MRZ-3a area would be where there is direct evidence of a surface exposure of a geologic unit, such as a limestone body, known to be or to contain a mineral resource elsewhere but has not been sampled or tested at the current location.

E. *MRZ-3b*—Areas containing inferred mineral deposits that may qualify as mineral resources. Land classified MRZ- 3b represents areas in geologic settings which appear to be favorable environments for the occurrence of specific mineral deposits. Further exploration work could result in the reclassification of all or part of these areas into the MRZ-3a category or specific localities into the MRZ-2a or MRZ-2b categories. MRZ-3b is applied to land where geologic evidence leads to the conclusion that it is plausible that economic mineral deposits are present. An example of a MRZ-3b area would be where there is indirect evidence such as a geophysical or geochemical anomaly along a permissible structure which indicates the possible presence of a mineral deposit or that an ore-forming process was operative.

F. *MRZ-4*—Areas where geologic information does not rule out either the presence or absence of mineral resources. The distinction between the MRZ-1 and MRZ-4 categories is important for land-use considerations. It must be emphasized that MRZ-4 classification does not imply that there is little likelihood for the presence of mineral resources, but rather there is a lack of knowledge regarding mineral occurrence. Further exploration work could well result in the reclassification of land in MRZ-4 areas to MRZ-3 or MRZ-2 categories."[4]

[4] Guidelines for classification and designation of mineral land, page 4 to 6.

Figure 3.11-1
Mineral Resource Zones



REGULATORY SETTING

Federal Agencies & Regulations

None that apply to the proposed Project.

State Agencies & Regulations

Surface Mining and Reclamation Act of 1975 (SMARA)

"The Surface Mining and Reclamation Act (SMARA), Chapter 9, Division 2 of the Public Resources Code, requires the State Mining and Geology Board to adopt State policy for the reclamation of mined lands and the conservation of mineral resources. These policies are prepared in accordance with the Administrative Procedures Act, (Government Code) and are found in California Code of Regulations, Title 14, Division 2, Chapter 8, Subchapter 1.

The Surface Mining and Reclamation Act of 1975 (SMARA, Public Resources Code, Sections 2710-2796) provides a comprehensive surface mining and reclamation policy with the regulation of surface mining operations to assure that adverse environmental impacts are minimized and mined lands are reclaimed to a usable condition. SMARA also encourages the production, conservation, and protection of the state's mineral resources. Public Resources Code Section 2207 provides annual reporting requirements for all mines in the state, under which the State Mining and Geology Board is also granted authority and obligations."[5]

State Mining & Geology Board (SMGB)

"The SMGB serves as a regulatory, policy, and appeals body representing the State's interests in geology, geologic and seismologic hazards, conservation of mineral resources and reclamation of lands following surface mining activities. The SMGB operates within the Department of Conservation, and is granted certain autonomous responsibilities and obligations under several statutes including the Alquist-Priolo Earthquake Fault Zoning Act, the Seismic Hazards Mapping Act, and the Surface Mining and Reclamation Act."[6]

The Office of Mine Reclamation (OMR)

"Created in 1991 to administer the Surface Mining and Reclamation Act of 1975 (SMARA). Established to meet the Act's requirement, OMR provides assistance to cities, counties, state agencies and mine operators for reclamation planning and promotes cost-effective reclamation. OMR strives to reclaim mined lands to a beneficial end-use through the implementation of SMARA, prevent or minimize the adverse environmental effects of mining by providing assistance to lead agencies and miners in the review of reclamation plans, and minimize residual hazards to public health and safety through the Abandoned Mine Lands program."[7]

[5] SMARA Description, http://www.conservation.ca.gov/smgb/Regulations/Pages/regulations.aspx
[6] State Mining & Geology Board (SMGB), http://www.conservation.ca.gov/smgb/Pages/Index.aspx
[7] Office of Mine Regulation, http://www.conservation.ca.gov/OMR/Pages/Index.aspx

Local Policy & Regulations

Tulare County General Plan Policies

The General Plan has a number of policies that apply to projects within Tulare County. General Plan policies that relate to the proposed Project are listed below.

ERM-2.1 Conserve Mineral Deposits
The County will encourage the conservation of identified and/or potential mineral deposits, recognizing the need for identifying, permitting, and maintaining a 50 year supply of locally available PCC grade aggregate.

ERM-2.2 Recognize Mineral Deposits
The County will recognize as a part of the General Plan those areas of identified and/or potential mineral deposits.

ERM-2.5 Resources Development
The County will promote the responsible development of identified and/or potential mineral deposits.

ERM-2.8 Minimize Hazards and Nuisances
The County will minimize the hazards and nuisances to persons and properties in the area during extraction, processing, and reclamation operations.

ERM-2.10 Incompatible Development
Proposed incompatible land uses in the County shall not be on lands containing or adjacent to identified mineral deposits, or along key access roads, unless adequate mitigation measures are adopted or a statement of overriding considerations stating public benefits and overriding reasons for permitting the proposed use are adopted.

ERM-2.13 SMARA Requirements
All surface mines in the County, unless otherwise exempted, shall be subject to reclamation plans that meet SMARA requirements. Reclamation procedures shall restore the site for future beneficial use of the land consistent with the Tulare County General Plan, subsequent to the completion of surface mining activities. Mine reclamation costs shall be borne by the mine operator, and guaranteed by financial assurances set aside for restoration procedures.

IMPACT EVALUATION

Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

Project Impact Analysis: ***Less than Significant Impact***

The proposed Project includes expanding the current mining operations. The proposed Project will make these resources more readily available and does not limit the availability to exclusively using rock resources. In addition, the current (and proposed) operation includes concrete recycling which allows additional aggregate to be produced for construction material. ***Less Than Significant Project-specific Impacts*** related to this Checklist item will occur.

Cumulative Impact Analysis: ***Less than Significant Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

As noted earlier, the proposed Project includes an expansion of a current mining operation. In addition, the concrete recycling will reduce amount of extraction of mineral resources that would be required for construction material. As such, ***Less Than Significant Cumulative Impacts*** related to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***Less than Significant Impact***

As noted earlier, ***Less Than Significant Project-specific and Cumulative Impacts*** related to this Checklist item will occur.

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

Project Impact Analysis: ***No Impact***

The Project site is not located in a MRZ area identified in the Tulare County 2030 General Plan. ***No Project-specific Impacts*** related to this Checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

The Project site is not located in a MRZ area and would not impact any parcel located in an MRZ zone. As such, ***No cumulative Impacts*** related to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***No Impact***

As noted earlier, ***No Project-specific or Cumulative Impacts*** related to this Checklist item will occur.

DEFINITIONS/ACRONYMS

Acronyms

(MRZ)	Mineral Resource Zone
(OMR)	Office of Mine Reclamation
(SMGB)	State Mining & Geology Board
(SMARA)	Surface Mining and Reclamation Act

REFERENCES

Tulare County 2030 General Plan, August 2012

Tulare County 2030 General Plan Background Report, February 2010

California Department of Conservation, Division of Mines and Geology, "Guidelines for Classification and Designation of Mineral Lands", http://www.conservation.ca.gov/smgb/Guidelines/Documents/ClassDesig.pdf

2013 CEQA Guidelines

SMARA Description, http://www.conservation.ca.gov/smgb/Regulations/Pages/regulations.aspx

State Mining & Geology Board (SMGB), http://www.conservation.ca.gov/smgb/Pages/Index.aspx

Office of Mine Regulation, http://www.conservation.ca.gov/OMR/Pages/Index.aspx

Noise
Chapter 3.12

SUMMARY OF FINDINGS

The proposed Project will result in less than significant impacts related to Noise. No Mitigation Measures will be required. A Noise Study Report prepared by consultant VRPA Technologies is included as Appendix D of this document which is used as the basis for determining this Project will result in Less than Significant Impacts with Mitigation. A detailed review of potential impacts is provided in the following analysis.

INTRODUCTION

California Environmental Quality Act (CEQA) Requirements

This section of the ~~Draft~~ Final Environmental Impact Report (~~DEIR~~FEIR) addresses potential impacts related to Noise. As required in Section 15126, all phases of the proposed Project will be considered as part of the potential environmental impact.

As noted in Section 15126.2 (a), "[a]n EIR shall identify and focus on the significant environmental effects of the proposed project. In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced. Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, the human use of the land (including commercial and residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services. The EIR shall also analyze any significant environmental effects the project might cause by bringing development and people into the area affected. For example, an EIR on a subdivision astride an active fault line should identify as a significant effect the seismic hazard to future occupants of the subdivision. The subdivision would have the effect of attracting people to the location and exposing them to the hazards found there. Similarly, the EIR should evaluate any potentially significant impacts of locating development in other areas susceptible to hazardous conditions (e.g., floodplains, coastlines, wildfire risk areas) as identified in authoritative hazard maps, risk assessments or in land use plans addressing such hazards areas."[1]

The environmental setting provides a description of the Noise Setting in Tulare County. The

[1] 2013 CEQA Guidelines, Section 15126.2 (a)

regulatory setting provides a description of applicable Federal, State, and Local regulatory policies that were developed in part from information contained in the Tulare County 2030 General Plan, Tulare County General Plan Background Report, and/or Tulare County 2030 General Plan EIR incorporated by reference and summarized below. Additional documents utilized are noted as appropriate. A description of the potential impacts of the proposed Project is provided and includes the identification of feasible mitigation measures (if necessary and feasible) to avoid or lessen the impacts.

Thresholds of Significance

- Exceed Tulare County Standards for Noise Levels
- Expose people of excessive groundborne vibration
- Expose people to excessive airport/airstrip noise

ENVIRONMENTAL SETTING

"Noise in the community has often been cited as being a health problem, not in terms of actual damage such as hearing impairment, but in terms of inhibiting general well-being and contributing to undue stress and annoyance. The health effects of noise in the community arise from interference with human activities such as sleep, speech, recreation, and tasks demanding concentration or coordination. When community noise interferes with human activities or contributes to stress, public annoyance with the noise source increases, and the acceptability of the environment for people decreases. This decrease in acceptability and the threat to public well-being are the bases for land use planning policies preventing exposure to excessive community noise levels."[2]

"Noise sources are commonly grouped into two major categories: transportation and non-transportation noise sources. Transportation noise sources include surface traffic on public roadways, railroad line operations, and aircraft in flight. Non-transportation (or fixed), noise sources, commonly consist of industrial activities, railroad yard activities, small mechanical devices (lawnmowers, leaf blowers, air conditioners, radios, etc.), and other sources not included in the traffic, railroad and aircraft category."[3]

"Noise level data collected during continuous monitoring included the hourly Leq and Lmax and the statistical distribution of noise levels over each hour of the sample period. The community noise survey results indicate that typical noise levels in noise-sensitive areas of the unincorporated areas of Tulare County are in the range of 29-65 dB Ldn. As would be expected, the quietest areas are those that are removed from major transportation-related noise sources and industrial or stationary noise sources."[4]

A Noise Study Report was prepared by VRPA Technologies (VRPA) to determine if significant noise impacts would be expected to occur as a result of the Project, and to describe mitigation measures for noise if significant impacts are determined to exist.

[2] TCAG 2011 Regional Transportation Plan Draft Subsequent EIR, Page 151
[3] TCAG 2011 Regional Transportation Plan Draft Subsequent EIR, Page 153
[4] General Plan Background Report, page 8-77

"Existing traffic noise levels are established based on previously collected traffic data (Table 3.12-1) and using the Traffic Noise Model (TNM) Version 2.5. TNM 2.5 is an FHWA Traffic Noise Prediction Program. Once existing levels are established, future levels, based on expected traffic growth, are calculated and compared to both the existing noise level and the maximum allowable noise exposure to noise generation sources as described in Tulare County's General Plan. Tulare County's criteria shows that mitigation must be considered when the exterior noise exposure level of 60 L_{dn}/CNEL for single family residential and exterior noise exposure level of 65 to 70 L_{dn}/CNEL for multi-family, transient lodging, hospitals, churches, schools, business commercial and meeting halls has been exceeded. Levels reported in this section are in terms of A-weighted levels.

Existing traffic noise levels were evaluated using TNM 2.5. Under Caltrans Standards for Traffic volumes collected from the traffic report completed for this project and average vehicle speeds along Avenue 416, Avenue 420, Road 144, SR 63, and SR 201 (Avenue 400) were entered into the model to estimate noise levels at various receptors that would be affected by the Project.

To assess the traffic noise impacts from the project on the adjacent receptors, the first step is to determine the baseline or the existing noise condition. The second is to then compare the baseline to future level results, based on expected traffic growth, and Tulare County's Land Use Compatibility for Community Noise Environments. Tulare County's General Plan has determined that Project will have a significant impact if it causes or contributes to noise levels that exceed Tulare County's Land Use Compatibility for Community Noise Environments for sensitive receptors.

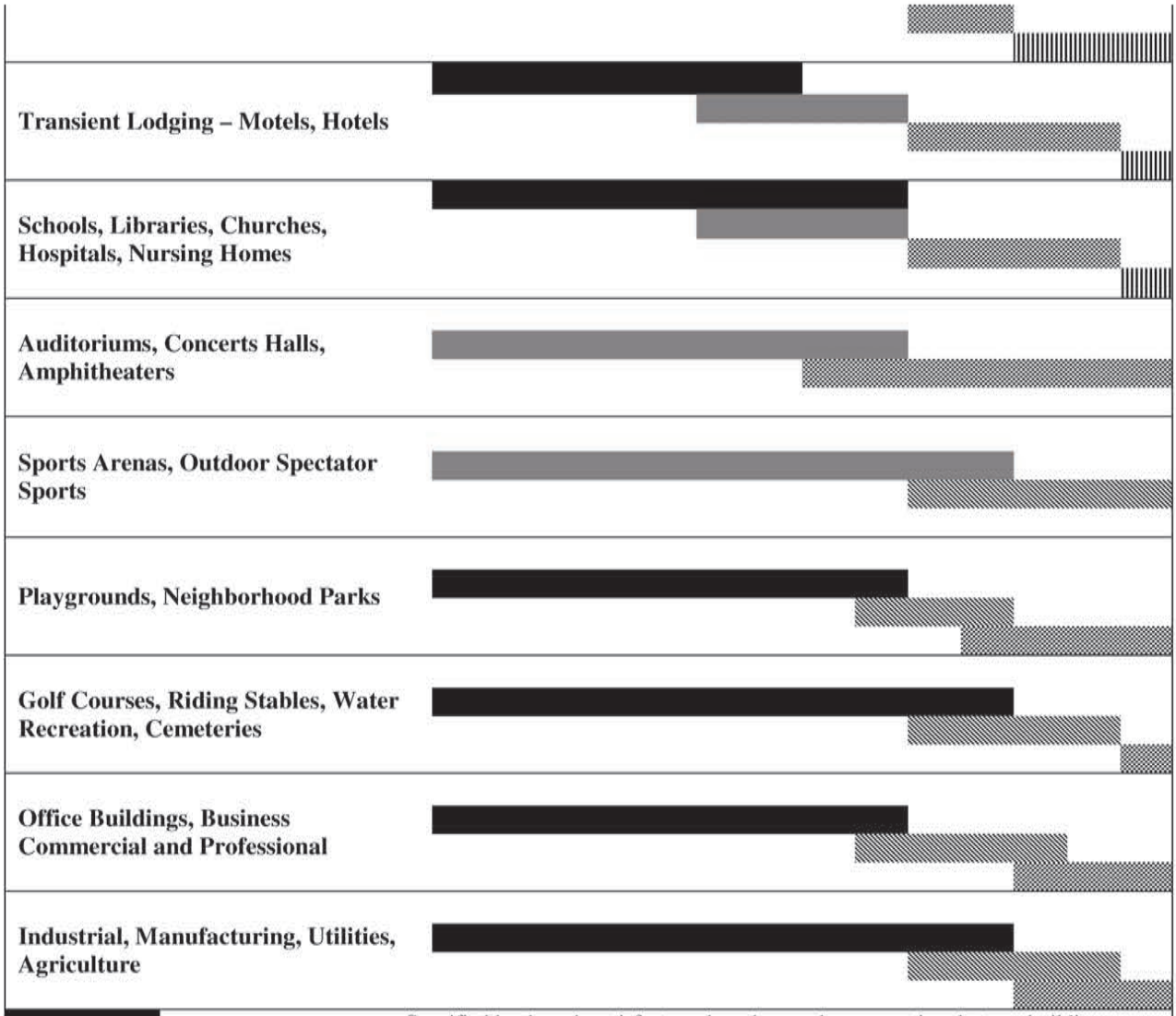
To assess existing noise conditions, VRPA Technologies staff compiled current traffic counts and existing geometric conditions in the Orosi Noise Study. Staff conducted noise level measurements within the project site and tabulated the results. The weather during the time of the noise measurements consisted of sunshine and wind speeds of less than 5 mph. The purpose of the measurements was to evaluate the accuracy of the model in describing traffic noise exposure within the project site.

The locations for each field receptor location are described below in Table 3.12-1 and are geographically depicted in Figure 3.12-1."[5]

Table 3.12-1
Land Use Compatibility for Community Noise Environments

Land Use Category	Community Noise Exposure-L_{dn} or CNEL (dB)						
	50	55	60	65	70	75	80
Residential - Low Density Single Family, Duplex, Mobile Homes							
Residential – Multi-Family							

[5] Orosi Noise Study



Normally Acceptable	Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
Conditionally Acceptable	New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
Normally Unacceptable	New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
Clearly Unacceptable	New construction or development generally should not be undertaken.

Source: Tulare County General Plan

Figure 3.12-1
Noise Receptor Locations

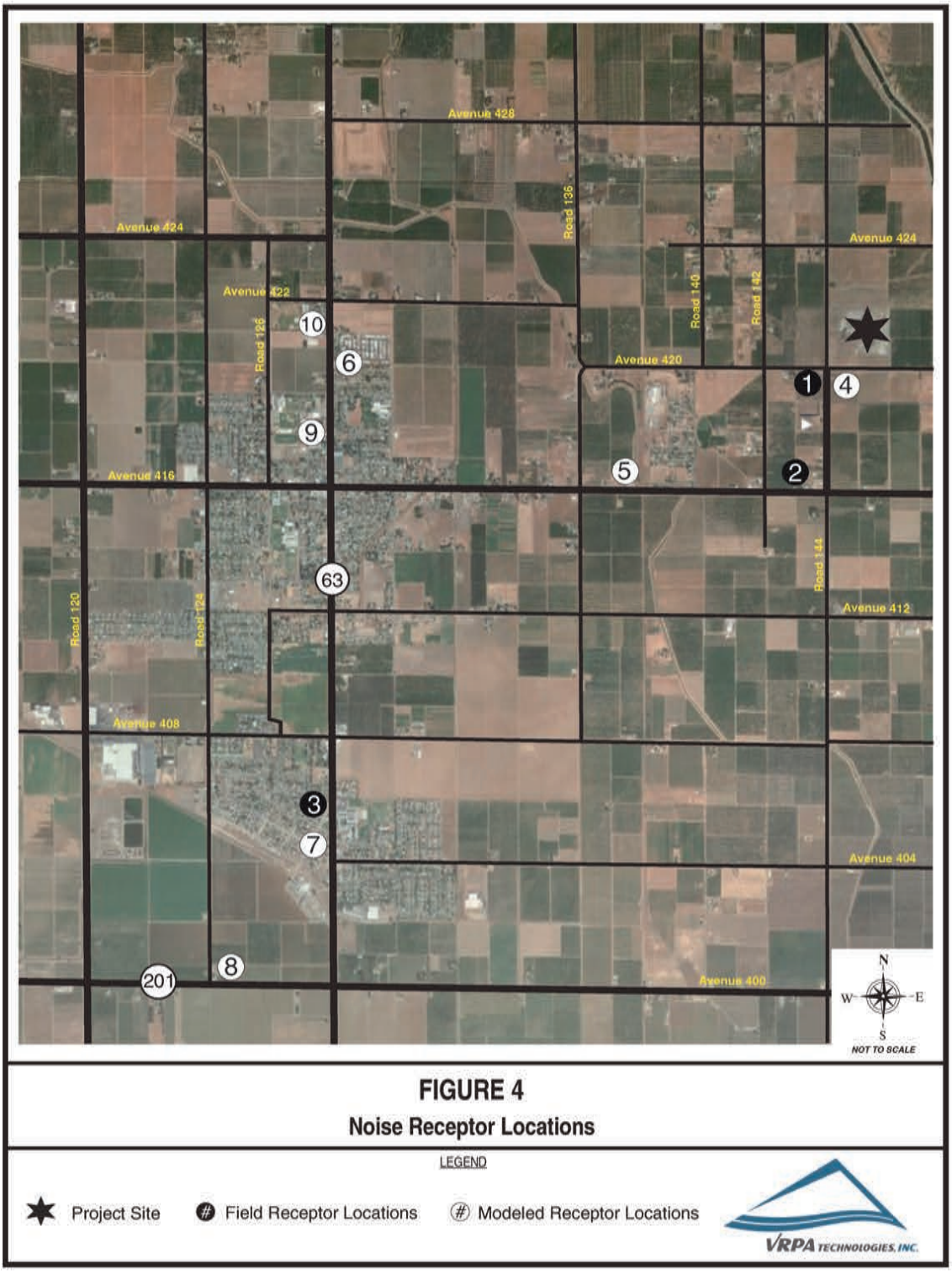


Table 3.12-2
Field Data/Traffic Counts

Receptor Location	Date of Count	Directional movement	15 minute count		
			Auto's	Medium Trucks	Large Trucks
1	5/23/2013	NB	12	0	0
		SB	14	1	0
2	5/23/2013	EB	12	0	2
		WB	20	2	0
3	5/23/2013	NB	102	4	3
		SB	127	0	1

Source: Orosi Noise Study

Table 3.12-3
Existing Noise Levels

Receptor I.D. No.	Location	Type of Development	Existing Noise Level Leq(h) dBA
1	Agricultural-Residence. Approximately 90 feet from Road 144 Centerline	Agricultural-Residence	45.0
2	Agricultural-Residence. Approximately 62 feet from Avenue 416 Centerline	Agricultural-Residence	47.3
3	Commercial Building. Approximately 80 feet from SR 63 Centerline	Commercial	58.8

Source: Orosi Noise Study

As shown in Tables 3.12-1 and 3.12-2, based on the traffic counts, the highest peak hour sound level recorded, 58.8 L_{eq}(h) dBA, was taken along SR 63. When it comes to noise levels, the Ldn is determined to be within +/- 2 dBA of the peak hour L_{eq}, under normal traffic conditions based upon Caltrans' Traffic Analysis Noise Protocol. Therefore, none of the existing noise levels exceed Tulare County's Land Use Compatibility for Community Noise Environments.

Table 3.12-3 shows the existing traffic noise exposure levels at a setback of 80 feet from the roadway centerline and the distances from the roadway centerline necessary to achieve 60 Leq(h) dBA.

Table 3.12-4
Existing Noise Levels for Roadway Segments

Roadway	Segment	Existing Noise Level Leq(h) dBA @ 80' Fom Roadway Centerlines	Distance (Feet) to 60 Leq(h) dBA from Roadway Centerline
Road 144	Between Avenue 420 and Avenue 416	46.0	20
Avenue 416	Between Road 144 and SR 63	49.5	25
SR 63	Between Avenue 424 and Avenue 416	55.9	50
SR 63	Between Avenue 416 and SR 201	58.8	70
SR201	Between SR 63 and Road 120	54.2	41

In order to calibrate the TNM 2.5 model, the existing counts (expanded to one hour), lane geometry, and any other pertinent existing conditions were added to the model. The noise level measurements taken in the Project area were then compared to the noise levels computed by the model. The difference between the measured and modeled noise levels, referred to as the "K constant", is then added to the Existing Plus Project and Future Year calculated noise levels to obtain the predicted noise levels for each study scenario.

Traffic volumes, truck mix, and vehicle speeds were used as inputs to the model for the Existing and Existing Plus Project modeled scenarios. Traffic volumes and truck mix were determined by the Traffic Impact Study (TIS) prepared for the Project. Table 3.12-4 shows the predicted noise levels at the three (3) measured sensitive receptors as a result of adding the Project. Results of the analysis show that none of the sensitive receptors will exceed Tulare County's Land Use Compatibility for Community Noise Environments for the Existing Plus Project scenario. TNM 2.5 printouts included are provided in Appendix D.

Table 3.12-5
Traffic Noise Impacts for Existing Conditions

Receptor I.D. No.	Existing Noise Level Leq(h) dBA	Existing Noise Level Modeled Leq(h) dBA	K - Factor (Measured - Modeled = K)	Existing Plus Project Noise Level Leq(h) dBA	Noise Increase (+) or Decrease (-)	Tulare County Noise Standard dBA Ldn	Impact
1	45.0	57.5	-12.5	47.9	2.9	75.0	None
2	47.3	64.1	-16.8	47.9	0.6	75.0	None
3	58.8	63.4	-4.6	58.9	0.1	70.0	None

For the Existing Plus Project scenario, seven (7) additional sensitive receptors were added to the model to evaluate the impacts to other sensitive receptors located within the Project study area. The results are identified in Table 3.12-5. Results of the analysis show that none of the sensitive receptors will exceed Tulare County's Land Use Compatibility for Community Noise

Environments.

Table 3.12-6
Traffic Noise Impacts for Existing Plus Project Conditions

Receptor I.D. No.	Type of Development	Existing Plus Project Noise Level Leq(h) dBA	Tulare County Noise Standard dBA Ldn	Impact
4	Residential	46.3	60.0	None
5	Residential	48.6	60.0	None
6	Residential	57.5	60.0	None
7	Residential	53.8	60.0	None
8	Residential	51.1	60.0	None
9	School	53.5	70.0	None
10	School	51.6	70.0	None

Mine Safety and Health Administration - MSHA

"The Mine Safety and Health Administration (MSHA) has established a Noise Exposure Standard for the purposes of reducing the long-term effects of noise for mining related activities. The National Institute for Occupational Safety and Health (NIOSH) has identified occupational noise-induced hearing loss as one of the ten leading work-related diseases and injuries. MSHA estimated that 13% of the mining population of the United States would develop material hearing impairment during their working lifetime under the previous noise standards. The noise exposure standards established by MSHA applies to all mine operators, both coal and metal and nonmetal, underground and surface operations.

Section 62.120 of the Noise Exposure Standard requires that if a miner's noise exposure equals or exceeds the "action level" during any work shift, the business/company is required to enroll the miner in a "hearing conservation program" (HCP) that complies with Section 62.150. This "action level" is identical to what is being used by Occupational Safety and Health Administration's (OSHA) in its hearing conservation amendment, and results in uniform enforcement levels in both general industry and the mining industry. The Permissible Exposure

Level (PEL) is defined as an 8-hour time-weighted average sound level of 90 dBA integrating all sound levels from at least 90 dBA to at least 140 dBA. A miner may not be exposed at any time to sound levels exceeding 115 dBA, even if the miner is wearing hearing protectors.

The proposed Orosi Rock Surface Mining Amendment to Permit will expose workers to noise levels of 85 to 110 dBA. In order to comply with the MSHA standard, the Project may establish a system of monitoring that evaluates each miner's noise exposure sufficiently to determine continuing compliance with the MSHA rule." [6]

REGULATORY SETTING

Federal Agencies & Regulations

Federal Highways Administration (FHWA) Highway Traffic Noise Prediction methodology

"In March 1998, the Federal Highway Administration (FHWA) released the Traffic Noise Model, Version 1.0 (FHWA TNM®). It was developed as a means for aiding compliance with policies and procedures under FHWA regulations. Since its release in March 1998, Version 1.0a was released in March 1999, Version 1.0b in August 1999, Version 1.1 in September 2000, Version 2.0 in June 2002, Version 2.1 in March 2003 and the current version, Version 2.5 in April 2004. The FHWA TNM is an entirely new, state-of-the-art computer program used for predicting noise impacts in the vicinity of highways. It uses advances in personal computer hardware and software to improve upon the accuracy and ease of modeling highway noise, including the design of effective, cost-efficient highway noise barriers."[7]

Federal Aviation Administration (FAA)

"Aircraft operated in the U.S. are subject to certain federal requirements regarding noise emissions levels. These requirements are set forth in Title 14 CFR, Part 36. Part 36 establishes maximum acceptable noise levels for specific aircraft types, taking into account the model year, aircraft weight, and number of engines. Pursuant to the federal Airport Noise and Capacity Act of 1990, the FAA established a schedule for complete transition to Part 36 "Stage 3" standards by year 2000. This transition schedule applies to jet aircraft with a maximum takeoff weight in excess of 75,000 pounds, and thus applies to passenger and cargo airlines, but not to operators of business jets or other general aviation aircraft."[8]

Federal Railway Administration (FRA) and the Federal Transit Administration (FTA)

"The Federal Railway Administration (FRA) and the Federal Transit Administration (FTA) have published guidance relative to vibration impacts. According to the FRA, fragile buildings can be exposed to groundborne vibration levels of 0.5 PPV without experiencing structural damage. The FTA has identified the human annoyance response to vibration levels as 80 VdB."[9]

[6] Orosi Traffic Study
[7] Federal Highway Administration website, Traffic Noise Model, http://www.fhwa.dot.gov/environment/noise/traffic_noise_model/
[8] TCAG 2011 Regional Transportation Plan Draft Subsequent EIR, page 152
[9] Ibid., page 152

State Agencies & Regulations

California Noise Insulation Standards

"The California Noise Insulation Standards found in the California Code of Regulations, Title 24, set requirements for new multi-family residential units, hotels, and motels that may be subject to relatively high levels of transportation-related noise. For exterior noise, the noise insulation standard is DNL 45 dB in any habitable room and requires an acoustical analysis demonstrating how dwelling units have been designed to meet this interior standard where such units are proposed in areas subject to noise levels greater than DNL 60 dB."[10]

California's Airport Noise Standards

"The State of California has the authority to establish regulations requiring airports to address aircraft noise impacts on land uses in their vicinities. The State of California's Airport Noise Standards, found in Title 21 of the California Code of Regulations, identify a noise exposure level of CNEL 65 dB as the noise impact boundary around airports. Within the noise impact boundary, airport proprietors are required to ensure that all land uses are compatible with the aircraft noise environment or the airport proprietor must secure a variance from the California Department of Transportation."[11]

California Department of Transportation (Caltrans)

"The State of California establishes noise limits for vehicles licensed to operate on public roads. For heavy trucks, the State passby standard is consistent with the federal limit of 80 dB. The State passby standard for light trucks and passenger cars (less than 4.5 tons gross vehicle rating) is also 80 dB at 15 meters from the centerline."[12]

Local Policy & Regulations

Tulare County General Plan Policies

The General Plan has a number of policies that apply to projects within Tulare County. General Plan policies that relate to the proposed Project are listed below.

HS-8.1 Economic Base Protection
The County shall protect its economic base by preventing the encroachment of incompatible land uses on known noise-producing industries, railroads, airports, and other sources.

HS-8.2 Noise Impacted Areas
The County shall designate areas as noise-impacted if exposed to existing or projected noise levels that exceed 60 dB Ldn (or Community Noise Equivalent Level (CNEL)) at the exterior of

[10] Ibid., page 153
[11] Ibid., page 152
[12] TCAG 2011 Regional Transportation Plan Draft Subsequent EIR, page 152

buildings.

HS-8.3 Noise Sensitive Land Uses
The County shall not approve new noise sensitive uses unless effective mitigation measures are incorporated into the design of such projects to reduce noise levels to 60 dB Ldn (or CNEL) or less within outdoor activity areas and 45 dB Ldn (or CNEL) or less within interior living spaces.

HS-8.4 Airport Noise Contours
The County shall ensure new noise sensitive land uses are located outside the 60 CNEL contour of all public use airports.

HS-8.6 Noise Level Criteria
The County shall ensure noise level criteria applied to land uses other than residential or other noise-sensitive uses are consistent with the recommendations of the California Office of Noise Control (CONC).

HS-8.8 Adjacent Uses
The County shall not permit development of new industrial, commercial, or other noise-generating land uses if resulting noise levels will exceed 60 dB Ldn (or CNEL) at the boundary of areas designated and zoned for residential or other noise-sensitive uses, unless it is determined to be necessary to promote the public health, safety and welfare of the County.

HS-8.10 Automobile Noise Enforcement
The County shall encourage the CHP, Sheriff's office, and local police departments to actively enforce existing sections of the California Vehicle Code relating to adequate vehicle mufflers, modified exhaust systems, and other amplified noise.

HS-8.11 Peak Noise Generators
The County shall limit noise generating activities, such as construction, to hours of normal business operation (7 a.m. to 7 p.m.). No peak noise generating activities shall be allowed to occur outside of normal business hours without County approval.

HS-8.13 Noise Analysis
The County shall require a detailed noise impact analysis in areas where current or future exterior noise levels from transportation or stationary sources have the potential to exceed the adopted noise policies of the Health and Safety Element, where there is development of new noise sensitive land uses or the development of potential noise generating land uses near existing sensitive land uses. The noise analysis shall be the responsibility of the project applicant and be prepared by a qualified acoustical engineer (i.e., a Registered Professional Engineer in the State of California, etc.). The analysis shall include recommendations and evidence to establish mitigation that will reduce noise exposure to acceptable levels (such as those referenced in Table 10-1 of the Health and Safety Element).

HS-8.14 Sound Attenuation Features
The County shall require sound attenuation features such as walls, berming, heavy landscaping, between commercial, industrial, and residential uses to reduce noise and vibration impacts.

HS-8.15 Noise Buffering
The County shall require noise buffering or insulation in new development along major streets, highways, and railroad tracks.

HS-8.16 State Noise Insulation
The County shall enforce the State Noise Insulation Standards (California Administrative Code, Title 24) and Chapter 35 of the Uniform Building Code.

HS-8.18 Construction Noise
The County shall seek to limit the potential noise impacts of construction activities by limiting construction activities to the hours of 7 am to 7pm, Monday through Saturday when construction activities are located near sensitive receptors. No construction shall occur on Sundays or national holidays without a permit from the County to minimize noise impacts associated with development near sensitive receptors.

HS-8.19 Construction Noise Control
The County shall ensure that construction contractors implement best practices guidelines (i.e. berms, screens, etc.) as appropriate and feasible to reduce construction-related noise-impacts on surrounding land uses.

IMPACT EVALUATION

Would the project:

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Project Impact Analysis: ***Less than Significant with Mitigation***

Existing Traffic Noise Levels

"Table 3.12-4 shows that there will not be a significant impact to any sensitive receptors by this Project in the existing or existing plus project scenarios. The noise from vehicles, equipment or mining operations is not projected to exceed Tulare County's Land Use Compatibility for Community Noise Environments of 60 L_{dn}/CNEL, with or without the Project."[13]

Mining Operations

"If during any work shift a miner's noise exposure exceeds the dual hearing protection level, the mine operator must, in addition to the actions required for noise exposures that exceed the permissible exposure level, provide and ensure the concurrent use of both an ear plug and an ear muff type hearing protector. The following table sets out mine operator actions under MSHA's noise standard."[14]

[13] Orosi Traffic Noise Study
[14] http://www.msha.gov/30CFR/62.140.htm

Table 3.12-7
Mining Operation Requirements

Provision	Condition	Action Required by the Mine Operator
§62.120	Miner's noise exposure is less than the action level	None
§62.120	Miner's exposure equals or exceeds the action level, but does not exceed the permissible exposure level (PEL)	Operator enrolls the miner in hearing conservation program (HCP) which includes (1) a system of monitoring, (2) voluntary, with two exceptions, use of operator-provided hearing protectors, (3) voluntary audiometric testing, (4) training, and (5) record keeping.
§62.130	Miner's exposure exceeds the PEL	Operator uses/continues to use all feasible engineering and administrative controls to reduce exposure to PEL; enrolls the miner in a HCP including ensured use of operator-provided hearing protectors; posts administrative controls and provides copy to affected miner; must never permit a miner to be exposed to sound levels exceeding 115 dBA.
§62.140	Miner's exposure exceeds the dual hearing protection level	Operator enrolls the miner in a HCP, continues to meet all the requirements of §62.130, ensures concurrent use of earplug and earmuff.

Mitigation Measure(s):

12-1 Provide all hearing protection measures outlined in MSHA's Noise Standard Actions required by Mine Operators

Cumulative Impact Analysis: ***Less than Significant with Mitigation***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

Tulare County's General Plan has determined that a Project will have a significant impact if it causes or contributes to noise levels that exceed Tulare County's Land Use Compatibility for Community Noise Environments for sensitive receptors. Results of the analysis show that at Receptor 6, there is an increase of 0.1 L_{eq} dB as a result of the Project. Therefore, the Projects impact on Receptor 6 is considered less than significant.

Table 3.12-8
Traffic Noise Impacts for Existing Plus Project Plus Cumulative and Cumulative Year 2040 Without and Plus Project Conditions

Receptor I.D. No.	Existing Plus Project Plus Cumulative Noise Level Leq(h) dBA	Cumulative Year 2040 Without Project Noise Level Leq(h) dBA	Cumulative Year 2040 Plus Project Noise Level Leq(h) dBA	Noise Increase (+) or Decrease (-)[1]	Tulare County Noise Standard dBA Ldn	Impact
1	47.9	46.3	48.6	2.3	75.0	None
2	47.9	51.1	51.3	0.2	75.0	None
3	59.0	61.1	61.2	0.1	70.0	None
4	46.3	42.5	46.8	4.3	60.0	None
5	48.7	51.8	52.1	0.3	60.0	None
6	57.6	60.4	60.5	0.1	60.0	Yes
7	53.9	56.0	56.1	0.1	60.0	None
8	51.6	57.0	57.3	0.3	60.0	None
9	53.6	56.3	56.4	0.1	70.0	None
10	51.7	54.4	54.5	0.1	70.0	None

1: Comparison made between Cumulative Year 2040 Without Project and Cumulative Year 2040 Plus Project

Tulare County's adopted General Plan indicates that a noise study report should include recommendations and evidence to establish mitigation that will reduce noise exposure to acceptable levels. Receptor 6 (residence) is projected to exceed Tulare County's Land Use Compatibility for Community Noise Environments of 60 L_{dn}/CNEL with or without the Project. Based on Caltrans' Traffic Noise Analysis Protocol, noise abatement must be designed for a substantial reduction in noise, which is defined as a 5-decibel (dB) minimum reduction. This reduction represents a "readily perceptible change" in the noise level. An effective sound wall can typically reduce noise levels by 5 to 10 dBs, cutting the loudness of traffic noise by as much as one half. However, providing a sound wall along SR 63 (sensitive receptor location) would create property access issues and would be considered aesthetically unappealing in the area of the impacted sensitive receptor.

FHWA has identified that the presence of dense trees/shrubs that break the line of sight from the sound source to the receiver can provide a decibel reduction of 3 – 5 dBs. Implementation of dense trees/shrubs would reduce the noise level expected at Receptor 6 to a level that is below Tulare County's Land Use Compatibility for Community Noise Environments of 60 L_{dn}/CNEL. Without implementation of any abatement measures, the proposed Project's off-site traffic noise exposure for the Cumulative 2040 Plus Project scenario at Receptor 6."[15]

Table 8 shows the Cumulative 2040 Without Project and Plus Project traffic noise exposure levels at a setback of 80 feet from the roadway centerline and the distances from the roadway centerline necessary to achieve 60 Leq(h) dBA.

Table 3.12-9
Roadway Segment Noise Levels for Existing Plus Project, Existing Plus Project Plus Cumulative, and Cumulative Year 2040 Without and Plus Project Conditions

Roadway	Segment	Existing Plus Project		Existing Plus Project Plus Cumulative		Cumulative Year 2040 Without Project		Cumulative Year 2040 Plus Project	
		Noise Level Leq(h) dBA @ 80' Fom Roadway Centerlines	Distance (Feet) to 60 Leq(h) dBA from Roadway Centerline	Noise Level Leq(h) dBA @ 80' Fom Roadway Centerlines	Distance (Feet) to 60 Leq(h) dBA from Roadway Centerline	Noise Level Leq(h) dBA @ 80' Fom Roadway Centerlines	Distance (Feet) to 60 Leq(h) dBA from Roadway Centerline	Noise Level Leq(h) dBA @ 80' Fom Roadway Centerlines	Distance (Feet) to 60 Leq(h) dBA from Roadway Centerline
Road 144	Between Avenue 420 and Avenue 416	48.9	23	48.9	23	47.3	20	49.9	25
Avenue 416	Between Road 144 and SR 63	50.1	26	50.7	28	53.9	40	54.1	41
SR 63	Between Avenue 424 and Avenue 416	56.0	50	56.1	51	58.9	70	59.0	71
SR 63	Between Avenue 416 and SR 201	58.9	70	59.0	71	61.1	91	61.2	92
SR201	Between SR 63 and Road 120	54.3	41	54.4	43	59.8	78	60.1	81

Mitigation Measure(s):

12-2 If the applicant amends the SMARA Contract for renewal in 2030, the applicant shall conduct another noise study at receptor #6. If it found that the Project's noise impacts exceed the General Plan's threshold of 60 leq(h) the Project shall pay its fair share of Design and Planting costs for dense trees and shrubs in order to reduce the noise impact to receptor #6 to a level less than the General Plan threshold of 60 leq(h).

Conclusion: ***Less than Significant with Mitigation***

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Project Impact Analysis: ***Less than Significant Impact***

[15] Orosi Rock Noise Study

"Condition 43 of the existing Conditions of Approval required the Project to monitor the vibration impacts from blasting operations. Vibration monitoring has previously been performed and all data has been provided to Tulare County. Neil's Controlled Blasting, L.P conducted seismic and noise monitoring during the occurrence of a blast on August 1, 2007. Three seismographs were used concurrently to monitor the blast. The two seismographs located at the south and west property lines recorded vibration readings below 0.15 in/sec, which is well below the US Bureau of Mines recommendation of 2 in/ sec. The noise level readings taken at the time of the blast recorded a measurement below the 70dB limit at 12Hz, which is not detectable to the human ear. Therefore, it has been determined that vibrations from rock blasting at the Project's site are considered ***Less than Significant*** and no further study or mitigation is required."[16]

Cumulative Impact Analysis: ***Less than Significant Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

"Operations of the proposed Project will not result in any long-term vibration impacts."[17] Therefore, ***No Cumulative Impacts*** related to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***Less than Significant Impact***

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Project Impact Analysis: ***Less than Significant Impact***

Under Existing conditions, the Noise Study Report indicates that none of the sensitive receptor locations in both the With and Without Project scenarios exhibit predicted noise impacts that exceed Tulare County's Land Use Compatibility for Community Noise Environments. A change in the noise level of at least 5 dB is required before any noticeable change in community response would be expected. Table 5 of the Noise Study Report shows that the sensitive receptors will increase by no more than 2.9 L_{eq} dB as a result of the Project.[18] Therefore, impacts from the Project are anticipated to be ***Less Than Significant***.

Cumulative Impact Analysis: ***Less than Significant Impact***

[16] Orosi Rock Noise Study
[17] Ibid.
[18] Ibid.

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

As noted earlier in the response to Item 3.12 a), the proposed Project will increase ambient noise levels; however, the increase in noise levels will not exceed Tulare County's Maximum Acceptable Ambient Noise Exposure for Various Land Uses. Therefore, less than significant cumulative impacts related to this Checklist item will occur.

Mitigation Measure(s):

None Required

Conclusion: ***Less than Significant Impact***

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Project Impact Analysis: ***Less than Significant Impact***

There is no construction activities associated with the amendment to the Project's Permit that would generate a direct increase in ambient noise levels.

Cumulative Impact Analysis: ***Less than Significant Impact with Mitigation***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

"Table 3.12-3 shows that sensitive receptor #6 exceeds Tulare County's Land Use Compatibility for Community Noise Environments by 0.1 L_{eq} dB, as a result of traffic generated by the Project. Receptor 6 (residence) is projected to exceed Tulare County's Land Use Compatibility for Community Noise Environments of 60 L_{dn}/CNEL, with or without the Project. Tulare County's General Plan has determined that a Project will have a significant impact if it causes or contributes to noise levels that exceed Tulare County's Land Use Compatibility for Community Noise Environments for sensitive receptors. Results of the analysis show that at Receptor 6, there is an increase of 0.1 L_{eq} dB, as a result of the Project. Therefore, the Projects impact on Receptor 6 is considered significant.

Tulare County's adopted General Plan indicates that a noise study report should include recommendations and evidence to establish mitigation that will reduce noise exposure to acceptable levels. Receptor 6 (residence) is projected to exceed Tulare County's Land Use Compatibility for Community Noise Environments of 60 L_{dn}/CNEL with or without the Project. Based on Caltrans' Traffic Noise Analysis Protocol, noise abatement must be designed for a substantial reduction in noise, which is defined as a 5-decibel (dB) minimum reduction. This reduction represents a "readily perceptible change" in the noise level. An

effective sound wall can typically reduce noise levels by 5 to 10 dBs, cutting the loudness of traffic noise by as much as one half. However, providing a sound wall along SR 63 (sensitive receptor location) would create property access issues and would be considered aesthetically unappealing in the area of the impacted sensitive receptor.

FHWA has identified that the presence of dense trees/shrubs that break the line of sight from the sound source to the receiver can provide a decibel reduction of 3 – 5 dBs. Implementation of dense trees/shrubs would [mitigate] the noise level expected at Receptor 6 to a level that is below Tulare County's Land Use Compatibility for Community Noise Environments of 60 L_{dn}/CNEL and is considered Less than Significant. Without implementation of any abatement measures, the proposed Project's off-site traffic noise exposure for the Cumulative 2040 Plus Project scenario at Receptor 6 would be significant and unavoidable."[19]

Mitigation Measure(s):

See Mitigation Measure 12-2.

Conclusion: ***Less than Significant with Mitigation***

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Project Impact Analysis: ***No Impact***

"The Project is not located within two miles of a public airport or public use airport."[20]

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR. "The Project is not located within two miles of a public airport or public use airport."[21]

Mitigation Measure(s):

None Required.

Conclusion: ***No Impact***

f) For a project within the vicinity of a private airstrip, would the project expose people

[19] Orosi Noise Study
[20] ibid
[21] ibid

residing or working in the project area to excessive noise levels?

Project Impact Analysis: ***No Impact***

The Project is not located within the vicinity of a private airstrip.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR. The Project is not located within the vicinity of a private airstrip.

Mitigation Measure(s):

None Required.

Conclusion: ***No Impact***

DEFINITIONS/ACRONYMS

Definitions

"Noise is often described as unwanted sound, and thus is a subjective reaction to characteristics of a physical phenomenon. Researchers have generally agreed that A-weighted sound pressure levels (sound levels) are well correlated with subjective reaction to noise. Variations in sound levels over time are represented by statistical descriptors, and by time-weighted composite noise metrics such as the Day/Night Average Level (Ldn)."[22] In addressing noise impacts, the following key terms are outlined and explained below:

Ambient Noise - "The total noise associated with a given environment and usually comprising sounds from many sources, both near and far."

Attenuation - "Reduction in the level of sound resulting from absorption by the topography, the atmosphere, distance, barriers, and other factors.

A-weighted decibel (dBA) - A unit of measurement for noise based on a frequency weighting system that approximates the frequency response of the human ear.

Community Noise Equivalent Level (CNEL) - Used to characterize average sound levels over a 24-hour period, with weighting factors included for evening and nighttime sound levels. Leq values (equivalent sound levels measured over a 1-hour period - see below) for the evening period (7:00 p.m. to 10:00 p.m.) are increased by 5 dB, while Leq values for the nighttime period (10:00 p.m. to 7:00 a.m.) are increased by 10 dB. For a given set of sound measurements, the

[22] TCAG 2011 Regional Transportation Plan Draft Subsequent EIR, page 150

CNEL value will usually be about 1 dB higher than the Ldn value (see below). In practice, CNEL and Ldn are often used interchangeably.

Decibel (dBA) - A unit of measurement describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure (which is 20 micronewtons per square meter).

Day-Night Average Sound Level (Ldn) - Average sound exposure over a 24-hour period. Ldn values are calculated from hourly Leq values, with the Leq values for the nighttime period (10:00 p.m. to 7:00 a.m.) increased by 10 dB to reflect the greater disturbance potential from nighttime noises."

Equivalent Sound Level (Leq) - The level of a steady-state sound that, in a stated time period and at a stated location, has the same sound energy as the time-varying sound (approximately equal to the average sound level). The equivalent sound level measured over a 1-hour period is called the hourly Leq or Leq (h).

Lmax and Lmin - The maximum and minimum sound levels, respectively, recorded during a measurement period. When a sound meter is set to the "slow" response setting, as is typical for most community noise measurements, the Lmax and Lmin values are the maximum and minimum levels recorded typically for 1-second periods.

Percentile-Exceeded Sound Level (Lx) - The sound level exceeded during a given percentage of a measurement period. Examples include L10, L50, and L90. L10 is the A-weighted sound level that is exceeded 10% of the measurement period, L50 is the level exceeded 50% of the period, and so on. L50 is the median sound level measured during the measurement period. L90, the sound level exceeded 90% of the time, excludes high localized sound levels produced by nearby sources such as single car passages or bird chirps. L90 is often used to represent the background sound level. L50 is also used to provide a less conservative assessment of the background sound level.

Sensitive Receptors - Sensitive receptors are defined to include residential areas, hospitals, convalescent homes and facilities, schools, and other similar land uses."[23]

[23] General Plan Background Report, pages 8-46 to 8-47

REFERENCES

Tulare County 2030 General Plan, August 2012

Tulare County General Plan Background Report, February 2010

TCAG 2011 Regional Transportation Plan Draft Subsequent Environmental Impact Report, April 30, 2010

Orosi Rock Surface Mining Amendment to Permit, Noise Study Report, prepared by VRPA Technologies, June 2013

Federal Highway Administration website, Traffic Noise Model, http://www.fhwa.dot.gov/environment/noise/traffic_noise_model/

Caltrans Noise Studies Website, http://www.dot.ca.gov/hq/env/noise/pub/2006_protocol.pdf env/noise/pub/2006_protocol.pdf

2012 CEQA Guidelines

Population and Housing
Chapter 3.13

SUMMARY OF FINDINGS

The proposed Project will result in less than significant impacts related to Public Services without mitigation. A detailed review of potential impacts is provided in the following analysis.

INTRODUCTION

California Environmental Quality Act (CEQA) Requirements

This section of the ~~Draft~~ Final Environmental Impact Report (~~DEIR~~FEIR) addresses potential impacts to Population and Housing. As required in Section 15126, all phases of the proposed Project will be considered as part of the potential environmental impact.

As noted in 15126.2 (a), "[a]n EIR shall identify and focus on the significant environmental effects of the proposed Project. In assessing the impact of a proposed Project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced. Direct and indirect significant effects of the Project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, the human use of the land (including commercial and residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services. The EIR shall also analyze any significant environmental effects the Project might cause by bringing development and people into the area affected. For example, an EIR on a subdivision astride an active fault line should identify as a significant effect the seismic hazard to future occupants of the subdivision. The subdivision will have the effect of attracting people to the location and exposing them to the hazards found there. Similarly, the EIR should evaluate any potentially significant impacts of locating development in other areas susceptible to hazardous conditions (e.g., floodplains, coastlines, wildfire risk areas) as identified in authoritative hazard maps, risk assessments or in land use plans addressing such hazards areas."[1]

The environmental setting provides a description of the Population and Housing in the County. The regulatory setting provides a description of applicable Federal, State and Local regulatory policies that were developed in part from information contained in the Tulare County 2030

[1] 2012 CEQA Guidelines, Section 15126.2 (a)

General Plan, Tulare County General Plan Background Report and/or Tulare County General Plan Revised DEIR incorporated by reference and summarized below. Additional documents utilized are noted as appropriate. A description of the potential impacts of the proposed Project is provided and includes the identification of feasible mitigation measures (if necessary and feasible) to avoid or lessen the impacts.

Thresholds of Significance

- Induce Substantial Population Growth
- Displace Housing
- Displace People

ENVIRONMENTAL SETTING

"Tulare County, California is one of the largest counties in the great and fertile San Joaquin Valley. Geographically it is situated about midway between San Francisco and Los Angeles, the two principal cities of the Pacific Slope. Within the confines of Tulare County are now 4,863 square miles, or 3,158,400 acres."[2]

The Tulare County Region has three (3) subregional Housing Market Areas. These three areas are described below:

***Visalia/Farmersville/Exeter/Sequoia Park/Dinuba/Cutler/Orosi Market Area*:**

"Located in northern Tulare County and encompassing Census Tracts 1 through 20. Several cities are located within this market area including Dinuba, Exeter, Farmersville, Visalia (the County's largest City), and Woodlake. Visalia is the only city within the entire County with two regional shopping centers. A number of unincorporated communities are located within this market area including: Cutler, East Orosi, Orosi, Sultana, Traver, Goshen, West Goshen, Ivanhoe, Lemon Cove, Three Rivers, and other Valley and Sierra Communities. It should be noted that Woodlake and Farmersville are highly defined sub-market areas within this Market Area. These communities have high farmworker households, low median income, and high unemployment rates within Tulare County. The geographic boundary of this market area extends to the Tulare County line in the north, west and east, and generally extends to Avenue 256 in the south."[3]

Tulare/Southwest Tulare County Market Area:

"Located in central Tulare County, this Market Area encompasses Census Tracts 21 through 24, 29 through 32, and 42 through 44. The only incorporated city in this Market Area is Tulare, the second largest city in the County. A number of unincorporated cities are also located in this Market Area and include: Tipton, Pixley, Earlimart, and other Valley Communities. Most economic interaction with communities in this market area primarily occurs between the City of Delano located just south of the Tulare/Kern County

[2] Tulare County Regional Blueprint, page 4 to 5
[3] Final Tulare County 2008 Regional Housing Needs Assessment Plan, page II-2

Line and the City of Visalia to the north. The geographic boundary of this market area extends generally along Avenue 256, the County line to the west and to the south, and along Rd. 192/Rd. 176/Rd. 208/SR 65 to the east."[4]

Lindsay/Strathmore/Porterville/Foothills/Southeast Tulare County Market Area:

"Located in southeast Tulare County, this Market Area encompasses Census Tracts 25 through 28, 33 through 41, and 45. Most economic interaction in this Market Area occurs between the unincorporated communities and the Cities of Lindsay and Porterville. The unincorporated communities in this Market Area include: Strathmore, Cairns Corner, Ducor, Terra Bella, the Tule Indian Reservation, and other Valley and Sierra Communities. The geographic boundary of this market area extends along Avenue 256 to the north, Rd. 192/Rd. 176/Rd. 208/SR 65 to the west, and the County line to the south and east."[5]

According to the Tulare County Regional Housing Needs Plan, the number of household in Tulare County's was 110,356 in 2000. In 2007 the number of households was 125,836. The 2014 household projection was 159,514.

Table 3.13-1
Tulare County Population

	1980	1990	2000	2008
Tulare County's Population	245,738	311,921	368,021	435,254

Source: 1980, 1990, 2000 U.S. Census, State of California, Department of Finance, E-1 Population Estimates.

"Affordability problems occur when housing costs become so high in relation to income that households have to pay an excessive proportion of their income for housing, or are unable to afford any housing and are homeless. A household is considered to be overpaying (or cost burdened) if it spends more than 30 percent of its gross income on housing. Severe overpayment occurs when a household spends more than 50 percent of income on housing. Housing costs depend upon many variables, including the type, size, value and/or location of the housing units, the intended tenure of the unit (whether it is to be occupied by owners or renters), and the inclusion or exclusion of one or more utilities, services, property taxes, insurance, and maintenance."[6]

"Housing costs continue to rise significantly. Since 2000, the median rent has increased 40.9 percent from $516 to $727. The monthly owner costs for housing units with a mortgage have seen an even larger escalation going from $943 to $1,518 which is a 61 percent increase. The monthly owner costs for those housing units without a mortgage increased by 31 percent, going from $251 to $330."[7]

As noted in the Tulare County 2008 Regional Housing Needs Assessment Plan, "[t]he RHNA Plan recommends that the County provide land use and zoning for approximately 938 units per year in the unincorporated portions of the County. This augmented number was due to the high

[4] Final Tulare County 2008 Regional Housing Needs Assessment Plan, page II-2
[5] Ibid. Page II-4
[6] 2009 Housing Element, page 36
[7] Ibid. Page 41

allocation of housing given to the incorporated cites mainly as a result of the amount of annexations carried out by incorporated cites. The County administratively agreed to increase its housing share to 7,035 units (938 units per year over the 7-1/2 year RHNA planning period) to alleviate member jurisdictions concerns over high housing numbers within the incorporated cities."[8]

"The County has made significant progress in meeting the quantifiable goals and projected needs from the 2003 Housing Element… The 7.5-year time frame included a construction boom. The 2002 Regional Housing Needs Plan indicated a housing need of 2,250 units within the unincorporated area; overall growth was much greater than the projected need."[9]

REGULATORY SETTING

Federal Agencies & Regulations

US Department of Housing and Urban Development (HUD)

"HUD's mission is to create strong, sustainable, inclusive communities and quality affordable homes for all. HUD is working to strengthen the housing market to bolster the economy and protect consumers; meet the need for quality affordable rental homes: utilize housing as a platform for improving quality of life; build inclusive and sustainable communities free from discrimination; and transform the way HUD does business."[10]

State Agencies & Regulations

California Department of Housing and Community Development (HCD)

HCD's mission is to "[p]rovide leadership, policies and programs to preserve and expand safe and affordable housing opportunities and promote strong communities for all Californians."[11] "In 1977, the State Department of Housing and Community Development (HCD) adopted regulations under the California Administrative Code, known as the Housing Element Guidelines, which are to be followed by local governments in the preparation of local housing elements. AB 2853, enacted in 1980, further codified housing element requirements. Since that time, new amendments to State Housing Law have been enacted. Each of these amendments has been considered during development of this Housing Element."[12]

California Relocation Assistance Act

The State of California adopted the California Relocation Assistance Act (*California Government Code* §7260 et seq.) in 1970. This State law, which follows the federal Uniform Relocation Assistance and Real Property Acquisition Act, requires public agencies to provide

[8] Ibid. Page 10
[9] Ibid. Page 101
[10] HUD Website, http://portal.hud.gov/hudportal/HUD?src=/about/mission
[11] HCD website, http://www.hcd.ca.gov/mission.html
[12] 2009 Housing Element, page 3 to 4

procedural protections and benefits when they displace businesses, homeowners, and tenants in the process of implementing public programs and projects. This State law calls for fair, uniform, and equitable treatment of all affected persons through the provision of relocation benefits and assistance to minimize the hardship of displacement on the affected persons.

Local Policy & Regulations

Tulare County 2008 Regional Housing Needs Assessment Plan

"The Tulare County Association of Governments (TCAG) was responsible for allocating the State's projections to each local jurisdiction within Tulare County including the County unincorporated area, which is reflected in this Housing Element. Tulare County has no control over the countywide population and housing projections provided to TCAG when it prepared the Regional Housing Needs Assessment Plan."[13]

Tulare County Regional Blueprint 2009

This Blueprint includes the following preferred growth scenario principals:

- Increase densities county-wide by 25% over the status quo densities.
- Establish light rail between cities.
- Extend Highway 65 north to Fresno County.
- Expand transit throughout the county.
- Maintain urban separators around cities.
- Growth would be directed toward incorporated cities and communities where urban development exists and where comprehensive services and infrastructure are or will be provided.

Tulare County Housing Authority

"The Housing Authority of the County of Tulare (HATC) has been officially designated as the local public housing agency for the County of Tulare by the Board of Supervisors and was created pursuant to federal and state laws. …HATC is a unique hybrid: a public sector agency with private sector business practices. Their major source of income is the rents from residents. The HATC mission is "to provide affordable, well-maintained rental housing to qualified low- and very low-income families. Priority shall be given to working families, seniors and the disabled. Tenant self sufficiency and responsibility shall be encouraged. Programs shall be self-supporting to the maximum extent feasible." HATC provides rental assistance to very low and moderate-income families, seniors and the handicapped throughout the county. HATC offers many different programs, including the conventional public housing program, the housing choice voucher program (Section 8), the farm labor program for families with farm labor income, senior housing programs, and other programs. They also own or manage some individual subsidized rental complexes that do not fall under the previous categories, and can provide information about other affordable housing that is available in Tulare County. All programs are handicap

[1] Ibid. Page 10

accessible. Almost all of the complexes have 55-year recorded affordability covenants."[14]

2009-2014 Housing Element Policies

Policy 1.11
Encourage the development of a broad range of housing types to provide an opportunity of choice in the local housing market.

Policy 1.14
Pursue an equitable distribution of future regional housing needs allocations, thereby providing a greater likelihood of assuring a balance between housing development and the location of employment opportunities.

Policy 1.33
Encourage and support a balance between housing and agricultural needs.

Policy 3.11
Support and coordinate with local economic development programs to encourage a "jobs to housing balance" throughout the unincorporated area.

IMPACT EVALUATION

Would the project:

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Project Impact Analysis: ***Less than Significant Impact***

The proposed Project does not include new homes. As part of the proposed expansion, the number of employees will increase by up to 10 employees. This increase in the size of this existing business will not induce population growth because of the relative size of the growth. In addition, the Project site is located in a rural area and this increase in the size of this business will not induce nearby parcels to build new residences or create new businesses. ***Less Than Significant Project-specific Impacts*** related to this Checklist item will occur.

Cumulative Impact Analysis: ***Less than Significant Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

[14] Ibid. Page 112

As the proposed expansion will result in no more than 10 new employees, less than significant population growth will occur. ***Less Than Significant Cumulative Impacts*** related to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***Less than Significant Impact***

As noted earlier, ***Less Than Significant Project-specific and Cumulative Impacts*** related to this Checklist item will occur.

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

Project Impact Analysis: ***No Impact***

There is no housing located on the project site and no housing will be displaced as a result of the proposed Project. No Project-specific impacts related to this Checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

As noted above, there is no existing housing on the Project site and the proposed Project will not displace any housing units. No cumulative impacts related to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***No Impact***

As noted earlier, no Project-specific or cumulative impacts related to this Checklist item will occur.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

Project Impact Analysis: ***No Impact***

The proposed Project does not include the conversion of housing. As such, no Project-specific impacts related to this Checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

The proposed Project would not convert housing on-site or off-site. As such, no cumulative impacts related to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***No Impact***

As noted earlier, no Project-specific or cumulative impacts related to this Checklist item will occur.

REFERENCES

Tulare County 2030 General Plan, August 2012

Tulare County 2009 Housing Element Update, May 2012

HUD Website: http://portal.hud.gov/hudportal/HUD?src=/about/mission

HCD Website, http://www.hcd.ca.gov/mission.html

Final Tulare County 2008 Regional Housing Needs Assessment Plan, Tulare County Association of Governments, July 2008

2013 CEQA Guidelines

Tulare County Regional Blueprint, TCAG, May 2009

Public Services
Chapter 3.14

SUMMARY OF FINDINGS

The proposed Project will result in less than significant impacts related to Public Services. A detailed review of potential impacts is provided in the analysis below.

INTRODUCTION

California Environmental Quality Act (CEQA)

This section of the ~~Draft~~ Final Environmental Impact Report (~~DEIR~~FEIR) addresses potential impacts to Land Use and Recreation. As required in Section 15126, all phases of the proposed Project will be considered was part of the potential environmental impact.

The environmental setting provides a description of the Public Services in the County. The regulatory setting provides a description of applicable Federal, State and Local regulatory policies that were developed in part from information contained in the Tulare County 2030 General Plan, the Tulare County General Plan Background Report and/or the Tulare County General Plan Revised DEIR incorporated by reference and summarized below. Additional documents utilized are noted as appropriate. A description of the potential impacts of the proposed Project is provided and includes the identification of feasible mitigation measures (if necessary and feasible) to avoid or lessen the impacts.

INTRODUCTION

California Environmental Quality Act (CEQA) Requirements

This section of the ~~Draft~~Final Environmental Impact Report (~~DEIR~~FEIR) addresses potential impacts related to Public Services. As required in Section 15126, all phases of the proposed Project will be considered as part of the potential environmental impact.

As noted in Section 15126.2 (a), "[a]n EIR shall identify and focus on the significant environmental effects of the proposed project. In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced. Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, the human use of the land (including commercial and

residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services. The EIR shall also analyze any significant environmental effects the project might cause by bringing development and people into the area affected. For example, an EIR on a subdivision astride an active fault line should identify as a significant effect the seismic hazard to future occupants of the subdivision. The subdivision would have the effect of attracting people to the location and exposing them to the hazards found there. Similarly, the EIR should evaluate any potentially significant impacts of locating development in other areas susceptible to hazardous conditions (e.g., floodplains, coastlines, wildfire risk areas) as identified in authoritative hazard maps, risk assessments or in land use plans addressing such hazards areas."[1]

The environmental setting provides a description of the Public Services Setting in Tulare County. The regulatory setting provides a description of applicable Federal, State, and Local regulatory policies that were developed in part from information contained in the Tulare County 2030 General Plan, Tulare County General Plan Background Report, and/or Tulare County 2030 General Plan EIR incorporated by reference and summarized below. Additional documents utilized are noted as appropriate. A description of the potential impacts of the proposed Project is provided and includes the identification of feasible mitigation measures (if necessary and feasible) to avoid or lessen the impacts.

Thresholds of Significance:

- Impact Fire Services
- Impact Police Services
- Impact Schools
- Impact Parks
- Impact Other Public Facilities

ENVIRONMENTAL SETTING

Tulare County Fire Protection

"The [formerly titled] California Department of Forestry and Fire Protection/Tulare County Fire Department (now CalFire/TCFD) serve 145,128 of Tulare County's population. As Table 7-6 [of the General Plan Background document] shows, dispatchers reported 14,022 responses in 2002, averaging 38.4 calls a day. Fire occurrence data generated by the department indicate a direct relationship between high use areas of the county and fire occurrence. The population increase in the mountain areas have caused increased wildland urban interface problems as well. Structures are being built throughout wildland areas wherein vegetation fires can spread rapidly. Providing adequate fire protection to those structures has become a major undertaking."[2]

"..[T]he Tulare County Fire Department responded to 14,022 calls for service in 2002… [A] majority of the calls were for medical emergencies (52 percent) followed by fire calls (20

[1] 2013 CEQA Guidelines, Section 15126.2 (a)
[2] General Plan Background Report, page 7-73

percent). The remaining calls ranged from dispatch incidents (8.1 percent) to assisting other agencies (7.3 percent) to public assistance (3.4 percent)."[3]

"Tulare County contracts with the California Division of Forestry (CDF) for fire protection services. The Cutler-Orosi fire station serves south to Avenue 352, west to Road 104, east to the foothills and north to the county line. The station is backed up by stations located in Dinuba, Ivanhoe, Woodlake and Fresno County. Ambulance service is provided by a fire station in Dinuba.

The station is staffed by a full-time paid firefighter, and is supported by 20 volunteers. Equipment support is provided by a 4-wheel drive fire truck (90 gpm pumper) used for grass fires and accidents, and a large engine (1250 gpm pumper) used for structural fires.

During the summer months the primary calls for service involve grass fires. In the winter, the majority of calls involve structural fires."[4]

Police Protection

"In 2007, the Tulare County Sheriff's Department currently had 448 sworn officers serving its unincorporated population (145,128), and generates a level of service ratio of 3.2 officers per 1,000 residents. The ratio is above the accepted standard of 2.0 officers per 1,000 residents set by the Federal Bureau of Investigation. The Sheriff's Department also has 186 non-sworn clerical and support staff amounting to a total Sheriffs Department staff personnel of 633 employees."[5]

"Law enforcement protection for the unincorporated county is divided into 22 areas with four stations… [T]he Porterville substation serves the largest number of areas with 10 patrols, followed by the headquarters in Visalia with six, and Cutler-Orosi and Pixley, each with three areas."[6]

"The Tulare County Sheriff Department's Cutler-Orosi substation serves a rural population of approximately 40,000 persons. In addition to serving Cutler and Orosi, the substation also serves Sultana, Yettem, and East Orosi. The station is staffed using a 3-shift operation which includes 13 deputies, three sergeants, one lieutenant and 2 detectives who rotate among other stations. During any one shift there are three to four deputies in the field and one sergeant on the desk. The lieutenant maintains an 8 to 5, five days a week, schedule.

The types of calls for police service in Cutler and Orosi are typical of other unincorporated communities in Tulare County. Sheriff officials feel that the more serious calls result from Cutler rather than Orosi or outlying areas. Officials stated that the major reason for Cutler requiring more calls can be traced to Cutler having four bars as compared to two in Orosi. This type of commercial use usually generates a higher demand for police service. Officials also feel

[3] Ibid., page 7-74
[4] Culter-Orosi Community Plan, page 16
[5] General Plan Background Report, page 7-71 to 7-72
[6] Ibid. Page 7-72

that Cutler has a larger farm labor population than Orosi, and that this may also be a factor in explaining the higher rate of service calls."[7]

Schools

A total of 48 school districts provide education throughout Tulare County. Of the 48 school districts, seven are unified districts providing educational services for kindergarten through 12th grade. The remaining 41 districts consist of 36 elementary school districts and four high school districts. Many districts only have one school."[8]

"Total enrolment in Tulare County public schools has increased from about 80,000 to 88,300 students during a nine-year span from 1993 to 2002. On average, the growth rate has remained steady with annual increases approximating two percent."[9]

"The Cutler-Orosi Unified School District serves Cutler and Orosi, and the smaller communities of Yettem, Badger and Lovell. The District has six schools which provide grades K through 12.

Cutler Elementary School provides grades K-3 and 6-8; grades 4-5 attend the elementary school in Yettem. Orosi has two elementary schools and one high school. El Monte Elementary has grades K-1 and 6-8, Palm Elementary has grades 2-5, and Orosi High School is 9-12. Sierra Elementary, located in the mountain community of Badger, provides grades K-8. A continuation high school located in Lovell provides grades 9 12.

The ethnic composition of the district is 70 percent Hispanic, 15 percent Asian, 15 percent White and less than 1 percent Black.

The District has recently purchased a new 18 acre elementary school site in Orosi, located east of Road 128 and north of Sand Creek. It will have a capacity of 750 students and serve grades 6-8. In addition, a 57 acre site was purchased at the northwest corner of Road 128 and Avenue 419 in Orosi. Twelve acres of this site will be reserved for an elementary school and the balance for a new high school.

School officials have stated that the District is exceeding its enrollment capacity. An indicator of this capacity problem is average classroom load. The District is currently averaging 30 students per classroom. School officials have indicated that the average classroom load is 30 students. Enrollment figures from 1979/80 to 1987/88 show that enrollment in the elementary grades, K-8, has increased from 1755 to 2380 students, an average annual increase of five percent. Even more dramatic is the increased enrollments experienced in the K-6 grades. For the last seven years, enrollment in these grades has increased at an average annual rate of almost six percent.

Orosi High School's enrollment has increased from 615 to 684 students, an average annual increase of 1.5 percent. This growth rate is expected to increase as the Population at the lower grades ages. School officials have stated that the construction of two new elementary schools,

[7] Culter-Orosi Community Plan, page 16
[8] General Plan Background Report, page 7-75 to 7-76
[9] Ibid. Page 7-76

and eventually a new high school, should adequately serve the District for the next twenty years. School impact fees currently being collected by the District, and construction funds from the State will be used to finance these projects."[10]

Parks

There are a number of Federal, State, and local parks within Tulare County. There are 13 park and recreational facilities operated by Tulare County. A list of these local park facilities is provided in the table below.

Table 3.14-1
Recreational Areas in Tulare County

ID	Recreation Area	Location	Acres	Type of Use/Features
1	Alpaugh Park	Located in Alpaugh on Road 40.	3	Reservations for picnic areas are taken. No entrance fee.
2	Balch Park Campgrounds	20 miles NE of Springville in the Sierras.	160	71 Campsites. No reservations taken; first come first serve basis. Entrance fee for vehicles.
3	Bartlett Park	8 miles east of Porterville on North Drive.	127.5	Reservations for picnic areas are taken. Entrance fee for vehicles.
4	Camp COTYAC	Near Ponderosa in Eastern Tulare County.	8	County of Tulare Youth Adventure Camp (Camp COTYAC). Cabins, lodge with kitchen, restrooms and showers.
5	Cutler Park	5 miles east of Visalia on Highway 216 to Ivanhoe.	50	Reservations for picnic areas are taken. Entrance fee for vehicles.
6	Elk Bayou Park	6 miles SE of Tulare on Avenue 200.	60	Reservations for picnic areas are taken. No fee for day use.
7	Kings River Nature Preserve	2 miles east of Highway 99 on Road 28	85	This park is only for school environmental programs.
8	Ledbetter Park	1 mile northwest of Cutler on Road 124/Hwy 63	11	Reservations for picnic areas are taken. No fee.
9	Mooney Grove Park	2 Miles south of Caldwell Avenue on Mooney Blvd. In South Visalia.	143	Reservations for picnic areas are taken. Paddle boats, playground, baseball diamonds. Home of the End Trail statue. One of the largest oak woodlands in Tulare County. Location of the Agriculture and Farm Labor Museum.
10	Pixley Park	1 mile NE of Pixley on Road 124.	22	Reservations for picnic areas are taken. No fee.
11	Tulare County Museum	In Mooney Grove Park, South Visalia.	8.5	Free admission with park fee. Museum is opened Thursday thru Monday (closed Tuesday and Wednesday).
12	Woodville Park	Located in Avenue 166 in Woodville.	10	Reservations for picnic areas are taken. Day use no entrance fee.
13	West Main Street Park	2 blocks west of County Courthouse on Main Street in Downtown Visalia.	5	Day use no entrance fee.

A more lengthy discussion of recreational facilities is provided in Chapter 3.15.

Library

"The Tulare County Public Library System comprises of interdependent branches, grouped by services, geography and usage patterns to provide efficient and economical services to the residents of the county. At present, there are 14 regional libraries and one main branch."[11]

[10] Culter-Orosi Community Plan, page 17
[11] General Plan Background Report, page 7-96

Table 3.14-2
Tulare County Libraries

Branch	Address	Service Hours (2003)
Alpaugh	3816 Avenue 54 Alpaugh, CA 93201-0069	Tuesday: 10 am - 1pm, 2 pm - 6 pm Wednesday: 10 am - 1 pm, 2 pm – 6 pm
Dinuba	150 South I Street Dinuba, CA 93618-2399	Tuesday: 11 am - 5 pm, 6 pm - 8 pm Wednesday: 9 am - 1 pm, 2 pm - 6 pm Thursday: 11 am - 5 pm, 6 pm - 8 pm Friday: 9 am - 1 pm, 2 pm -6 pm
Earlimart	780 East Washington Earlimart, CA 93219-2153	Tuesday: 10 am -1 pm, 2 pm - 6 pm Wednesday: 10 am - 1 pm, 2 pm - 6 pm Thursday: 10 am - 1 pm, 2 pm - 6 pm Friday: 10 am - 1, 2 pm - 6 pm
Exeter	230 East Chestnut Exeter, CA 93221-1712	Tuesday: 11 am -5 pm; 6 pm - 8 pm Wednesday: 11 pm - 5 pm, 6 pm - 8 pm Thursday: 9 am - 1 pm; 2 pm - 6 pm Friday: 9 am - 1 pm; 2 pm - 6pm
Ivanhoe	15964 Heather Ivanhoe, CA 93235-1253	Wednesday: 10 am - 1 pm, 2 pm - 6 pm Thursday: 10 am - 1 pm, 2 pm - 6 pm
Lindsay	165 North Gale Hill Street Lindsay, CA 93247-2507	Tuesday: 11 pm - 5 pm; 6 pm - 8 pm Wednesday: 9 am - 1 pm; 2 pm - 6 pm Thursday: 11 am - 5 pm; 6 pm - 8 pm Friday: 9 am - 1 pm; 2 pm - 6 pm
Cutler-Orosi	12646 Avenue 416 Orosi, CA 93647-2018	Wednesday: 9 am - 1 pm, 2 pm - 6 pm Thursday: 9 am - 1 pm, 2 pm - 6 pm Friday: 9 am -1 pm, 2 pm - 6 pm
Pixley	300 North School Pixley, CA 93256-1011	Tuesday: 9:30 am - 8 pm Wednesday : 9:30am - 5 pm Thursday: 9:30 am - 8 pm Friday: 9:30 am - 3:30 pm Saturday: 10 am - 2 pm
Springville	35800 Highway 190 Springville, CA 93265-0257	Thursday: 11 am - 5 pm , 6 pm - 8 pm Friday: 9 am - 1 pm , 2 pm - 6 pm Saturday: 9 am - 1 pm, 2 pm - 5 pm
Strathmore	19646 Road 230 Strathmore, CA 93267-0595	Tuesday: 9 am - 1 pm, 2 pm - 6 pm Wednesday: 9 am - 1 pm, 2 pm - 6 pm
Terra Bella	23825 Avenue 92 Terra Bella, CA 93270-0442	Monday – Friday: 8:30 am - 2:30 pm
Three Rivers	42052 Eggers Drive 216 Three Rivers, CA 93271-0216	Wednesday: 10 pm - 1 pm, 2 pm - 6 pm Thursday: 12 pm - 1 pm, 6 pm - 8 pm Friday: 10 am - 1 pm, 2 pm - 6 pm
Tipton	301 East Woods Avenue Tipton, CA 93272-0039	Thursday: 9 am - 1 pm, 2 pm - 6 pm Friday: 9 am - 1 pm, 2 pm - 6 pm
Visalia	Main Branch 200 West Oak Avenue Visalia, CA 93291-4993	Tuesday: 9 am - 8 pm Wednesday: 9 am - 8 pm Thursday: 9 am - 8 pm Friday: 12 pm - 6 pm Saturday: 9 am - 5 pm
Woodlake	400 West Whitney Woodlake, CA 93286-1298	Wednesday: 9 am - 1 pm, 2 pm - 6 pm Thursday: 9 am - 1 pm, 2 pm - 6 pm Friday: 9 am - 1 pm, 2 pm - 6 pm

Library hours current as of February 2010

REGULATORY SETTING

Federal Agencies & Regulations

None that apply to the proposed Project.

State Agencies & Regulations

None that apply to the proposed Project.

Local Policy & Regulations

Tulare County General Plan Policies

The Tulare County General Plan has several policies that apply to projects within County of Tulare. General Plan policies that relate to the proposed Project are listed as follows:

PFS-7.1 Fire Protection
The County shall strive to expand fire protection service in areas that experience growth in order to maintain adequate levels of service.

PFS-7.2 Fire Protection Standards
The County shall require all new development to be adequately served by water supplies, storage, and conveyance facilities supplying adequate volume, pressure, and capacity for fire protection.

PFS-7.3 Visible Signage for Roads and Buildings
The County shall strive to ensure all roads are properly identified by name or number with clearly visible signs.

PFS-7.5 Fire Staffing and Response Time Standards
The County shall strive to maintain fire department staffing and response time goals consistent with National Fire Protection Association (NFPA) standards.

Table 3.14-3
Fire Staffing and Reponses Time Standards

	Demographics	Staffing/Response Time	% of Calls
Urban	> 1,000 people/sq. mi.	15 FF/9 min.	90
Suburban	500-100 people/sq. mi.	10 FF/10 min.	80
Rural	< 500 people/sq. mi.	6 FF/14 min.	80
Remote*	Travel Dist. > 8 min.	4 FF/no specific response time	90

*Upon assembling the necessary resources at the emergency scene, the fire department should have the capacity to safety commence an initial attach within 2 minutes, 90% of the time. (FF = Fire Fighters)
Source: Tulare County 2030 General Plan

PFS-7.6 Provision of Station Facilities and Equipment
The County shall strive to provide sheriff and fire station facilities, equipment (engines and other apparatus), and staffing necessary to maintain the County's service goals. The County shall continue to cooperate with mutual aid providers to provide coverage throughout the County.

PFS-7.8 Law Enforcement Staffing Ratios
The County shall strive to achieve and maintain a staffing ratio of 3 sworn officers per 1,000 residents in unincorporated areas.

PFS-7.9 Sheriff Response Time
The County shall work with the Sheriff's Department to achieve and maintain a response time of:

1. Less than 10 minutes for 90 percent of the calls in the valley region; and
2. 15 minutes for 75 percent of the calls in the foothill and mountain regions.

PFS-7.12 Design Features for Crime Prevention and Reduction
The County shall promote the use of building and site design features as means for crime prevention and reduction.

PFS-8.1 Work with Local School Districts
The County shall work with local school districts to develop solutions for overcrowded schools and financial constraints of constructing new facilities.

PFS-8.4 Library Facilities and Services
The County shall encourage expansion of library facilities and services as necessary to meet the needs (e.g., internet access, meeting rooms, etc.) of future population growth.

IMPACT EVALUATION

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Fire protection?

Project Impact Analysis: ***No Impact***

The Project site is served by the Tulare County Fire Department from the Cutler-Orosi Substation located at 40779 Road 128 in Cutler, approximately 3.5 miles west. The current operation is served by an on-site fire hydrant system that is tied to an existing well. The expansion of operations will not impact fire department response times as the Project expansion will remain on the same site thus distance to the nearest fire station will remain unchanged. ***No Project-specific Impacts*** related to this Checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

The proposed Project will not significantly impact the fire department's response times. The proposed Project will be served by the Cutler-Orosi Substation located at 40779 Road 128 in Cutler approximately 3.5 miles west of the Project site. Therefore, ***No Cumulative Impacts*** related to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***No Impact***

No Project-specific and Cumulative Impacts related to this Checklist item will occur.

Police protection?

Project Impact Analysis: ***No Impact***

The proposed Project is served by the Cutler-Orosi Substation located at 40779 Road 128 in Cutler approximately 3.5 miles west. ***No Project-specific Impacts*** related to this Checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

As noted earlier, the proposed Project will not significantly impact Police Services. As such, ***No Cumulative Impacts*** related to this Checklist item will occur.

Mitigation Measure(s):

None required.

Conclusion: ***No Impact***

As noted earlier, ***No Significant Project-specific and Cumulative Impacts*** related to this Checklist item will occur.

Schools?

Project Impact Analysis: ***Less than Significant Impact***

The proposed Project does not involve a significant number of new employees. As such, there will be ***No Impact*** to school enrollment.

Cumulative Impact Analysis: ***Less than Significant Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

As noted earlier, the proposed Project will have no impact on Schools. As such, ***No Cumulative Impacts*** related to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***No Impact***

As noted earlier, ***No Project-specific or Cumulative Impacts*** related to this Checklist item will occur.

Parks?

Project Impact Analysis: ***Less than Significant Impact***

The proposed Project is anticipated to result in an increase of 10 new employees. The nearest park is Ledbetter Park in Cutler; approximately 3.5 west of the site. Even if all employees chose to utilize Ledbetter Park, the park size is sufficient in size to accommodate their use. Therefore, ***Less Than Significant Impacts*** to parks will occur.

Cumulative Impact Analysis: ***Less than Significant Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

As noted earlier, the proposed Project will not significantly impact parks. As such, ***Less Than Significant Cumulative Impacts*** related to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***Less than Significant Impact***

As noted earlier, ***Less Than Significant Project-specific or Cumulative Impacts*** related to this Checklist item will occur.

Other public facilities?

Project Impact Analysis: ***No Impact***

Other public facilities in proximity to the Project site that were evaluated for their potential to be impacted include water treatment plants, libraries and solid waste disposal facilities.

The proposed Project will benefit solid waste disposal facilities through increased diversion of solid waste (particularly recycled concrete) from landfills.

The proposed Project is not connected to a sewer line and will rely on an existing and a new septic system. The proposed Project will not impact service levels of a waste water treatment facility.

The proposed Project does not involve the creation of new residences. The proposed Project will not result in a significant increase in employees, thus, library service levels will not be impacted.

As such, ***No Project-specific Impacts*** related to this Checklist item will occur.

Cumulative Impact Analysis: ***Less than Significant Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

As noted earlier, the proposed Project will not impact other public facilities. As such, ***No Cumulative Impacts*** related to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***No Impact***

As noted earlier, ***No Project-specific and Cumulative Impacts*** related to this Checklist item will occur.

REFERENCES

Tulare County 2030 General Plan, August 2012

Tulare County 2030 General Plan Background Report, February 2010

2013 CEQA Guidelines

Website Search of Tulare County Fire Department by Hector Guerra, Chief Environmental Planner, RMA, Planning Branch, September 18, 2013.

Website Search of Tulare County Sheriff's Office by Hector Guerra, Chief Environmental Planner, RMA, Planning Branch, September 18, 2013.

Recreation
Chapter 3.15

SUMMARY OF FINDINGS

The proposed Project will result in no impacts related to Recreation. No mitigation measures will be required.

INTRODUCTION

California Environmental Quality Act (CEQA) Requirements

This section of the ~~Draft~~ Final Environmental Impact Report (~~DEIR~~FEIR) addresses potential impacts to Recreation. As required in Section 15126, all phases of the proposed Project will be considered as part of the potential environmental impact.

As noted in Section 15126.2 (a), "[a]n EIR shall identify and focus on the significant environmental effects of the proposed project. In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced. Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, the human use of the land (including commercial and residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services. The EIR shall also analyze any significant environmental effects the project might cause by bringing development and people into the area affected. For example, an EIR on a subdivision astride an active fault line should identify as a significant effect the seismic hazard to future occupants of the subdivision. The subdivision would have the effect of attracting people to the location and exposing them to the hazards found there. Similarly, the EIR should evaluate any potentially significant impacts of locating development in other areas susceptible to hazardous conditions (e.g., floodplains, coastlines, wildfire risk areas) as identified in authoritative hazard maps, risk assessments or in land use plans addressing such hazards areas."[1]

The environmental setting provides a description of the Recreational Resources in the County. The regulatory setting provides a description of applicable Federal, State and Local regulatory policies that were developed in part from information contained in the Tulare County 2030

[1] 2013 CEQA Guidelines, Section 15126.2 (a)

General Plan, Tulare County General Plan Background Report, and/or Tulare County 2030 General Plan EIR incorporated by reference and summarized below. Additional documents utilized are noted as appropriate. A description of the potential impacts of the proposed Project is provided and includes the identification of feasible mitigation measures (if necessary and feasible) to avoid or lessen the impacts.

Thresholds of Significance

The thresholds of significance for this section are established by the CEQA Checklist item questions. The following are potential thresholds for significance.

- Increase use of existing recreational facilities
- Include or require additional recreational facilities

ENVIRONMENTAL SETTING

"Tulare County contains several county, state, and federal parks. Aside from parks in the county, there are many open space areas as well. This section will highlight these various parks and open space areas and identify recreational opportunities within them."[2] In addition to the 13 parks and recreation facilities that are owned and operated by Tulare County, there are State Parks and Forests, National Parks and National Forests, and trails and recreational areas.

Federal Recreation Areas

Lake Kaweah

"Lake Kaweah was formed after the construction of the Terminus Dam on the Kaweah River in 1962. The lake offers many recreational opportunities including fishing, camping, and boating. Lake Kaweah is located 20 miles east of Visalia on Highway 198 and was constructed by the U.S. Army Corps of Engineers for flood control and water conservation purposes. The lake has a maximum capacity to store 143,000 acre-feet of water. There are a total of 80 campsites at the lake's Horse Creek Campground, which contains toilets, showers and a playground. Campfire programs are also available. Aside from camping, boat ramps are provided at the Lemon Hill and Kaweah Recreation Areas. Both Kaweah and Horse Creek provide picnic areas, barbecue grills and piped water. Swimming is allowed in designated areas. In addition, there is a one-mile hiking trail between Slick Rock and Cobble Knoll, which is ideal for bird watching."[3]

Lake Success

"Lake Success was formed by construction of the Success Dam on the Tule River in 1961. The lake offers many recreational activities including fishing, boating, waterskiing, and picnicking. The U.S. Army Corps of Engineers (USACOE) constructed this reservoir for both flood control

[2] General Plan Background Report, page 4-1
[3] Ibid. Page 4-7

and irrigation purposes. The lake has a capacity of 85,000 acre-feet of water. The lake is located eight miles east of Porterville in the Sierra Nevada foothills area. Recreational opportunities include ranger programs, camping at the Tule campground, which provides 104 sites, boating, fishing, picnic sites, playgrounds and a softball field. Seasonal hunting is also permitted in the 1,400-acre Wildlife Management Area."[4]

National Parks and National Forests

"Most of the recreational opportunities in the county are located in Sequoia National Forest, Giant Sequoia National Monument, and in Sequoia and Kings Canyon National Parks (SEKI). Although these parks span adjacent counties, they make a significant contribution to the recreational opportunities that Tulare County has to offer."[5]

Table 3.15-1
National Park and Forest Facilities

Recreation Area	Location	Camping Sites
Sequoia National Forest		
Gray's Meadow	5 miles West of Independence on Onion Valley Road.	52 tent/RV sites
Oak Creek	4 ½ miles NW of Independence off Highway 395.	21 tent/RV sites
Onion Valley	14 miles West of Independence on Onion Valley Road.	29 tent/RV sites
Stony Creek	14 miles SE of Grant Grove on Generals Highway.	49 tent/RV sites
Whitney Portal	13 miles West of Lone Pine on Whitney Portal Road.	43 tent/RV sites
Total		**194 sites**
Kings Canyon and Sequoia National Park		
Atwell Mill	Sequoia, 19 miles from Highway 198 on Mineral King Road.	21 tent sites
Azalea	Kings Canyon, 3 ½ miles from Kings Canyon Park entrance.	110 tent sites
Buckeye Flat	Sequoia, 11 miles South of Giant Forest of Generals Highway.	28 tent sites
Canyon View	Cedar Grove in Kings Canyon	23 tent sites
Cold Springs	Sequoia, Mineral King Area.	25 tent sites
Crystal Springs	Kings Canyon, ½ mile North of Grant Grove.	67 tent/RV sites
Dorst Creek	Sequoia, 9 miles North of Lodgepole off Generals Highway.	210 tent/RV sites
Lodgepole	Sequoia, 4 miles NE of Cedar Grove.	203 tent/RV sites
Moraine	Kings Canyon, 1 mile East of Cedar Grove.	120 tent/RV sites
Potwisha	Sequoia, 4 miles NE of Ash Mountain entrance off Generals Highway.	42 tent/RV sites
Sentinel	In the Cedar Grove area near the Kings River.	82 tent sites
Sheep Creek	Kings Canyon, 1/2-mile West of Cedar Grove.	111 tent/RV sites
South Fork	Sequoia, 13 miles on South Fork from Highway 198.	10 tent sites
Sunset	In the Grant Grove area 3 miles from Kings Canyon park entrance.	157 tent sites
Total		**1,209 sites**

Source: Tulare County Resource Management Agency, Parks and Recreation Branch, 2008; Automobile Club of Southern California, Tulare County Map.

Sequoia National Forest

"Sequoia National Forest takes its name from the Giant Sequoia, which is the world's largest tree. There are more than 30 groves of sequoias in the lower slopes of the park. The park includes over 1,500 miles of maintained roads, 1,000 miles of abandoned roads and 850 miles of

[4] Ibid. Page 4-7
[5] Ibid. Page 4-8

trails for hikers, off-highway vehicle users and horseback riders. The Pacific Crest Trail connecting Canada and Mexico, crosses a portion of the forest, 78 miles of the total 2,600 miles of the entire trail. It is estimated that 10 to 13 million people visit the forest each year."[6]

Giant Sequoia National Monument

"The Giant Sequoia National Monument was created in 2000 by President Clinton in an effort to preserve 34 groves of ancient sequoias located in the Sequoia National Forest. The Monument includes a total of 327,769 acres of federal land, and provides various recreational opportunities, including camping, picnicking, fishing, and whitewater rafting. According to the Giant Sequoia National Monument Management Plan EIS, the Monument includes a total of 21 family campgrounds with 502 campsites and seven group campgrounds. In addition, there are approximately 160 miles of system trails, including 12 miles of the Summit National Recreation Trail."[7]

Sequoia and Kings Canyon National Parks (SEKI)

"The U.S. Congress created the Kings Canyon National Park in 1940 and Sequoia National Park in 1890. Because they share many miles of common boundaries, they are managed as one park. The extreme large elevation ranges in the parks (from 1,500 to 14,491 feet above sea level), provide for a wide range of vegetative and wildlife habitats. This is witnessed from exploring Mt. Whitney, which rises to an elevation of 14,491 feet, and is the tallest mountain in the contiguous United States. During the summer months, park rangers lead walks through the parks, and tours of Crystal and Boyden Caves. During the winter, visitors explore the higher elevations of the parks via cross country skis or snowshoes, or hike the trails in the foothills. The SEKI also contains visitor lodges, the majority of which are open year round. According to the National Parks Conservation Association, a combined total of approximately 1.4 million people visit the two parks on an annual basis."[8]

Table 3.15-2
Recreational Areas in Tulare County

ID	Recreation Area	Location	Acres	Type of Use/Features
County				
1	Alpaugh Park	Located in Alpaugh on Road 40.	3	Reservations for picnic areas are taken. No entrance fee.
2	Balch Park Campgrounds	20 miles NE of Springville in the Sierras.	160	71 Campsites. No reservations taken; first come first serve basis. Entrance fee for vehicles.
3	Bartlett Park	8 miles east of Porterville on North Drive.	127.5	Reservations for picnic areas are taken. Entrance fee for vehicles.
4	Camp COTYAC	Near Ponderosa in Eastern Tulare County.	8	County of Tulare Youth Adventure Camp (Camp COTYAC). Cabins, lodge with kitchen, restrooms and showers.
5	Cutler Park	5 miles east of Visalia on Highway 216 to Ivanhoe.	50	Reservations for picnic areas are taken. Entrance fee for vehicles.
6	Elk Bayou Park	6 miles SE of Tulare on Avenue 200.	60	Reservations for picnic areas are taken. No fee for day use.
7	Kings River Nature Preserve	2 miles east of Highway 99 on Road 28	85	This park is only for school environmental programs.

[6] Ibid. Page 4-9
[7] Ibid.
[8] Ibid.

ID	Recreation Area	Location	Acres	Type of Use/Features
8	Ledbetter Park	1 mile northwest of Cutler on Road 124/Hwy 63	11	Reservations for picnic areas are taken. No fee.
9	Mooney Grove Park	2 Miles south of Caldwell Avenue on Mooney Blvd. In South Visalia.	143	Reservations for picnic areas are taken. Paddle boats, playground, baseball diamonds. Home of the End Trail statue. One of the largest oak woodlands in Tulare County. Location of the Agriculture and Farm Labor Museum.
10	Pixley Park	1 mile NE of Pixley on Road 124.	22	Reservations for picnic areas are taken. No fee.
11	Tulare County Museum	In Mooney Grove Park, South Visalia.	8.5	Free admission with park fee. Museum is opened Thursday thru Monday (closed Tuesday and Wednesday).
12	Woodville Park	Located in Avenue 166 in Woodville.	10	Reservations for picnic areas are taken. Day use no entrance fee.
13	West Main Street Park	2 blocks west of County Courthouse on Main Street in Downtown Visalia.	5	Day use no entrance fee.
State				
14	Colonel Allensworth State Historic Park	7 miles west of Earlimart on County Road J22.	na	15 campsites, open year round.
15	Mountain Home State Forest	Located in Sequoia National Forest	na	No reservations taken for campgrounds.
Federal				
16	Lake Kaweah	25 miles east of Visalia on Highway 198.	2,558	Horse Creek Campground, boat ramps, picnic areas, swimming, and hiking.
17	Lake Success	10 miles SE of Porterville on Highway 198.	2,450	Tule Campground, boating, fishing, picnic areas, playgrounds, and softball field. Hunting is permitted in the Wildlife Management Area.
18	Sequoia National Forest	Southeastern portion of Tulare County.	na	Campgrounds include Gray's Meadow, Oak Creek, Onion Valley, Stony Creek, Sunset, and Whitney Portal with over 300 campsites.
19	Giant Sequoia National Monument	Covers areas north and south of Sequoia and Kings Canyon National Parks.	na	
20	Sequoia and Kings Canyon National Parks (SEKI)	Northeastern portion of Tulare County.	na	Campgrounds include Atwell Mill Campground, Buckeye Flat, Cold Springs, Crystal Springs, Dorst Campground, Lodgepole, Moraine, Potwisha, Sheep Creek, and South Fork with over 800 campsites.
Total Acres				**5,701**

Source: Tulare County Resource Management Agency, Parks and Recreation Branch, 2008; Automobile Club of Southern California, Tulare County Map.

Trails and Wilderness Areas include; the Pacific Crest Trail, the South Sierra Wilderness Area, the Dome Land Wilderness Area, and the Golden Trout Wilderness Area. Other Recreational Facilities include the International Agri-Center and the Tulare County Fairgrounds.

State Parks and Forests

Colonel Allensworth State Park

"The only State Park in Tulare County is Colonel Allensworth State Historic Park discussed in Section 9.3. The park contains a museum and a visitor center addressing the town's history, as well as camping facilities. Allensworth is the only California town to be founded, financed and governed by African Americans. The small farming community was founded in 1908 by Colonel Allen Allensworth and a group of others dedicated to improving the economic and social status

of African Americans. Uncontrollable circumstances, including a drop in the area's water table, resulted in the town's demise. With continuing restoration and special events, the town is coming back to life as a state historic park. The park's visitor center features a film about the site. A yearly rededication ceremony reaffirms the vision of its pioneers."[9]

Mountain Home State Forest

"The Mountain Home State Forest is a State Forest managed by the California Department of Forestry and Fire Protection (CDF). The Forest consists of 4,807 acres of parkland containing a number of Giant Sequoias, and is located just east of Porterville. The Forest is a Demonstration Forest, which is considered timberland that is managed for forestry education, research, and recreation. Fishing ponds, hiking trails, and campsites are some of the amenities that can be found in the Forest."[10]

REGULATORY SETTING

Federal Agencies & Regulations

United States National Park Service (NPS)

"The National Park Service (NPS) is a bureau of the U.S. Department of the Interior. The NPS manages the 397 units of the National Park System. The NPS also helps administer dozens of affiliated sites, the National Register of Historic Places, National Heritage Areas, National Wild and Scenic Rivers, National Historic Landmarks, and National Trails."[11]

State Agencies & Regulations

California Department of Parks and Recreation

"California Department of Parks and Recreation manages more than 270 park units, which contain the finest and most diverse collection of natural, cultural, and recreational resources to be found within California. These treasures are as diverse as California: From the last stands of primeval redwood forests to vast expanses of fragile desert; from the lofty Sierra Nevada to the broad sandy beaches of our southern coast; and from the opulence of Hearst Castle to the vestiges of colonial Russia. California State Parks contains the largest and most diverse natural and cultural heritage holdings of any state agency in the nation. State park units include underwater preserves, reserves, and parks; redwood, rhododendron, and wildlife reserves; state beaches, recreation areas, wilderness areas, and reservoirs; state historic parks, historic homes, Spanish era adobe buildings, including museums, visitor centers, cultural reserves, and preserves; as well as lighthouses, ghost towns, waterslides, conference centers, and off-highway vehicle parks. These parks protect and preserve an unparalleled collection of culturally and

[9] Ibid. Page 4-3
[10] Ibid. Page 4-7
[11] National Park Service Overview Brochure, Updated 05/11

environmentally sensitive structures and habitats, threatened plant and animal species, ancient Native American sites, historic structures and artifacts . . . the best of California's natural and cultural history."[12]

Local Policy & Regulations

Tulare County General Plan Policies

The Tulare County General Plan has a number of policies that apply to projects within County of Tulare. General Plan policies that relate to the proposed Project are listed below.

ERM-5.2 Park Amenities
The County shall provide a broad range of active and passive recreational opportunities within community parks. When possible, this should include active sports fields and facilities, community center/recreation buildings, children's play areas, multi-use areas and trails, sitting areas, and other specialized uses as appropriate.

ERM-5.3 Park Dedication Requirements
The County shall require the dedication of land and/or payment of fees, in accordance with local authority and State law (for example the Quimby Act), to ensure funding for the acquisition and development of public recreation facilities.

ERM-5.5 Collocated Facilities
The County shall encourage the development of parks near public facilities such as schools, community halls, libraries, museums, prehistoric sites, and open space areas and shall encourage joint-use agreements whenever possible.

IMPACT EVALUATION

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Project Impact Analysis: ***Less than Significant Impact***

Typically, the increased use of parks and recreational facilities are caused by the addition of new housing. No new housing is proposed. Although the proposed Project will result in increase of up to 10 employees, the Project site is not located near a park or recreational facility. In addition, the proposed Project is not located adjacent to a school, community hall, library, museum, or prehistoric site. As such, ***Less Than Significant Project-specific Impact*** related to this Checklist item will occur.

[12] California Dept. of Parks and Recreation, http://www.parks.ca.gov/?page_id=91

Cumulative Impact Analysis: ***Less than Significant Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

The proposed Project does not include housing. The proposed Project would result in an increase of up to 10 employees, which would not significantly increase the use of parks or recreational facilities. As such ***Less Than Significant Cumulative Impacts*** related to this Checklist item would occur.

Mitigation Measure(s):

None Required.

Conclusion: ***Less than Significant Impact***

As noted earlier, ***Less Than Significant Project-specific and Cumulative Impacts*** related to this Checklist item will occur.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Project Impact Analysis: ***No Impact***

The proposed Project does not include new recreational facilities or the expansion of recreational facilities. As such, ***No Project-specific Impacts*** related to this Checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

As noted earlier, the proposed Project does not include new recreational facilities or the expansion of recreational facilities. As such, ***No Cumulative Impacts*** related to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***No Impact***

As noted earlier, ***No Project-specific or Cumulative Impacts*** related to this Checklist item will occur.

REFERENCES

Tulare County 2030 General Plan, August 2012

Tulare County 2009 Housing Element Update, May 2012

Tulare County Regional Blueprint, TCAG, May 2009

HUD Website: http://portal.hud.gov/hudportal/HUD?src=/about/mission

HCD Website, http://www.hcd.ca.gov/mission.html

Final Tulare County 2008 Regional Housing Needs Assessment Plan, Tulare County Association of Governments, July 2008

2013 CEQA Guidelines

Transportation/Traffic
Chapter 3.16

SUMMARY OF FINDINGS

The proposed Project will not have any significant impacts related to Transportation and Traffic with mitigation. A Traffic Impact Study Report prepared by consultant VRPA Technologies is included as Appendix G of this document which is used as the basis for determining this Project will result Less Than Significant Impacts with mitigation. A detailed review of potential impacts is provided in the following analysis.

INTRODUCTION

California Environmental Quality Act (CEQA) Requirements

This section of the ~~Draft~~ Final Environmental Impact Report (~~DEIR~~FEIR) addresses potential impacts to Transportation and Traffic. As required in Section 15126, all phases of the proposed Project will be considered as part of the potential environmental impact.

As noted in Section 15126.2 (a), "[a]n EIR shall identify and focus on the significant environmental effects of the proposed project. In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced. Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, the human use of the land (including commercial and residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services. The EIR shall also analyze any significant environmental effects the project might cause by bringing development and people into the area affected. For example, an EIR on a subdivision astride an active fault line should identify as a significant effect the seismic hazard to future occupants of the subdivision. The subdivision would have the effect of attracting people to the location and exposing them to the hazards found there. Similarly, the EIR should evaluate any potentially significant impacts of locating development in other areas susceptible to hazardous conditions (e.g., floodplains, coastlines, wildfire risk areas) as identified in authoritative hazard maps, risk assessments or in land use plans addressing such hazards areas."[1]

[1] 2013 CEQA Guidelines, Section 15126.2 (a)

The environmental setting provides a description of the Transportation and Traffic in the County. The regulatory setting provides a description of applicable Federal, State and Local regulatory policies that were developed in part from information contained in the Tulare County 2030 General Plan, Tulare County General Plan Background Report, and/or Tulare County 2030 General Plan EIR incorporated by reference and summarized below. Additional documents utilized are noted as appropriate. A description of the potential impacts of the proposed Project is provided and includes the identification of feasible mitigation measures (if necessary and feasible) to avoid or lessen the impacts.

Thresholds of Significance

The thresholds of significance for this section are established by the CEQA Checklist item questions. The following are potential thresholds for significance.

- Result in a Level of Service (LOS) less than "D"
- Unsafe roadway/circulation design
- Impact Air Traffic
- Dangerous Site Design
- Inadequate Access
- Need for additional Public Transit
- Need for additional Bike Facilities
- Need for additional Pedestrian Facilities

ENVIRONMENTAL SETTING

"Tulare County has two major regional highways, State Highway 99 and 198. State Highway 99 connects Tulare County to Fresno and Sacramento to the north and Bakersfield to the south. State Highway 198 connects from U.S. Highway 101 on the west and continues eastward to Tulare County, passing through the City of Visalia and into Sequoia National Park. The highway system in the County also includes State highways, County-maintained roads, and local streets within each of the eight cities."[2]

"Tulare County's transportation system is composed of several State Routes, including three freeways, multiple highways, as well as numerous county and city routes. The county's public transit system also includes two common carriers (Greyhound and Orange Belt Stages), the AMTRAK Service Link, other local agency transit and paratransit services, general aviation, limited passenger air service and freight rail service."[3]

"Some prominent county roadways include, but are not limited to, Alta Avenue (Road 80), Caldwell Avenue/Visalia Road (Avenue 280), Demaree Road/Hillman Street (Road 108), Tulare Avenue (Avenue 232), Olive Avenue (Avenue 152), Spruce Road (Road 204), El Monte Way

[2] Tulare County 2030 General Plan, page 13-2
[3] General Plan Background Report, page 5-4

(Avenue 416), Paige Avenue (Avenue 216), Farmersville Boulevard (Road 164), Road 192, and Road 152. Additionally, the highway system includes numerous county-maintained local roads, as well as local streets and highways within each of the eight cities and several unincorporated communities."[4]

"Travel within Tulare County is a function of the size and spatial distribution of its population, economic activity, and the relationship to other major activity centers within the Central Valley (such as Fresno and Bakersfield) as well as more distant urban centers such as Los Angeles, Sacramento, and the Bay Area. In addition, there is considerable travel between the northwest portions of Tulare County and southern Fresno County and travel to/from Kings County to the west. Due to the interrelationship between urban and rural activities (employment, housing, services, etc.) and the low average density/ intensity of land uses, the private automobile is the dominant mode of travel for residents in Tulare County."[5]

"According to the 2005 HCM, LOS is categorized by two parameters, uninterrupted flow and interrupted flow. Uninterrupted flow facilities have no fixed elements, such as traffic signals, that cause interruptions in traffic flow (e.g., freeways, highways, and controlled access). Interrupted flow facilities have fixed elements that cause an interruption in the flow of traffic such as stop signs, signalized intersections, and arterial roads (Transportation Research Board). The difference between uninterrupted flow and interrupted LOS is defined in the following summary."[6]

Table 3.16-1
Uninterrupted Traffic Flow Facilities LOS

LOS A	Represents free flow. Individual vehicles are virtually unaffected by the presence of others in the traffic stream.
LOS B	Is in the range of stable flow, but the presence of other vehicles in the traffic stream begins to be noticeable. Freedom to select desired speeds is relatively unaffected, but there is a slight decline in the freedom to maneuver.
LOS C	Is in the range of stable flow, but marks the beginning of the range of flow in which the operation of individual vehicles becomes significantly affected by interactions with others vehicles in the traffic stream.
LOS D	Is a crowded segment of roadway with a large number of vehicles restricting mobility and a stable flow. Speed and freedom to maneuver are severely restricted and the driver experiences a generally poor level of comfort and convenience.
LOS E	Represents operating conditions at or near level capacity. All speeds are reduced to a low, but relatively uniform value. Small increases in flow will cause breakdowns in traffic movement.
LOS F	Is used to define forced or breakdown flow (stop and go gridlock). This condition exists wherever the amount of traffic approaches a point where the amount of traffic exceeds the amount that can travel to a destination. Operations within queues are characterized by stop and go waves and they are extremely unstable.

[4] General Plan Background Report, page 5-7
[5] General Plan Background Report, page 5-4
[6] 2011 TCAG Regional Transportation Plan, page 3-17

Source: 2011 Regional Transportation Plan, Tulare County Association of Governments

Table 3.16-2
Interrupted Traffic Flow Facilities LOS

LOS A	Describes operations with average intersection stopped delay of ten seconds or less (how long a driver must wait at a signal before the vehicle can begin moving again).
LOS B	Describes operations with average intersection stopped delay in the range of 10.0 to 20.0 seconds per vehicle, and with reasonably unimpeded operations between intersections.
LOS C	Describes operations with higher average stopped delays at intersections (in the range of 20.0 to 35.0 seconds per vehicle). Stable operations between locations may be more restricted due to the ability to maneuver and change lanes at mid-block locations can be more restrictive then LOS B. Further, longer queues and/or adverse signal coordination may contribute to lower average speeds.
LOS D	Describes operations where the influence of delay is more noticeable (35.0 to 55.0 seconds per vehicle). Intersection stopped delay is longer and the range of travel speeds are about 40 percent below free flow speed. This is caused by inappropriate signal timing, high volumes and some combinations of these.
LOS E	Is characterized by significant approach stopped delay (55.0 to 80.0 seconds per vehicle), and average travel speeds of one-third the free flow speed or lower. These conditions are generally considered to represent the capacity of the intersection or arterial.
LOS F	Characterizes arterial flow at extremely low speeds, with high intersection stopped delay (greater than 80.0 seconds per vehicle). Poor progression, long cycle lengths and high traffic demand volumes may be major contributing factors to this condition. Traffic may be characterized by frequent stop-and-go conditions.

Source: 2011 Regional Transportation Plan, Tulare County Association of Governments

"Public transportation provides an economical and efficient alternative for getting people to work, school and other chosen destinations. In Tulare County, buses are the primary mode of public transportation. Public transportation also takes the form of shared ride taxi, automobile and vanpools; dial-a-ride, and specialized handicapped accessible services. In Tulare County, social service transportation is provided by the following: local transit agencies, demand responsive operators and city/county special programs for senior citizens, mental health organizations and disabled citizens programs. These programs are funded and subsidized through State and federal grants, Local Transportation Funds (LTF), State Transit Assistance Funds (STAF), and local transportation sales tax revenues."[7]

"For a land use plan to operate effectively, a well thought out circulation plan is imperative. Existing roadways must have the capacity to expand as traffic counts increase, and new roads must be planned so that one part of the community can be connected to another. Cutler and Orosi have an excellent circulation system in terms of access to other parts of the County. State Highway 201 and several county roads provide access to Highway 99, 20 miles to the west, and the foothill region to the east. Highway 99 is an important route used by industry to move goods to the southern and northern parts of the State. It also provides commuters with access to the Central Valley's larger metropolitan areas. State Highway 63 is another major north/south route in this region. It connects Cutler and Orosi with Visalia and it is the prime route between the two communities.

[7] TCAG Transportation Plan, page 1-14

The communities also have a local circulation system, that when completed, will tie them together and create an excellent framework from which minor neighborhood streets can be built. Roads 120, 124, 128 (State Highway 63), 130 and 136 traverse the planning area in a north/south fashion and Avenues 424, 416, 408 and 400 (State Highway 201) are laid out on an east-west axis. Several roadways must either be built or widened in order to create an efficient circulation system. Most notably, there is an absence of a north-south road east of Highway 63 which would connect Cutler to Orosi, and a road system southwest of Cutler which would "open up" land for industrial development.

The internal circulation system of Cutler and Orosi is composed of paved streets with a curb to curb width of 40 feet. These "minor" streets provide circulation within each neighborhood of the community. Although they all have ample capacity for additional traffic, the condition of some of these streets is poor because they lack curbs and/or gutters or their pavement condition is deteriorating. Further, there are numerous areas in Orosi which are composed of large-lot rural residential development and are not "linked" to adjacent neighborhoods."[8]

Traffic Impact Study Requirement

As it was anticipated that the proposed Project would generate more than 100 peak hour trips, it was determined that a traffic impact study was required. "The following criterion is a starting point in determining when a TIS is needed. When a project:

1. Generates over 100 peak hour trips assigned to a State highway facility
2. Generates 50 to 100 peak hour trips assigned to a State highway facility – and, affected State highway facilities are experiencing noticeable delay; approaching unstable traffic flow conditions (LOS "C" or "D").
3. Generates 1 to 49 peak hour trips assigned to a State highway facility – the following are examples that may require a full TIS or some lesser analysis[4]:
   a. Affected State highway facilities experiencing significant delay; unstable or forced traffic flow conditions (LOS "E" or "F").
   b. The potential risk for a traffic incident is significantly increased (i.e., congestion related collisions, non-standard sight distance considerations, increase in traffic conflict points, etc.).
   c. Change in local circulation networks that impact a State highway facility (i.e., direct access to State highway facility, a non-standard highway geometric design, etc.)."[9]

A Traffic Impact Analysis Report (TIAR), dated May 2013, was prepared for the Proposed Project by consultant VRPA Technologies, Inc. Within this traffic analysis, the consultant outlined a number of roadways that may be affected. These roadways are listed below.

> "State Route (SR) 63 is generally an undivided four-lane road without bike lanes through Cutler and Orosi and a two-lane road without bike lanes outside these communities. On-street parking is currently permitted on the four-lane segments. The posted speed limit is generally 35-40 mph throughout Cutler and Orosi (except for school zones with a posted speed of 25

[8] Cutler-Orosi Community Plan, page 22
[9] Guide for the Preparation of Traffic Impact Studies, page 2

mph). The posted speed limit outside these communities is generally 55 mph. According to the California Department of Transportation's website, the average annual daily traffic (AADT) along SR-63 in this area consisted of approximately 11,200 south of Avenue 416 (El Monte Way) and 6,800 north of Avenue 416 (El Monte Way) in 2011.

Avenue 416/El Monte Way (west of Road 130) is generally an undivided two to four-lane minor arterial without bike lanes, with a posted speed limit of 25 and 40 mph through the study area.

Avenue 416/El Monte Way (east of Road 130) is an undivided two-lane major collector without bike lanes, with a posted speed limit of 50 mph through the study area.

State Route 201/Avenue 400 (west of SR 63) is an undivided two-lane road in the study area. The posted speed limit is generally 55 mph. According to the California Department of Transportation's website, the AADT along SR 201 in this area consisted of approximately 58,000 in 2011.

Road 144 is an undivided two-lane local street without bike lanes, with a posted speed limit of 55 mph through the study area.

Existing AM and PM peak hour turning movements were collected at each study intersection by National Data and Surveying Services. Traffic counts were conducted for the peak hour periods of 7:00-9:00 AM and 4:00-6:00 PM for all key intersections on Tuesday, May 7th, 2013. In addition, 24-hour classification counts were also conducted on Tuesday, May 7th, 2013 for the purposes of analyzing the Traffic Index (TI) of study roadway segments. All counts were conducted while schools were in session. Traffic count data worksheets are provided in Appendix C of the TIAR."[10](See Appendix G)

All counts were conducted while schools were in session. This roadway data will be used to determine the Traffic Index (TI) that represents the estimated total accumulated traffic loading for heavy vehicles to determine the pavement design life. The TI is used to calculate the expected life of the pavement based upon a high percentage of truck traffic within the study area.

In addition to existing conditions, the Traffic Report provided trip generation, existing LOS conditions, projected 2040 LOS conditions, potential impact(s) of the Proposed Project, and recommended mitigation(s). Checklist item specific analysis is discussed in each of the impact analysis sections below.

Airport

"There are nine public use airports in Tulare County. These include six publicly owned and operated facilities (Porterville Municipal, Sequoia Field, Tulare Municipal [Mefford Field], Visalia Municipal, Woodlake, and Harmon Field [currently closed]) and three privately owned and operated airports (Alta Airport [currently closed], Thunderhawk Field, and Eckert Field).

[10] Orosi Traffic Impact Analysis Report

Badger Field is under consideration for Federal Aviation Administration (FAA) recertification as a restricted private airfield (as of August 2006)."[11]

Design for Emergency Access

According to § 21060.3 and § 15359 of the CEQA Guidelines, an "Emergency" means a sudden, unexpected occurrence, involving a clear and imminent danger, demanding immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential public services. "Emergency" includes such occurrences as fire, flood, earthquake, or other soil or geologic movements, as well as such occurrences as riot, accident, or sabotage. A Proposed Project could potentially generate impacts through inadequate design for emergency access.

Alternative Transportation

"TCAT has been providing rural route service between various cities and towns in Tulare County since 1981. TCAT retains MV Transportation to provide all of its transit services, which includes fixed route and demand responsive services for inter-city and intra-city service in many small communities throughout the County. TCAT is the most extensive transit system in Tulare County and connects with Dinuba Area Regional Transit (DART), Visalia City Coach (VCC), Tulare InterModal Express (TIME), Porterville City Operated Local Transit (COLT), Kings Area Rural Transit (KART), Kern Regional Transit, Orange Belt and Greyhound bus."[12]

"The dominant mode of travel in Cutler-Orosi, like other communities in Tulare County, is the automobile. Transit is primarily used by the elderly and by persons who do not have access to automobiles. The 1980 Census indicated that the most common mode of transportation used by persons traveling to work was either their own automobile or carpooling with other persons. Of the persons in Cutler and Orosi who drive to work, approximately 40 to 50 percent carpool. The Census also indicated that 106 households in Cutler and 64 in Orosi were without automobiles. This indicates that a portion of the population may from time to time require public transit. The Tulare County Transit Service fills this public transit need by providing Monday through Friday dial-a-ride service. Public transportation outside the county is provided by the Greyhound Bus system."[13]

REGULATORY SETTING

Federal Agencies & Regulations

None that apply to the proposed Project.

[11] Tulare County 2030 General Plan, page 13-2
[12] TCAG Transportation Plan, page 1-14
[13] Cutler-Orosi Community Plan, page 24

State Agencies & Regulations

Caltrans: Transportation Concept Reports

Caltrans has prepared a number concept reports for State Routes, Interstate Routes, and US Routes. Tulare County is located in Caltrans District 6. The concept reports for SR 63 and SR 201 apply to the proposed Project.

Caltrans Guide for the Preparation of Traffic Impact Studies

"The California Department of Transportation (Caltrans) has developed this "Guide for the Preparation of Traffic Impact Studies" in response to a survey of cities and counties in California. The purpose of that survey was to improve the Caltrans local development review process (also known as the Intergovernmental Review/California Environmental Quality Act or IGR/CEQA process). The survey indicated that approximately 30 percent of the respondents were not aware of what Caltrans required in a traffic impact study (TIS)."[14]

Local Policy & Regulations

Tulare County Transportation Control Measures (TCM)

"Transportation Control Measures (TCM) are designed to reduce vehicle miles traveled, vehicle idling, and/or traffic congestion in order to reduce vehicle emissions. Currently, Tulare County is a nonattainment region under the Federal Clean Air Act (CAA) and the California Clean Air Act (CCAA). Both of these acts require implementation of TCMs. These TCMs for Tulare County are as follows:

- Rideshare Programs;
- Park and Ride Lots;
- Alternate Work Schedules;
- Bicycle Facilities;
- Public Transit;
- Traffic Flow Improvement; and
- Passenger Rail and Support Facilities."[15]

Tulare County Association of Governments (TCAG)

"… [W]ith the passage of Assembly Bill (AB) 69 State law has required the preparation of Regional Transportation Plans (RTPs) to address transportation issues and assist local and state decision makers in shaping California's transportation infrastructure."[16] The Tulare County Association of Government has prepared the 2011 Regional Transportation Plan. Specific policies that apply to the Proposed Project are listed as follows:

TRANSPORTATION SYSTEM MANAGEMENT (TSM) Policy 5
Support installation of adequate left and right turning pockets to allow increased storage, as

[14] Caltrans Guide for the preparation of traffic studies, page ii
[15] Tulare County General Plan 2030 Update Recirculated Draft Environmental Impact Report, page 3.2-2
[16] TCAG Transportation Plan, page 1-11

necessary.

TRANSPORTATION SYSTEM MANAGEMENT (TSM) Policy 6
Encourage improvements in design of signalized intersections to improve turning for large vehicles and circulation flow.

Tulare County General Plan Policies
The Tulare County General Plan has a number of policies that apply to projects within County of Tulare. General Plan policies that relate to the proposed Project are listed below.

LU-7.4 Streetscape Continuity
The County shall ensure that streetscape elements (e.g., street signs, trees, and furniture) maintain visual continuity and follow a common image for each community.

LU-7.3 Friendly Streets
The County shall encourage new streets within UDBs to be designed and constructed to not only accommodate traffic, but also serve as comfortable pedestrian and cyclist environments. These should include, but not be limited to:

1. Street tree planting adjacent to curbs and between the street and sidewalk to provide a buffer between pedestrians and automobiles, where appropriate,
2. Minimize curb cuts along streets,
3. Sidewalks on both sides of streets, where feasible,
4. Bike lanes and walking paths, where feasible on collectors and arterials, and
5. Traffic calming devices such as roundabouts, bulb-outs at intersections, traffic tables, and other comparable techniques.

LU-7.6 Screening
The County shall require landscaping to adequately screen new industrial uses to minimize visual impacts.

TC-1.14 Roadway Facilities
As part of the development review process, new development shall be conditioned to fund, through impact fees, tonnage fees, and/or other mechanism, the construction and maintenance of roadway facilities impacted by the project. As projects or locations warrant, construction or payment of pro-rata fees for planned road facilities may also be required as a condition of approval.

TC-1.15 Traffic Impact Study
The County shall require an analysis of traffic impacts for land development projects that may generate increased traffic on County roads. Typically, applicants of projects generating over 100 peak hour trips per day or where LOS "D" or worse occurs, will be required to prepare and submit this study. The traffic impact study will include impacts from all vehicles, including truck traffic.

TC-1.16 County Level Of Service (LOS) Standards
The County shall strive to develop and manage its roadway system (both segments and intersections) to meet a LOS of "D" or better in accordance with the LOS definitions established by the Highway Capacity Manual.

TC-5.3 Provisions for Bicycle Use
The County shall work with TCAG to encourage local government agencies and businesses to consider including bicycle access and provide safe bicycle parking facilities at office buildings, schools, shopping centers, and parks.

TC-5.4 Design Standards for Bicycle Routes
The County shall utilize the design standards adopted by Caltrans and as required by the Streets and Highway Code for the development, maintenance, and improvement of bicycle routes.

HS-1.9 Emergency Access
The County shall require, where feasible, road networks (public and private) to provide for safe and ready access for emergency equipment and provide alternate routes for evacuation.

IMPACT EVALUATION

Would the project:

a) **Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?**

Project Impact Analysis: ***Less than Significant Impact***

"The proposed Project lies within the central portion of the San Joaquin Valley. The proposed Project is located on the Valley floor at an elevation of approximately 456 feet above sea level with the surrounding area mostly flat. A Traffic Impact Study (TIS) has been prepared for the purpose of analyzing traffic conditions related to the Orosi Rock Surface Mining Operation Amendment to Permit Project (Formally known as "Whiterock Sand & Gravel). The Project's current permit was approved by the Tulare County Planning Commission on October 12, 2005. The current operation is producing 100,000 to 200,000 tons of finished product annually and will increase to 800,000 tons annually. It will also increase annual truck trips from 11,000 to 44,000, yet maintain its current daily and hourly truck trip limitation of 200 trips (daily) and 20 trips (per hour), which is identified in Condition 28 of the Project's current Conditions of Approval. The Orosi Rock Surface Mining site is located at the northeast corner of Road 144 and Avenue 420 in Tulare County."[17]

[17] Orosi Traffic Impact Analysis Report

VRPA Technologies prepared a Traffic Impact Study (TIS) for the proposed Project. The TIS is included as Appendix H of the TIAR. (See Appendix G). The TIS listed the Existing Intersection Operations (**Table 3.16-3**) and Existing Street Segment Operations (**Table 3.16-4**)

Circulation

There is one (1) existing access/egress point to enter/exit the Project site. The access/egress point is located along Avenue 420 approximately 1,300 feet east of Road 144. Site circulation will enter from the access/egress point and travel approximately 3,200' to a round-about private roadway. Following off-loading of material, trucks will then exit from the access/egress point as currently approved in the existing permit. A 10' dirt road also accesses Road 144 to provide an alternative exit for smaller vehicles.

Level of Service

Intersection Capacity Analysis

"All intersection LOS analyses were estimated using Synchro Software. Various roadway geometrics, traffic volumes, and properties (signal timing, peak hour factors, etc) were input into the Synchro Software program in order to accurately determine the travel delay and LOS for each Study scenario. The intersection LOS and delays reported represent the Synchro outputs. Synchro assumptions, listed below, show the various Synchro inputs and methodologies used in the analysis.

Lane Geometry

- Storage lengths for turn lanes for existing intersections were measured in the field and rounded to the nearest 25 feet.

Traffic Conditions

- The peak hour factor for Existing, Existing Plus Project, and Existing Plus Project Plus Cumulative (Near-Term) conditions were determined using existing counts based on approach of movement.
- The peak hour factor for future scenarios is 0.92.
- Posted roadway speed limits were observed in the field and input into the Synchro network to determine roadway link speeds.
- The Right Turn on Red parameter was set to 'Yes'.
- Heavy vehicle percentages were applied as follows and are based on the HCM default or Caltrans' truck data available on its website:
    - SR-63 – 8%
    - SR-201 – 14%
    - All other roadways – 3%

Signal Timing Parameters

- Signal phasing was based on a field review; minimum green and yellow times as well as pedestrian walk and don't walk times were based on traffic signal timing sheets.
- Signal phasing remained constant throughout scenarios unless the project or any other planned improvements are specifically changing an intersection. Lead-Lag optimize was set to "fixed" for all scenarios.
- Traffic signals were assumed to be "actuated and uncoordinated".
- All intersection cycle lengths and offsets were optimized using a cycle length range of 60-120 seconds.

Results of the analysis show that none of the study intersections are currently operating worse than the minimum level of service. Table 3-16.3 shows the intersection LOS for the existing conditions. Synchro Worksheets are provided in the Traffic Impact Study Appendix D of the TIAR. (See Appendix G)

TABLE 3-16.3
Existing Intersection Operations

INTERSECTION	CONTROL	PEAK HOUR	EXISTING 2013	
			DELAY	LOS
1. SR-63 / Avenue 428	One-Way Stop Sign	AM	9.6	A
		PM	9.8	A
2. SR-63 / Avenue 416	Signalized	AM	16.1	B
		PM	21.0	C
3. SR-63 / SR-201	Two-Way Stop Sign	AM	21.6	C
		PM	18.4	C
4. Road 144 / Avenue 420	Two-Way Stop Sign	AM	8.8	A
		PM	8.8	A

DELAY is measured in seconds

LOS = Level of Service / **BOLD** denotes LOS standard has been exceeded

For signalized and all-way stop controlled intersections, delay results show the average for the entire intersection. For one-way and two-way stop controlled intersections, delay results show the delay for the worst movement.

Segment Analysis

Results of the AM and PM peak hour LOS segment analysis along the existing street and highway system in the project area are reflected in Table 3-16.4. Street segment capacity was determined using information shown in Table 3-16.5, which comes from the Modified Arterial Level of Service Tables included in Appendix B of the TIAR (See Appendix G).

Results of the analysis show that none of the study intersections are operating worse than the minimum level of service. [18]"

TABLE 3-16.4
Existing Street Segment Operations

SEGMENT	DESCRIPTION	PEAK HOUR	EXISTING 2013	
			VOLUME	LOS
1. SR-63: Avenue 428 to Avenue 416	Two-lane Undivided to Four-Lane Undivided *	AM	354	B
		PM	599	B
2. SR-63: Avenue 416 to SR-201	Two-lane Undivided to Four-Lane Undivided *	AM	520	B
		PM	941	C
3. SR 201: Road 120 to SR-63	Two-Lane Undivided	AM	74	B
		PM	96	B
4. Avenue 416: SR-63 to Road 144	Two-lane Undivided to Four-Lane Undivided *	AM	221	B
		PM	407	B
5. Road 144: Avenue 420 to Avenue 416	Two-Lane Undivided	AM	51	B
		PM	61	B

LOS = Level of Service / **BOLD** denotes LOS standard has been exceeded

* Segments were conservatively analyzed assuming two-lane undivided thresholds.

Table 3-16.5
Peak Hour Two-Way Volumes

LEVEL OF SERVICE						
LANES	DIVIDED	TYPE	B	C	D	E
2	Undivided	State Signalized Arterial (Class I)	860	1,370	1,480	***
2	Undivided	Signalized Arterial (Class I)	774	1,233	1,332	***
2	Undivided	Unsignalized Roadway	420	780	1,100	1,400
4	Undivided	State Signalized Arterial (Class I)	1,950	2,333	2,460	***
4	Undivided	Signalized Arterial (Class I)	1,755	2,100	2,214	***

*** Not applicable for that level of service letter grade

Trip Generation

"To assess the impacts that the Project may have on the surrounding street and highway segments and intersections, the first step is to determine Project trip generation. Project trip generation is shown in Table 3-16.6. Daily and peak hour Project truck trip generation was provided by Orosi Rock, LLC and is consistent with the daily and peak hour trip limits allowed in the Project's previous Conditions of Approval. Based on roadway segment

[18] Orosi Traffic Impact Analysis Report

classification counts collected adjacent to the Project driveway in May 2013, it was determined that none of the Project's existing truck trips were captured in the existing peak hour turning movement counts collected in the study area. As a result, all peak hour Project trips were applied to the study area in the analysis and no credit was given to Project trips that may already be in existence on the roadway network.[19]"

TABLE 3-16.6
Project Trip Generation

Land Use Description	Trip Rate Source	Average Daily Trip Ends [1]	Weekday AM Peak Hour				Weekday PM Peak Hour			
		Volume	In:Out	In	Out	Total	In:Out	In	Out	Total
Surface Mining Operation	Orosi Rock, LLC [2]	200	50:50	10	10	20	50:50	10	10	20
	Total	**200**		**10**	**10**	**20**		**10**	**10**	**20**

1 A "trip" is defined as a "one-way" trip.

2 Trip generation is consistent with information received from the Project representative as well as the previous Conditions of Approval.

Trip Distribution

"To facilitate the estimation of trip distribution for this Project, Orosi Rock representatives were contacted. Project trip distribution was estimated and is based upon prevailing traffic patterns in the study area and previous sales records. Trip distribution is shown in Figure 3-16.

Project Traffic

Project traffic as shown in Table 3-16.5 was distributed to the roadway system using the trip distribution percentages shown in Figure 3-1.
The capacity analysis for all analysis scenarios was performed assuming a "Passenger Car Equivalent" (PCE) of 2.5:1 for all Project truck trips entering and exiting the facility, which is a conservative estimate while remaining consistent with the Highway Capacity Manual. The PCE's are reflected in the figures (as appropriate) and segment operations tables included in this report

Existing Plus Project Traffic Conditions

An Existing Plus Project Scenario was analyzed to include existing (2013) traffic plus traffic generated by the Project.

[19] Orosi Traffic Impact Analysis Report

FIGURE 3-1
Trip Distribution

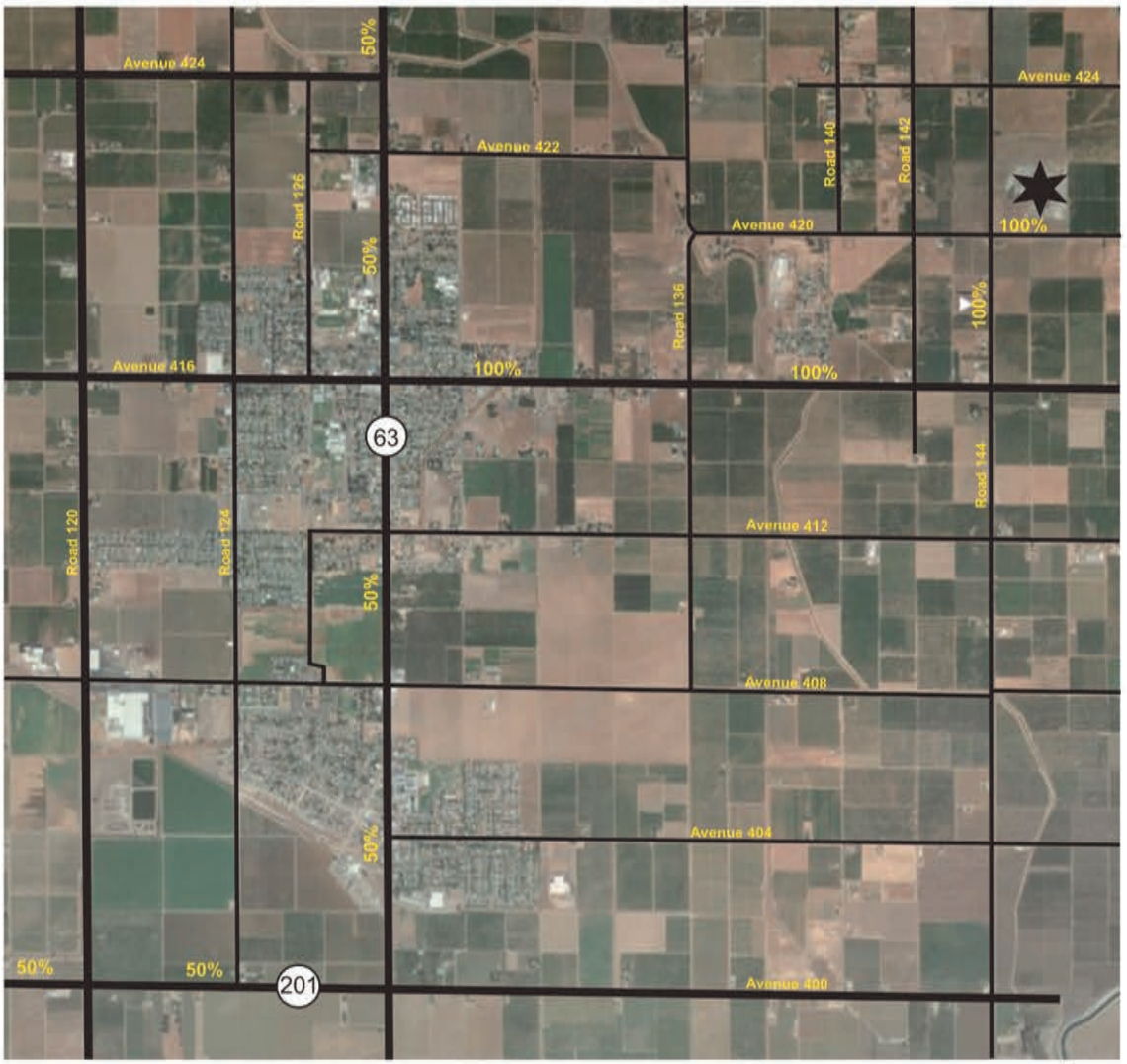


FIGURE 3-1
Project Trip Distribution

LEGEND

Project Site XX% Project Trip Distribution Percentage

VRPA TECHNOLOGIES, INC.

Impacts

Intersection LOS

Table 3-16.6 shows that all intersections are anticipated to remain within desirable operating conditions for Existing conditions scenarios.

Segment LOS

"Table 3-16.7 shows the results of the roadway segment LOS analysis. As shown, none of the study segments are expected to fall short of desirable operating conditions for various scenarios.

Results of the analysis show that none of the study intersections are operating worse than the minimum level of service. The existing LOS at most intersections would remain constant with the implementation of the Proposed Project. At the intersection of State Route 63/Avenue 428, the LOS PM would change from "A" to "B". All intersections would remain above the minimum level of LOS "D" outlined by Caltrans and the Tulare County 2030 General Plan.[20]"

Less than Significant Impact related to the traffic portion of this Checklist item will occur as a result of the proposed Project.

Cumulative Impact Analysis: ***Less than Significant with Mitigation***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the traffic report, Tulare County 2030 General Plan, Tulare County General Plan Background Report, Tulare County 2030 General Plan EIR, City of Porterville 2030 General Plan, and/or Porterville 2030 General Plan EIR.

"The impacts of the Project were analyzed considering future traffic conditions, approximately twenty-seven (27) years after the assumed approval of the amendment, or in this case the year 2040. The levels of traffic expected in 2040 relate to the cumulative effect of traffic increases resulting from the implementation of the General Plans of local agencies, including the City of Visalia and Tulare County. Traffic conditions without the Project in the Year 2040 were estimated using the Tulare County Association of Governments (TCAG) regional travel model."[21]

[20] Orosi Traffic Impact Analysis Report, Page 20.
[21] Ibid.

Cumulative Project Traffic

"Traffic impact analyses typically require the analysis of cumulative projects (approved or pending developments that have not yet been built in the vicinity of the Project) in addition to the proposed Project. The only cumulative project included in this TIS is Pena's Disposal Service expansion project located at the northeast corner of Avenue 408 (Kamm Avenue) at Road 120. Trip generation and distribution information for the cumulative project was based on information found in the corresponding TIS report prepared by Omni-Means in December 2011 as well as calculations performed by VRPA Technologies. Trip generation and distribution information are provided in Appendix E of the TIAR (See Appendix G).

Existing Plus Project Plus Cumulative (Opening Year) Traffic Conditions

An Existing Plus Project Plus Cumulative Scenario was analyzed to include existing (2013) traffic plus traffic generated by the Project plus traffic generated by the cumulative project. Based on the analysis, there will be less than significant impacts.

Cumulative 2040 Without Project Traffic Conditions

The impacts of the Project were analyzed considering future traffic conditions, approximately twenty-seven (27) years after the assumed opening day of the Project, or in this case the year 2040. The levels of traffic expected in 2040 relate to the cumulative effect of traffic increases resulting from the implementation of the General Plans of local agencies, including the City of Visalia and Tulare County. Traffic conditions without the Project in the Year 2040 were estimated using the Tulare County Association of Governments (TCAG) regional travel model. Future traffic forecasts along study area roadway segments were estimated by utilizing methodologies published by Fresno COG using the TurnsW32 program. Manual adjustments were made in order to remain consistent with the future forecasts contained in the Pena's Disposal Service TIS prepared by Omni-Means in December 2011. For reference, the TCAG model outputs are provided in Technical Appendix F in the TIAR (See Appendix G).

Cumulative 2040 With Project Traffic Conditions

The addition of Project trips, which were distributed to the roadway system using the trip distribution percentages shown in Figure 3-1, were added to Cumulative 2040 without Project traffic volumes.

All intersection LOS analyses were estimated using Synchro Software. Various roadway geometrics, traffic volumes, and properties (signal timing, peak hour factors, etc) were input into the Synchro Software program in order to accurately determine the travel delay and LOS for each Study scenario. The intersection LOS and delays reported represent the Synchro outputs.[22]"

[22] Ibid., page 21

The addition of Project trips, which were distributed to the roadway system using the trip distribution percentages shown in Figure 3-1, were added to Cumulative 2040 without Project traffic volumes.

"Based on this information, Table 3.16.6 shows the Levels of Service (LOS) projected for the year 2040, and shows intersections that are expected to fall short of desirable operating conditions for various scenarios. The existing Level of Service (LOS) at all four intersections would remain the same with the implementation of the Proposed Project. State Route 63/Avenue 416 and State Route 63/State Route 201 both remain at a level of service lower than "D'. This would not trigger the threshold for significance as the existing LOS would remain at a lever of lower than "D" even without the project. However, mitigation measures will be imposed to improve the 2040 conditions to those intersections at a lower level than "D."

Table 3-16.7 shows the results of the roadway segment LOS analysis. As shown, none of the study segments are expected to fall short of desirable operating conditions for various scenarios.

The traffic impact analysis includes an evaluation of the project's impact to the Traffic Index (TI) along Avenue 416 (El Monte Way) between SR 63 and Road 144, Road 144 between Avenue 416 (El Monte Way) and Avenue 420, and Avenue 420 east of Road 144. Tulare County and Caltrans have not established significance criteria for the purpose of determining if a project has an impact to the traffic index of State facilities. TI calculations are included in Appendix H of the TIAR (See Appendix G).

The analysis of the TI was determined by using with and without project traffic volumes for the Year 2040. The analysis was conducted using existing truck traffic counts.[23]

[23] ibid

Table 3.16-6
Intersection Operations

INTERSECTION	CONTROL	PEAK HOUR	EXISTING 2013 PLUS PROJECT		EXISTING PLUS PROJECT PLUS CUMULATIVE		CUMULATIVE 2040 WITHOUT PROJECT		CUMULATIVE 2040 WITH PROJECT	
			DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS
1. SR-63 / Avenue 428	One-Way Stop Sign	AM	9.8	A	10.2	B	10.9	B	11.1	B
		PM	10.0	B	10.2	B	13.6	B	14.0	B
2. SR-63 / Avenue 416	Signalized	AM	16.7	B	18.1	B	**133.8**	**F**	**152.9**	**F**
		PM	21.9	C	22.4	C	**139.3**	**F**	**144.7**	**F**
3. SR-63 / SR-201	Two-Way Stop Sign	AM	24.6	C	**35.9**	**E***	**311.1**	**F**	**413.9**	**F**
		PM	20.1	C	20.8	C*	**--****	**F**	**--****	**F**
4. Road 144 / Avenue 420	Two-Way Stop Sign	AM	9.3	A	9.3	A	8.8	A	9.2	A
		PM	9.2	A	9.2	A	8.8	A	9.3	A

DELAY is measured in seconds

LOS = Level of Service / **BOLD** denotes LOS standard has been exceeded

For signalized and all-way stop controlled intersections, delay results show the average for the entire intersection. For one-way and two-way stop controlled intersections, delay results show the delay for the worst movement.

* Does not meet peak hour signal warrants

** Calculated value exceeds the software limitations

Table 3.16-7
Segment Operations

SEGMENT	DESCRIPTION	PEAK HOUR	EXISTING 2013 PLUS PROJECT		EXISTING PLUS PROJECT PLUS CUMULATIVE		CUMULATIVE 2040 WITHOUT PROJECT		CUMULATIVE 2040 WITH PROJECT	
			VOLUME	LOS	VOLUME	LOS	VOLUME	LOS	VOLUME	LOS
1. SR-63: Avenue 428 to Avenue 416	Two-lane Undivided to Four-Lane Undivided *	AM	379	B	436	B	588	B	613	B
		PM	624	B	644	B	823	B	848	B
2. SR-63: Avenue 416 to SR-201	Two-lane Undivided to Four-Lane Undivided *	AM	545	B	609	B	924	C	949	C
		PM	966	C	985	C	1,311	C	1,336	C
3. SR 201: Road 120 to SR-63	Two-Lane Undivided	AM	99	B	163	B	301	B	326	B
		PM	121	B	140	B	424	B	449	B
4. Avenue 416: SR-63 to Road 144	Two-lane Undivided to Four-Lane Undivided *	AM	271	B	285	B	287	B	337	B
		PM	457	B	461	B	529	B	579	B
5. Road 144: Avenue 420 to Avenue 416	Two-Lane Undivided	AM	101	B	101	B	66	B	116	B
		PM	111	B	111	B	79	B	129	B

LOS = Level of Service / **BOLD** denotes LOS standard has been exceeded

* Segments were conservatively analyzed assuming two-lane undivided thresholds.

Table 3.16-8
Traffic Index

STREET SEGMENT	CUMULATIVE 2040 WITHOUT PROJECT	CUMULATIVE 2040 WITH PROJECT	INCREASE
	TRAFFIC INDEX (TI)		
Avenue 416 (El Monte Way)			
SR 63 and Road144	9.5	10.7	1.2
Road 144			
Avenue 416 and Avenue 420	8.4	10.4	2.0
Avenue 420			
East of Road 144	7.6	10.3	2.7
SR 63			
North of Avenue 416 (El Monte Way)	10.1	10.6	0.5
SR 63			
Avenue 416 and SR 201	10.6	11.0	0.4
SR 201 (Avenue 400)			
West of SR 63	10.1	10.6	0.5

Mitigation measures are recommended to address potential impacts from the Cumulative Year 2040 without Project Conditions and the Cumulative Year 2040 with Project Conditions. "Described below are potential improvements at study area intersections and segments for various scenarios that would result in acceptable levels of service. In order to mitigate the Project's impacts, it is recommended that the Project contribute traffic impact fees, as determined by Tulare County in accordance with County policy. The payment of these fees would mitigate the Project's traffic impacts to Less than Significant levels.[24]"

Mitigation Measure(s):

16-1 **At the time of permit expiration in 2030, should the applicant choose to amend the permit to extend the life of the proposed surface mining permit, the applicant shall have a traffic study conducted at that time and pay the pro-rata share fee outlined by Caltrans for the impacts found to occur at that time. In the year 2035, if the Project is still in operation, the project shall pay for its fair share of the following improvements.**

SR 201 at SR 63

- Install traffic signal.
- Widen the eastbound approach to 1 left turn lane and 1 through/right-turn lane

[24] Orosi Traffic Impact Analysis Report, Page 45.

(adding 1 dedicated left turn lane).

- Widen the westbound approach to 1 left turn lane and 1 through/right-turn lane (adding 1 dedicated left turn lane).
- Widen the northbound approach to 1 left turn lane, 1 through lane, and 1 through/right-turn lane (adding 1 through lane).
- Widen the southbound approach to 1 left turn lane, 1 through lane, and 1 through/right-turn lane (adding 1 through lane).

Avenue 416 (El Monte Way) at SR 63

- Widen the eastbound approach to 1 left turn lane, 1 through lane, and 1 through/right-turn lane (adding 1 dedicated left turn lane).
- Widen the westbound approach to 1 left turn lane, 1 through lane, and 1 through/right-turn lane (adding 1 dedicated left turn lane).
- Widen the northbound approach to 1 left turn lane, 1 through lane, and 1 through/right-turn lane (adding 1 dedicated left turn lane).
- Widen the southbound approach to 1 left turn lane, 1 through lane and 1 through/right-turn lane (adding 1 dedicated left turn lane).

Avenue 416 (El Monte Way) at SR 63

- Widen the eastbound approach to 1 left turn lane, 2 through lanes, and 1 right-turn lane (adding 1 dedicated right-turn lane).

The level of service resulting from the potential improvements identified above is shown in Table 3.16-6 for study area intersections.

According to the Caltrans "Guide for the Preparation of Traffic Impact Studies," the intent of determining the equitable responsibility for mitigation measures is to provide a starting point for early discussions to address traffic mitigation equitability and to calculate the equitable share for mitigation traffic impacts. The formula used to calculate the equitable share responsibility to Caltrans facilities is as follows:

Equitable Share = (Project Trips) / (Future Year Plus Approved Project Traffic – Existing Traffic)

Table 3.16-7 shows the equitable share responsibility to Caltrans/Tulare County facilities for 2040 conditions. For the Cumulative Year 2040 With Project scenario, the Orosi Rock Surface Mining Project represents 4.2% of traffic at the SR-63 and Avenue 416 intersection and 1.6% of traffic at SR-63 and SR-201."[25]

[25] Orosi Traffic Impact Analysis Report, page 38.

"One potential mitigation measure would be to install a traffic signal at the intersection of State Route 201/State Route 63. This would raise the Level of Service to "B" for the AM Peak Hour and "C" for the PM Peak Hour. As the project site is not located on the intersection of State Route 201/State Route 63 and the Proposed Project only contributes to a portion of the lower Level of Service, a prorata share of the cost for the traffic signal is the appropriate mitigation measure. Based on the Equitable Share Responsibility from the Caltrans "Guide for Preparation of Traffic Impact Studies," the project would have a Fair Share Percentage of 1.6% for the SR 201/SR 63 intersection. The project would have a Fair Share Percentage of 4.2% for the SR63/Avenue 416 intersection. The applicant will be required to pay the prorate fee as outlined by Caltrans to mitigate potential cumulative impacts from traffic.[26]"

Table 3.16-9
Equitable Share Responsibility

INTERSECTION	EXISTING 2013	PROJECT TRIPS	CUMULATIVE YEAR 2040 PLUS WITH PROJECT	FAIR SHARE PERCENTAGE
SR 63 / Avenue 416 (El Monte Way)	1,378	52	2,620	4.2%
SR 201 / SR 63	764	26	2,434	1.6%

Conclusion: ***Less then Significant Impact with Mitigation***

With implementation of the above mentioned Mitigation Measures, potential Project-specific and cumulative impacts related to this Checklist item will be reduced to a ***Less Than Significant*** level.

b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Project Impact Analysis: ***Less than Significant Impact***

"According to the CalTrans concept reports for SR 63 and SR 201, Level of Service (LOS) "D" is minimum service level assigned. In addition, the General Plan Policy: TC-1.16 Tulare County LOS Standards calls for an LOS of "D" or better. As noted in the Traffic report, the Proposed Project would not lower the LOS of intersections in the area below "D". Additionally the Regional Transportation Plan, prepared by the TCAG, notes that "[t]he

[26] Orosi Traffic Impact Analysis Report

Cities of Visalia, Tulare and Porterville have the most traffic congestion in Tulare County and are candidates for TSM strategies."[27] As the project site is located in a rural area near the communities of Orosi and Cutler, the Proposed Project would not have an immediate impact on high congestion areas of Tulare County. Potential Project-specific impacts related this Checklist item will be considered less than significant."

Cumulative Impact Analysis: ***Less than Significant Impact with Mitigation***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the TIAR, Tulare County 2030 General Plan, Tulare County General Plan Background Report, Tulare County 2030 General Plan EIR, and the TCAG Regional Transportation Plan.

As noted in the Response to Item 3.16 a), the Proposed Project could potentially create a significant cumulative impact in 2040; however, with the implementation of the proposed Mitigation Measure 16-1, potential impacts would be reduced to a ***Less Than Significant*** level. As such, ***Less Than Significant Cumulative Impacts*** related to this Checklist item will occur.

Mitigation Measure(s):

See Mitigation Measure 16-1

Conclusion: ***Less than Significant Impact with Mitigation***

With implementation of Mitigation Measure 16-1, potential Project-specific and cumulative impacts related to this Checklist item will be reduced to a ***Less Than Significant*** level.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?

Project Impact Analysis: ***No Impact***

The nearest airport to the Project site is Alta Airport. This private airport, however; is permanently closed. The Tulare County Airport Commission noted on September 8, 2010 that the previous operation would have not impacts aviation traffic. In addition, the Airport Commission noted that the Proposed Project would not conflict with Tulare County Airport Land Use Plan (CALUP) policy. ***No Project-specific Impacts*** will occur as a result of the proposed Project.

Cumulative Impact Analysis: ***No Impact***

[27] TCAG Regional Transportation Plan, Page 3-62

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

As the nearest airport is permanently closed, ***No Cumulative Impacts*** related to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***No Impact***

As noted earlier, ***No Project-specific or Cumulative Impacts*** related to this Checklist item will occur.

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Project Impact Analysis: ***No Impact***

The proposed Project will not create any new design features on-site. The existing on-site circulation pattern will remain the same as the currently approved surface mining permit. Although there will be an increase in the volume of vehicles accessing the site, the same types of vehicles (heavy-duty haul trucks and personal vehicles) will continue to access the site. The proposed amendment does not change the total number of daily trips permitted for the surface mining operation. The existing site access/egress is located at a sufficient distance from the intersection to allow for safe vehicular access/egress to and from the site. ***No Project-specific Impacts*** related to this Checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

As noted earlier, no significant design changes that would cause a hazard are proposed. As such, ***No Cumulative Impacts*** related to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***No Impact***

As noted earlier, ***No Project-specific or Cumulative Impacts*** related to this Checklist item will occur.

e) Result in inadequate emergency access?

Project Impact Analysis: ***No Impact***

The Project site is currently accessed/egressed via an existing entrance road from Avenue 420. Eemergency access to the site will remain as approved on the existing surface mining permit, and adequate space will be maintained for emergency vehicles to turn around on site. A 10' dirt road also accesses Road 144 to provide an alternative exit.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

The existing site currently has adequate access/egress for emergency vehicles. The Project will not cumulatively limit access/egress to any of the surrounding properties. Therefore, ***No Cumulative Impact*** to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***No Impact***

As noted earlier, ***No Project-specific or Cumulative Impacts*** related to this Checklist item will occur.

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Project Impact Analysis: ***Less than Significant Impact***

The roads adjacent to the surrounding the Project site do not include sidewalks, bus stops, bus turnouts, or bike lanes. According to the Rte 10 North County Transit Schedule 2012, the nearest bus stops to the Project site are located at the intersections of Road 124/Avenue 416 and SR 63/School Avenue. The TCAG Bicycle Transportation Plan Map indicates that the nearest bikeway is an existing class II bikeway facility located on Avenue 416. As most of the additional daily trips will be truck traffic from light and heavy vehicles, it is not

anticipated that the proposed project will increase the demand for public transit, bicycle facilities, or pedestrian facilities which would result in a decrease of performance or safety of such facilities.

Cumulative Impact Analysis: ***Less than Significant Impact after Mitigation***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the TIAR, Tulare County 2030 General Plan, Tulare County General Plan Background Report, Tulare County 2030 General Plan EIR, and the TCAG Regional Transportation Plan.

One area of potential concern is the proposed Class 1 bike path planned for SR 63, outlined in the 2011 TCAG Regional Transportation Plan. The Proposed Project will generate additional truck traffic, which could potentially increase bicycle related safety concerns at the SR 201/SR63 intersection for Year 2040 conditions. With the installation of a traffic signal, bike safety concerns will be mitigated to a less than significant level. In lieu of installing a traffic signal, the Caltrans prorata share fee can be utilized to pay for the appropriate portion of the required traffic signal. This in-lieu fee is established by Caltrans as an appropriate mitigation for Year 2040 conditions, as it is proportioned for the construction of a future traffic signal. As such, implementation of Mitigation Measure 16.1 will result in cumulative impacts related to this Checklist item being reduced to a ***Less Than Significant*** level.

Mitigation Measure(s):

See Mitigation Measure 16.1.

Conclusion: ***Less than Significant Impact***

With implementation of Mitigation Measure 16.1, potential Project-specific and cumulative impacts related to this Checklist item will be reduced to a ***Less Than Significant*** level.

DEFINITIONS/ACRONYMS

Acronyms

(HCM)	Highway Capacity Manual
(LOS)	Level of Service

REFERENCES

Tulare County 2030 General Plan, August 2012

Tulare County General Plan Background Report, February 2010

Guide for the Preparation of Traffic Impact Studies, California Department of Transportation (Caltrans), December 2002

2011 Regional Transportation Plan, Tulare County Association of Governments (TCAG), July 11, 2012

2010 Tulare County Regional Bicycle Transportation Plan, Tulare County Association of Governments (TCAG)

2013 CEQA Guidelines

Tulare County 2030 General Plan, Recirculated Draft Environmental Impact Report (RDEIR), February 2010

Orosi Rock Mining Amendment to Permit Traffic Impact Analysis Report, VRPA, LLC, dated May 2013

Caltrans Concept Report for SR 63

Caltrans Concept Report for SR 201

Utilities and Service Systems
Chapter 3.17

SUMMARY OF FINDINGS

The proposed Project will result in less than significant impacts to Utilities and Service Systems with mitigation. A detailed review of potential impacts is provided in the following analysis.

INTRODUCTION

California Environmental Quality Act (CEQA) Requirements

This section of the ~~Draft~~ Final Environmental Impact Report (~~DEIR~~FEIR) addresses potential impacts to Utilities and Service Systems. As required in Section 15126, all phases of the proposed Project will be considered as part of the potential environmental impact.

As noted in Section 15126.2 (a), "[a]n EIR shall identify and focus on the significant environmental effects of the proposed project. In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced. Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, the human use of the land (including commercial and residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services. The EIR shall also analyze any significant environmental effects the project might cause by bringing development and people into the area affected. For example, an EIR on a subdivision astride an active fault line should identify as a significant effect the seismic hazard to future occupants of the subdivision. The subdivision would have the effect of attracting people to the location and exposing them to the hazards found there. Similarly, the EIR should evaluate any potentially significant impacts of locating development in other areas susceptible to hazardous conditions (e.g., floodplains, coastlines, wildfire risk areas) as identified in authoritative hazard maps, risk assessments or in land use plans addressing such hazards areas."[1]

The environmental setting provides a description of the Utilities and Service Systems setting in the County. The regulatory setting provides a description of applicable Federal, State and Local

[1] 2013 CEQA Guidelines, Section 15126.2 (a)

regulatory policies that were developed in part from information contained in the Tulare County 2030 General Plan, Tulare County General Plan Background Report, and/or County 2030 General Plan EIR incorporated by reference and summarized below. Additional documents utilized are noted as appropriate. A description of the potential impacts of the proposed Project is provided and includes the identification of feasible mitigation measures (if necessary and feasible) to avoid or lessen the impacts.

Thresholds of Significance

- Increase wastewater beyond existing treatment capacity per the RWQCB
- Result in the need for waste water infrastructure that would cause impacts
- Result in the need for waste water infrastructure that would cause impacts
- Result in the need for water supplies or entitlements
- Result in the determination by the wastewater provider that it has adequate capacity
- Served by a landfill with sufficient permitted capacity to Project's needs
- Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs

ENVIRONMENTAL SETTING

"Tulare County and special districts provide many important services to County residents and businesses in unincorporated communities and hamlets such as water, wastewater, storm drainage, solid waste removal, utilities, communications, fire protection, law enforcement, and a number of other community facilities and services (schools, community centers, etc.)."[2]

"Water districts supply water to communities and hamlets throughout the County. Most communities and some hamlets have wastewater treatment systems; however, several communities including Three Rivers, Plainview, Alpaugh, and Ducor rely on individual septic systems. Storm drainage facilities are generally constructed and maintained in conjunction with transportation improvements or new subdivisions in communities. Solid waste collection in the County is divided into service areas, as determined by the Board of Supervisors, with one license for each area. Southern California Edison provides electric service to the south and central areas of Tulare County while PG&E provides electric service in the north. The Gas Company is the primary provider of natural gas throughout the County."[3]

On August 28, 2012, the Board of Supervisors the closure of the Earlimart, Balance, Rock, Badger, and Kennedy Meadows Transfer Stations. Although, it was determined that there is sufficient capacity in the land fills, expansions of other transfer stations throughout Tulare County is desirable.

[2] Tulare County 2030 General Plan, page 14-3
[3] Ibid. Page 14-3

Sewer

"Sewage collection, domestic water and street lights are provided to Cutler and Orosi by the Cutler and Orosi Public Utility Districts. Sewage treatment is jointly provided by the districts at a waste water treatment plant located southwest of Cutler. The districts also collect and treat wastewater from the outlying communities of Sultana and East Orosi. In addition, the communities of Yettem and Seville are scheduled for connection to the treatment plant in the next three years."[4]

"The two districts jointly fund the maintenance and operation of the waste water treatment plant located on a portion of a 120 acre site near Cutler. The plant was originally constructed by the Cutler PUD in 1960. It was later upgraded by the Orosi PUD in 1965 when it connected to the plant. After the 1965 renovation, the plant contained two clarifier-digesters, two trickling filters, stabilization ponds and sludge drying beds. Its hydraulic capacity was .85 million gallons per day (MGPD). Effluent from the plant was used for irrigation on adjacent farmland owned by the two districts.

Due to the growth in the two communities and more stringent State waste water disposal requirements regarding effluent disposal, the plant was expanded and upgraded in 1982. An oxidation ditch system was added to the plant which increased the plant's hydraulic capacity to 1.47 MGPD. However, this addition did not resolve the problem of disposing of treated effluent. During the summer months the districts can use the effluent for irrigation. Unfortunately, during the winter months irrigation water is not needed and the stabilization ponds fill up with effluent. The districts have secured a permit through the National Pollution Discharge Elimination System to chlorinate the effluent and discharge it into Sand Creek. Sorensen and Keller, consulting engineers for the two districts, have indicated that a moratorium on development may be required if additional disposal capacity can not be developed. The districts are currently seeking a funding mechanism which would mitigate the problem of effluent disposal.

The two districts share in the ownership of the treatment capacity. As of 1982, the Orosi District owned approximately 60 percent of the plant's capacity, and the Cutler District 40 percent. Presently, the entire plant is operating at two-thirds of its hydraulic capacity, approximately 1.20 MGPD. Domestic and commercial flows account for most of the effluent; industrial development, less than five percent. The communities of Sultana and East Orosi, which connected to the plant in 1985, contribute 15,000 and 40,000 GPD, respectively. If Yettem and Seville connect, the plant will receive an additional 40,000 GPD.

While both districts share in the ownership of the treatment plant, they each operate their own collection system. The Orosi system is composed of vitrified clay pipes ranging in size from 6 to 15 inch lines. Recently, the District constructed its own 15 inch interceptor to the treatment plant, thereby, freeing up additional capacity in Cutler's interceptor line. There are numerous constraints in the collection system which could influence the direction, rate, and cost of urbanization. The original design of the collection system did not anticipate additional growth,

[4] Cutler-Orosi Community Plan, page 19

and therefore, development in a direction other than due south, will require lift stations. These stations are costly to install and maintain. The District has indicated that development which requires lift stations will be required to form assessment districts to pay for the maintenance and operation of these stations. Furthermore, many of the lines into which these lift stations would feed are at load capacity. Additional community growth in every direction but south could require new lines to parallel existing lines.

Historically, Cutler has not grown as rapidly as Orosi, and therefore, the Cutler PUD has sufficient capacity in its sewage collection system. The District does, however, have one problem associated with its collection system. During periods of precipitation, storm waters leak into the system. This can overburden the hydraulic capacity of the plant if the infiltration problem is excessive. The District periodically inspects the collection system to identify sites where storm water is infiltrating and corrects the situation.

The collection system has capacity for additional development in the west and east portions of the community. Lift stations are not required for most areas in Cutler except for the extreme southern portions of the District."[5]

Water

"Water for municipal purposes is provided to Cutler and Orosi by their respective utility districts. Groundwater is drawn from depths ranging from 150 to 350 feet. The static water table ranges from 28 to 50 feet. The quantity of water available to the two districts is not a constraint to development, however, both districts have experienced problems meeting drinking water standards. In Orosi, one well has been abandoned due to excessive nitrates and another well has levels higher than the District would like, even though it is within the guidelines set by the U.S. Public Health Service.

The Orosi PUD has four wells which feed into a distribution system composed of pipe ranging from 2 inch steel lines to 10 inch PVC lines. The east and southeast portions of the system are in poor condition, old, deteriorated or undersized. The District is in the process of replacing these segments of pipeline. The primary constraint to development involves the poor water quality in the northeast quadrant of the community. To mitigate this situation the District will have to import water to this area from a different part of the distribution system.

The Cutler water system is composed of four wells and a distribution system which ranges from 2 inch steel lines to 10 inch PVC lines. Sorensen and Keller have indicated that peripheral residential development can be adequately served. Major users of water, such as some types of industries, would require further analysis prior to connection."[6]

[5] Cutler-Orosi Community Plan, pages 19 and 20
[6] Ibid. Pages 20 and 21

REGULATORY SETTING

Federal Agencies & Regulations

Resource Conservation and Recovery Act (RCRA)[7]

Congress passed RCRA on October 21, 1976 to address the increasing problems the nation faced from our growing volume of municipal and industrial waste. RCRA, which amended the Solid Waste Disposal Act of 1965, set national goals for:

- Protecting human health and the environment from the potential hazards of waste disposal.
- Conserving energy and natural resources.
- Reducing the amount of waste generated.
- Ensuring that wastes are managed in an environmentally-sound manner.

To achieve these goals, RCRA established three distinct, yet interrelated, programs:

- The solid waste program, under RCRA Subtitle D, encourages states to develop comprehensive plans to manage nonhazardous industrial solid waste and municipal solid waste, sets criteria for municipal solid waste landfills and other solid waste disposal facilities, and prohibits the open dumping of solid waste.
- The hazardous waste program, under RCRA Subtitle C, establishes a system for controlling hazardous waste from the time it is generated until its ultimate disposal — in effect, from "cradle to grave."
- The underground storage tank (UST) program, under RCRA Subtitle I, regulates underground storage tanks containing hazardous substances and petroleum products.

RCRA banned all open dumping of waste, encouraged source reduction and recycling, and promoted the safe disposal of municipal waste. RCRA also mandated strict controls over the treatment, storage, and disposal of hazardous waste.

State Agencies & Regulations

California Global Warming Solutions Act of 2006 (AB 32)

With the passage of AB 32, the State Board Air Resources Board was required to adopt a statewide greenhouse gas emissions limit equivalent to the statewide greenhouse gas emissions levels in 1990 to be achieved by 2020. To achieve this requirement, a scoping plan was adopted in 2008 that includes high recycling and zero waste as a way to reduce greenhouse gas emissions from landfills. "As virgin raw materials are replaced with recyclables, a large reduction in energy consumption should be realized. Implementing programs with a systems approach that focus on consumer demand, manufacturing, and movement of products will result in the reduction of greenhouse gas emissions and other co-benefits."[8]

[7] http://www.epa.gov/epawaste/laws-regs/rcrahistory.htm
[8] Climate Change Scoping Plan, page 62

Local Policy & Regulations

Tulare County General Plan Policies

The General Plan has a number of policies that apply to projects within Tulare County. General Plan policies that relate to the proposed Project are listed below.

PFS-2.1 Water Supply
The County shall work with agencies providing water service to ensure that there is an adequate quantity and quality of water for all uses, including water for fire protection, by, at a minimum, requiring a demonstration by the agency providing water service of sufficient and reliable water supplies and water management measures for proposed urban development.

PFS-2.3 Well Testing
The County shall require new development that includes the use of water wells to be accompanied by evidence that the site can produce the required volume of water without impacting the ability of existing wells to meet their needs.

PFS-2.4 Water Connections
The County shall require all new development in UDBs, UABs, Community Plans, Hamlet Plans, Planned Communities, Corridor Areas, Area Plans, existing water district service areas, or zones of benefit, to connect to the community water system, where such system exists. The County may grant exceptions in extraordinary circumstances, but in these cases, the new development shall be required to connect to the water system when service becomes readily available.

PFS-2.5 New Systems or Individual Wells
Where connection to a community water system is not feasible per PFS-2.4: Water Connections, service by individual wells or new community systems may be allowed if the water source meets standards for quality and quantity.

PFS-3.1 Private Sewage Disposal Standards
The County shall maintain adequate standards for private sewage disposal systems (e.g., septic tanks) to protect water quality and public health.

PFS-3.2 Adequate Capacity
The County shall require development proposals to ensure the intensity and timing of growth is consistent with the availability of adequate wastewater treatment and disposal capacity.

PFS-3.4 Alternative Rural Wastewater Systems
The County shall consider alternative rural wastewater systems for areas outside of community UDBs and HDBs that do not have current systems or system capacity. For individual users, such systems include elevated leach fields, sand filtration systems, evapotranspiration beds, osmosis units, and holding tanks. For larger generators or groups of users, alternative systems, including

communal septic tank/leach field systems, package treatment plants, lagoon systems, and land treatment, can be considered.

PFS-4.1 Stormwater Management Plans
The County shall oversee, as per Community Plan Content Table PF-2.1 and Specific Plan Content, Hamlet Plans Policy PF-3.3, and Table LU-4.3, the preparation and adoption of stormwater management plans for communities and hamlets to reduce flood risk, protect soils from erosion, control stormwater, and minimize impacts on existing drainage facilities, and develop funding mechanisms as a part of the Community Plan and Hamlet Plan process.

PFS-4.2 Site Improvements
The County shall ensure that new development in UDBs, UABs, Community Plans, Hamlet Plans, Planned Communities, Corridor Areas, and Area Plans includes adequate stormwater drainage systems. This includes adequate capture, transport, and detention/retention of stormwater.

PFS-4.3 Development Requirements
The County shall encourage project designs that minimize drainage concentrations and impervious coverage, avoid floodplain areas, and where feasible, provide a natural watercourse appearance.

PFS-4.4 Stormwater Retention Facilities
The County shall require on-site detention/retention facilities and velocity reducers when necessary to maintain existing (pre-development) storm flows and velocities in natural drainage systems. The County shall encourage the multi-purpose design of these facilities to aid in active groundwater recharge.

PFS-4.5 Detention/Retention Basins Design
The County shall require that stormwater detention/retention basins be visually unobtrusive and provide a secondary use, such as recreation, when feasible.

PFS-4.7 NPDES Enforcement
The County shall continue to monitor and enforce provisions to control non-point source water pollution contained in the U.S. Environmental Protection Agency National Pollution Discharge Elimination System (NPDES) program.

PFS-5.1 Land Use Compatibility with Solid Waste Facilities
The County shall ensure that solid waste facility sites (for example, landfills) are protected from the encroachment by sensitive and/or incompatible land uses.

PFS-5.3 Solid Waste Reduction
The County shall promote the maximum feasible use of solid waste reduction, recycling, and composting of waste, strive to reduce commercial and industrial waste on an annual basis, and pursue financing mechanisms for solid waste reduction programs.

PFS-5.4 County Usage of Recycled Materials and Products
The County shall encourage all industries and government agencies in the County to use recycled materials and products where economically feasible.

PFS-5.8 Hazardous Waste Disposal Capabilities
The County shall require the proper disposal and recycling of hazardous materials in accordance with the County's Hazardous Waste Management Plan.

PFS-5.9 Agricultural Waste
The County shall investigate waste disposal and reuse needs for agricultural wastes for energy and other beneficial uses and shall change County plans accordingly.

IMPACT EVALUATION

Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Project Impact Analysis: ***Less than Significant Impact***

The existing facility utilizes an on-site septic tank and leach field for disposal of wastewater generated by employees. The mining operation does not require wastewater treatment. ***Less Than Significant Impacts*** related to this Checklist item will occur.

Cumulative Impact Analysis: ***Less than Significant Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the requirements of the Central Valley Regional Water Quality Control Board.

The proposed Project will generate a minimal amount of new wastewater to be processed by a permitted wastewater facility (septic tank and leach field). This minimal amount of new wastewater will not require any expansion of a wastewater treatment facility. ***Less Than Significant Cumulative Impacts*** related to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***Less than Significant Impact***

Less Than Significant Project-specific and Cumulative Impacts related to this Checklist item will occur.

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Project Impact Analysis: ***No Impact***

There is an existing septic system and water well on the site. No new or expansion of water or wastewater treatment facilities is anticipated. ***No Project-specific Impacts*** related to this Checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the requirements of the Central Valley Regional Water Quality Control Board. The proposed Project does not require new or expansion of water or wastewater treatment facilities. ***No Cumulative Impacts*** will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***No Impact***

As noted earlier, ***No Project-specific or Cumulative Impacts*** related to this Checklist item will occur.

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Project Impact Analysis: ***Less than Significant Impact***

The proposed Project will not result in a new or an expansion of a local public storm water drainage facility. Storm water on the Project site will be directed to an existing on-site drainage detention basin. This detention basin is sufficient to collect the appropriate amount of stormwater which might collect on the site. As such, no off-site detention basins will be required. ***Less Than Significant Project-specific Impacts*** related to this Checklist item will be required.

Cumulative Impact Analysis: ***Less than Significant Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the requirements of Central Valley Regional Water Quality Control Board.

The proposed Project will retain storm water on site. As no offsite storm water impacts will occur, ***Less Than Significant Cumulative*** impacts related to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***Less than Significant Impact***

As noted earlier, ***Less Than Significant Project-specific or Cumulative Impacts*** related to this Checklist item will occur.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Project Impact Analysis: ***No Impact***

Water supply for the Project will come from an existing, on-site ground water well. The well is not considered a public water system because it does not serve more than 25 employees. No new or expansion of water or wastewater treatment facilities is anticipated. ***No Project-specific Impacts*** related to this Checklist item will occur. Also, see Item 3. 9 b) which indicates that no new or expansion of water facilities is anticipated.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the requirements of the Central Valley Regional Water Quality Control Board.

As noted here, and in Item 3.9 b), the proposed Project will result in ***No Significant Impact*** related to this Checklist item.

Mitigation Measure(s):

None required.

Conclusion: ***No Impact***

As noted earlier, ***No Project-specific or Cumulative Impacts*** related to this Checklist item will occur.

e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Project Impact Analysis: ***No Impact***

The Project site currently utilizes an existing septic system. This septic system is adequate to treat the waste water needs of the proposed use. ***No Project-specific Impacts*** related to this Checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the requirements of Tulare County Environmental Health.

No connections to a wastewater treatment provider are proposed. ***No Cumulative Impacts*** related to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***No Impact***

As noted earlier, ***No Project-specific or Cumulative Impacts*** related to this Checklist item will occur.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Project Impact Analysis: ***No Impact***

The proposed Project does not include activities that will result in solid waste generation. As part of the current and proposed expanded operations, used concrete is crushed for recycling which reduces material that is sent to landfills. In addition, as noted in the discussion at Item 3.11-a), the current (and proposed) operation includes concrete recycling which allows additional aggregate to be produced for construction material. As such, the proposed Project will have ***No Project-specific Impacts*** related to this Checklist item.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

The proposed Project will continue the reduction of materials going directly to landfills. It will result in a cumulative benefit related to this Checklist item because it will increase the

amount of waste diverted from landfills. Therefore, proposed Project will result in ***No Impact***.

Mitigation Measure(s):

None Required.

Conclusion: ***No Impact***

As noted earlier, ***No Project-specific or Cumulative Impacts*** related to this Checklist item will occur.

g) Comply with federal, state, and local statutes and regulations related to solid waste?

Project Impact Analysis: ***No Impact***

The proposed Project does not include the creation or expansion of a solid waste facility. ***No Project-specific Impacts*** related to this Checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County and the state of California. This cumulative analysis is based on the Federal, State, and Local requirements, including requirements of Cal Recycle, California Air Resources Board, and Tulare County Environmental Health and Human Services Agency (Environmental Health Division).

The proposed Project does not include the creation or expansion of a solid waste facility. ***No Cumulative Impacts*** related to this Checklist item will occur.

Mitigation Measure(s):

None Required.

Conclusion: ***No Impact***

As noted earlier, ***No Project-specific or cumulative Impacts*** related to this Checklist item will occur.

REFERENCES

Tulare County 2030 General Plan, August 2012

Climate Change Scoping Plan, California Air Resources Board for the State of California, December 2008

EPA's Summary of the Resource Conservation and Recovery Act
http://www.epa.gov/epawaste/laws-regs/rcrahistory.htm

2013 CEQA Guidelines

Mandatory Findings of Significance
Chapter 3.18

SUMMARY OF FINDINGS

None of the conditions stated below under 15065(a) (1)-(4) are present due to the impacts from the proposed Project. The impacts to the Resources discussed as follows are, therefore, ***Less Than Significant***.

INTRODUCTION

California Environmental Quality Act (CEQA) Requirements

CEQA Guidelines "Mandatory Findings of Significance" (Section 15065(a)) lists the following potential impacts that need to be addressed by a lead agency:

> 15065(a): *"A lead agency shall find that a project may have a significant effect on the environment and thereby require an EIR to be prepared for the project where there is substantial evidence, in light of the whole record, that any of the following conditions may occur:*
>
> > *(1) The project has the potential to: substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; substantially reduce the number or restrict the range of an endangered, rare or threatened species; or eliminate important examples of the major periods of California history or prehistory.*
> >
> > *(2) The project has the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals.*
> >
> > *(3) The project has possible environmental effects that are individually limited but cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.*
> >
> > *(4) The environmental effects of a project will cause substantial adverse effects on human beings, either directly or indirectly."*

Under the California Environmental Quality Act (CEQA), an EIR must be prepared when certain specified impacts may result from construction or implementation/operation of a project. An EIR

has been prepared for the proposed Project, which fully addresses all of the Mandatory Findings of Significance, as described below.

Under Section 15065(a) of the CEQA Guidelines, a finding of significance is required if a project "has the potential to substantially degrade the quality of the environment." In practice, this is the same standard as a significant effect on the environment, which is defined in Section 15382 of the CEQA Guidelines as "a substantial or potentially substantial adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance." This EIR, in its entirety, addresses and discloses potential environmental affects associated with construction and operation of the proposed Project, including direct, indirect, and cumulative impacts related to the following environmental factors:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards-and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation/Traffic
- Utilities and Service Systems

As summarized in Project Requirements/Mitigation Measures Section, this EIR discusses potential environmental resource impacts, the level of significance prior to mitigation, project requirements that are otherwise required by law or are incorporated as part of the project description, feasible mitigation measures, and the level of significance after the incorporation of mitigation measures.

This section of the ~~Draft~~ Final Environmental Impact Report (~~DEIR~~FEIR) meets CEQA requirements by making mandatory findings of significance relative to impacts of the proposed Project site, located in the San Joaquin Valley portion of Tulare County. The "Environmental Setting" section summarizes environmental resources in the region, with special emphasis on the proposed Project site and vicinity. The "Regulatory Setting" provides a description of applicable State and local regulatory policies. A description of the potential impacts of the proposed project is also provided and includes the identification of feasible mitigation to avoid or lessen the impacts.

Long Term Impacts

As described in Section 15065(a)(2), a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals. This document addresses the short-term and irretrievable commitment of natural resources to ensure that the consumption is justified on a long-term basis.

Cumulative Impacts

Under Section 15065(a)(1) of the CEQA Guidelines, a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has the potential to (1) substantially reduce the habitat of a fish or wildlife species; (2) cause a fish or wildlife population to drop below self-sustaining levels; or (3) substantially reduce the number or restrict the range of an endangered, rare, or threatened species. Section 4.3 (Biological Resources) of the EIR fully addresses impacts related to the reduction of the fish or wildlife habitat, the reduction of fish or wildlife populations, and the reduction or restriction of the range of special-status species.

Impacts to Species

Section 15065(a)(1) of the CEQA Guidelines states that a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has the potential to eliminate important examples of a major period of California history or prehistory. Section 15065(a)(1) amplifies Public Resources Code 21001(c) requiring that major periods of California history are preserved for future generations. It also reflects the provisions of Public Resource Code Section 21084.1 requiring a finding of significance for substantial adverse changes to historical resources.

Impacts to Historical Resources

Section 15064.5 of the CEQA Guidelines establishes standards for determining the significance of impacts to historical resources and archaeological sites that are an historical resource. Section 4.4 (Cultural Resources) of this EIR (which is supported by a Cultural Resources Technical Report) fully addresses impacts related to California history and prehistory, historic resources, archaeological resources, and paleontological resources.

Impacts on Human Beings

Consistent with Section 15065(a)(4) of the CEQA Guidelines, a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has the potential to cause substantial adverse effects on human beings, either directly or indirectly. Under this standard, a change to the physical environment that might otherwise be minor must be treated as significant if people will be significantly affected. This factor relates to adverse changes to the environment of human beings generally, and not to effects on particular individuals. While changes to the environment that could indirectly affect human beings will be

represented by all of the designated CEQA issue areas, those that could directly affect human beings include air quality, geology and soils, hazards and hazardous materials, hydrology and water quality, noise, population and housing, public services, transportation/traffic, and utilities, which are addressed in this EIR.

Thresholds of Significance

The geographical area may be countywide, statewide, or nationwide, depending on the nature of the impact. Thresholds of Significance for impacts to biological resources are addressed in detail in Chapter 3.4. of this document. Thresholds of Significance for impacts to cultural resources, including impacts to historic and prehistoric resources, are addressed in Chapter 3.5 of this document.

ENVIRONMENTAL SETTING

"Tulare County… is located in a geographically diverse region with the majestic peaks of the Sierra Nevada framing its eastern region, while its western portion includes the San Joaquin valley floor, which is very fertile and extensively cultivated. Tulare County is the second-leading agricultural-producing county in the U.S. Fresno County is currently (2004) the top producer. In addition to its agricultural production, the county's economic base also includes agricultural packing and shipping operations."[1]

Native Vegetation

The native vegetation of the Valley is predominately characterized by the purple needlegrass series, valley oak series, vernal pools and wetland communities, and blue oak series. Fauna associated with this section include mule deer (Odocoileus hemionus), black-tailed deer (Odocoileus hemionus columbianus), coyotes (Canis latrans), white-tailed jackrabbits (Lepus townsendii), kangaroo rats (Dipodomys ingens), kit fox (Vulpes macrotis), and muskrats (Ondatra Zibethicus). Birds include waterfowl, hawks, golden eagles (Aquila chrysaetos), owls, white-tailed kites (Elanus leucurus), herons, western meadowlark (Sturnella neglecta) and California quail (Callipepla californica).[2]

Existing Cultural and Historic Resources

"Tulare County's known and recorded cultural resources were identified through historical records, such as those found in the National Register of Historic Places, the Historic American Building Survey/Historic American Engineering Record (HABS/HAER), the California Register of Historic Resources, California Historical Landmarks, and the Tulare County Historical Society list of historic resources."[3]

[1] General Plan Background Report, page 1-2
[2] Ibid. Page 9-10
[3] [3] Ibid. Page 9-56

Due to the sensitivity of many prehistoric, ethnohistoric, and historic archaeological sites, locations of these resources are not available to the general public. The Information Center at California State University Bakersfield houses records associated with reported cultural resources surveys, including the records pertinent to sensitive sites, such as burial grounds, important village sites, and other buried historical resources protected under state and federal laws.

REGULATORY SETTING

Federal Agencies & Regulations

See Chapters 3.4 and 3.5 of this document for federal regulations related to biological and cultural resources; respectively.

State Agencies & Regulations

See Chapters 3.4 and 3.5 of this document for state regulations related to biological and cultural resources; respectively.

Local Policy & Regulations

See Chapters 3.4 and 3.5 of this document for local regulations related to biological and cultural resources; respectively.

IMPACT EVALUATION

Would the project:

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

FINDINGS: IMPACTS TO BIOLOGICAL RESOURCES

Project Impact Analysis: ***Less than Significant Impact***

3.4 a) Less than Significant Impact

The biological scoping report and addendum report – biological survey determined that no federal or state listed species would be adversely impacted.

3.4 b) No Impact

Due to the lack of riparian habitat, no impacts related to this Checklist item will occur.

3.4 c) No Impact

There is no habitat for special study species located on-site. As such, no impacts related to this Checklist item will occur.

3.4 d) No Impact

The Project site does not serve as a fish or wildlife movement corridor. No impacts related to this Checklist item will occur.

3.4 e) No Impact

The proposed Project will not conflict with any policies or ordinances protecting biological resources. No impacts related to this Checklist item will occur.

3.4 f) No Impact:

There are two Habitat Conservation Plans that apply in Tulare County. The proposed Project does not conflict with these Plans. No impacts related to this Checklist item will occur.

Cumulative Impact Analysis: ***Less than Significant Impact***

The geographic area of this cumulative analysis is the San Joaquin Valley, the State of California, and the Western United States. As noted in Chapter 3.4, cumulative impacts related to biological resources will be less than significant.

Mitigation Measure(s):

None Required.

Conclusion: ***Less than Significant Impact***

Potential Project-specific and cumulative impacts to biological resources will be less than significant.

FINDINGS: IMPACTS TO EXAMPLES OF THE MAJOR PERIODS OF CALIFORNIA HISTORY OR PREHISTORY

Project Impact Analysis: ***Less than Significant Impact with Mitigation***

Chapter 3.5, Cultural Resources, discusses impacts to historic and prehistoric resources. A small prehistoric milling station and quartz quarry was previously discovered on the Project

site. Mitigation Measures have been included in this EIR to address the potential of cultural resources being unearthed as a result of Project-related ground excavation. With Mitigation Measures, less than significant Project-specific impacts will occur.

Cumulative Impact Analysis: ***Less than Significant Impact with Mitigation***

The geographic area of this cumulative analysis is Tulare County.

The proposed Project would only contribute to cumulative impacts related to this Checklist item if Project-specific impacts were to occur. As the proposed Project will be mitigated to a less than significant level, cumulative impacts would also be considered less than significant with mitigation.

Mitigation Measure(s):

See Mitigation Measures outlined in Chapter 3.5.

5-1 In the event that archaeological or paleontological resources are discovered during site excavation, the County shall require that grading and construction work on the project site be suspended until the significance of the features can be determined by a qualified archaeologist or paleontologist. In this event, the property owner shall retain a qualified archaeologist/ paleontologist to make recommendations for measures necessary to protect any site determined to contain or constitute an historical resource, a unique archaeological resource, or a unique paleontological resource or to undertake data recover, excavation analysis, and curation of archaeological or paleontological materials. County staff shall consider such recommendations and implement them where they are feasible in light of project design as previously approved by the County.

5-2 The property owner shall avoid and minimize impacts to paleontological resources. If a potentially significant paleontological resource is encountered during ground disturbing activities, all construction within a 100-foot radius of the find shall immediately cease until a qualified paleontologist determines whether the resources requires further study. The owner shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. The paleontologist shall notify the Tulare County Resource Management Agency and the project proponent of the procedures that must be followed before construction is allowed to resume at the location of the find. If the find is determined to be significant and the Tulare County Resource Management Agency determines avoidance is not feasible, the paleontologist shall design and implement a data recovery plan consistent with applicable standards. The plan shall be submitted to the Tulare County Resource Management Agency for review and approval. Upon approval, the plan shall be incorporated into the project.

5-3 Consistent with Section 7050.5 of the California Health and Safety Code and (CEQA Guidelines) Section 15064.5, if human remains of Native American origin are discovered during project construction, it is necessary to comply with State laws relating to the disposition of Native American burials, which fall within the jurisdiction of the Native American Heritage Commission (Public Resources Code Sec. 5097). In the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps should be taken:

1. There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:
- **a. The Tulare County Coroner/Sheriff must be contacted to determine that no investigation of the cause of death is required; and**
- **b. If the coroner determines the remains to be Native American:**
  - **i. The coroner shall contact the Native American Heritage Commission within 24 hours.**
  - **ii. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American.**
  - **iii. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code section 5097.98, or**

2. Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance.
- **a. The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission.**
- **b. The descendant fails to make a recommendation; or**
- **c. The landowner or his authorized representative rejects the recommendation of the descendent.**

Conclusion: ***Less than Significant Impact with Mitigation***

With mitigation, potential Project-specific and cumulative impacts to cultural resources will be less than significant.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Project Impact Analysis: ***See Chapter 4***

Cumulative impacts are discussed within the analysis of each Checklist item. In addition, cumulative impacts are summarized in Chapter 4.

Cumulative Impact Analysis: ***See Chapter 4***

Cumulative impacts are discussed within the analysis of each Checklist item. In addition, cumulative impacts are summarized in Chapter 4.

Mitigation Measure(s):

1-1 The Project site has an existing berm and shall continue to have and maintain an 8-foot berm along the entire edge of the project site (not including location of the driveway).

1-2 All exterior lighting shall be angled downward and adjusted to deflect and/or shield direct rays away from public roadways and adjacent properties.

3-1 During operation of the Project, off-road equipment used on the Project site (e.g., loaders, excavators, backhoes, dozers, etc.) shall be U.S. Environmental Protection Agency Tier 3-certified or higher, with the exception of a maximum total of 1,000 hours per year allowed for Tier 2 equipment.

5-1 In the event that archaeological or paleontological resources are discovered during site excavation, the County shall require that grading and construction work on the project site be suspended until the significance of the features can be determined by a qualified archaeologist or paleontologist. In this event, the property owner shall retain a qualified archaeologist/ paleontologist to make recommendations for measures necessary to protect any site determined to contain or constitute an historical resource, a unique archaeological resource, or a unique paleontological resource or to undertake data recover, excavation analysis, and curation of archaeological or paleontological materials. County staff shall consider such recommendations and implement them where they are feasible in light of project design as previously approved by the County.

5-2 The property owner shall avoid and minimize impacts to paleontological resources. If a potentially significant paleontological resource is encountered during ground disturbing activities, all construction within a 100-foot radius

of the find shall immediately cease until a qualified paleontologist determines whether the resources requires further study. The owner shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. The paleontologist shall notify the Tulare County Resource Management Agency and the project proponent of the procedures that must be followed before construction is allowed to resume at the location of the find. If the find is determined to be significant and the Tulare County Resource Management Agency determines avoidance is not feasible, the paleontologist shall design and implement a data recovery plan consistent with applicable standards. The plan shall be submitted to the Tulare County Resource Management Agency for review and approval. Upon approval, the plan shall be incorporated into the project.

5-3 Consistent with Section 7050.5 of the California Health and Safety Code and (CEQA Guidelines) Section 15064.5, if human remains of Native American origin are discovered during project construction, it is necessary to comply with State laws relating to the disposition of Native American burials, which fall within the jurisdiction of the Native American Heritage Commission (Public Resources Code Sec. 5097). In the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps should be taken:

1. **There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:**
   a. **The Tulare County Coroner/Sheriff must be contacted to determine that no investigation of the cause of death is required; and**
   b. **If the coroner determines the remains to be Native American:**
      i. **The coroner shall contact the Native American Heritage Commission within 24 hours.**
      ii. **The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American.**
      iii. **The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code section 5097.98, or**

2. **Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance.**

a. The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission.
b. The descendant fails to make a recommendation; or
c. The landowner or his authorized representative rejects the recommendation of the descendent.

7-1 During operation of the project, stationary equipment permitted by the San Joaquin Valley Air Pollution Control District shall be electric.

12-1 Provide all hearing protection measures outlined in MSHA's Noise Standard Actions required by Mine Operators

12-2 If the applicant amends the SMARA contract for renewal in 2020, the applicant shall conduct another noise study at receptor #6. If it found that the Project's noise impacts exceed the General Plan's threshold of 60 leq(h) the Project shall pay its fair share of Design and Planting costs for dense trees and shrubs in order to reduce the noise impact to receptor #6 to a level less than the General Plan threshold of 60 leq(h).

16-1 At the time of permit expiration in 2020, should the applicant choose to amend the permit to extend the life of the proposed surface mining permit, the applicant shall have a traffic study conducted at that time and pay the pro-rata share fee outlined by Caltrans for the impacts found to occur at that time. In the year 2035, if the Project is still in operation, the project shall pay for its fair share of the following improvements.

<u>SR 201 at SR 63</u>

- **Install traffic signal.**
- **Widen the eastbound approach to 1 left turn lane and 1 through/right-turn lane (adding 1 dedicated left turn lane).**
- **Widen the westbound approach to 1 left turn lane and 1 through/right-turn lane (adding 1 dedicated left turn lane).**
- **Widen the northbound approach to 1 left turn lane, 1 through lane, and 1 through/right-turn lane (adding 1 through lane).**
- **Widen the southbound approach to 1 left turn lane, 1 through lane, and 1 through/right-turn lane (adding 1 through lane).**

<u>Avenue 416 (El Monte Way) at SR 63</u>

- **Widen the eastbound approach to 1 left turn lane, 1 through lane, and 1 through/right-turn lane (adding 1 dedicated left turn lane).**
- **Widen the westbound approach to 1 left turn lane, 1 through lane, and 1 through/right-turn lane (adding 1 dedicated left turn lane).**
- **Widen the northbound approach to 1 left turn lane, 1 through lane, and 1 through/right-turn lane (adding 1 dedicated left turn lane).**
- **Widen the southbound approach to 1 left turn lane, 1 through lane and 1 through/right-turn lane (adding 1 dedicated left turn lane).**

Avenue 416 (El Monte Way) at SR 63

- **Widen the eastbound approach to 1 left turn lane, 2 through lanes, and 1 right-turn lane (adding 1 dedicated right-turn lane).**

Conclusion: ***See Chapter 4***

Cumulative impacts are discussed within the analysis of each Checklist item. In addition, cumulative impacts are summarized in Chapter 4.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Project Impact Analysis: ***Less than Significant Impact***

The proposed Project would not result in any impacts to human beings beyond what has already been analyzed in chapter 3.1 to 3.17.

There are no significant environmental adverse effects from this project to human beings.

Cumulative Impact Analysis: ***Less than Significant Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

There are no significant environmental adverse effects from this project to human beings.

Mitigation Measure(s):

None Required.

Conclusion: ***Less than Significant Impact***

There will be no significant environmental effects which will cause substantial adverse affects to impacts to human beings either directly or indirectly.

DEFINITIONS/ACRONYMS

Definitions

See Chapters 3.4 and 3.5 of this document for definitions related to biological and cultural resources.

REFERENCES

Tulare County 2030 General Plan, August 2012

Tulare County 2030 General Plan: Recirculated Draft EIR, February 2010

2013 CEQA Guidelines

Summary of Cumulative Impacts
Chapter 4

CUMULATIVE IMPACTS ANALYSIS UNDER CEQA

Section 15355 Cumulative Impacts

""Cumulative impacts" refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.

(a) The individual effects may be changes resulting from a single project or a number of separate projects.

(b) The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time."[1]

Section 15130 Discussion of Cumulative Impacts

"(a) An EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable, as defined in section 15065(a) (3). Where a lead agency is examining a project with an incremental effect that is not "cumulatively considerable," a lead agency need not consider that effect significant, but shall briefly describe its basis for concluding that the incremental effect is not cumulatively considerable.

(1) As defined in Section 15355, a cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. An EIR should not discuss impacts which do not result in part from the project evaluated in the EIR.

(2) When the combined cumulative impact associated with the project's incremental effect and the effects of other projects is not significant, the EIR shall briefly indicate why the cumulative impact is not significant and is not discussed in further detail in the EIR. A lead agency shall identify facts and analysis supporting the lead agency's conclusion that the cumulative impact is less than significant.

(3) An EIR may determine that a project's contribution to a significant cumulative impact will be rendered less than cumulatively considerable and thus is not significant. A project's contribution is less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact. The lead agency shall identify facts and analysis supporting its conclusion that the contribution will be rendered less than cumulatively considerable.

[1] 2013 CEQA Guidelines, Section 15355

(b) The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by the standards of practicality and reasonableness, and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact. The following elements are necessary to an adequate discussion of significant cumulative impacts:

(1) Either:

(A) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or

(B) A summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect. Such plans may include: a general plan, regional transportation plan, or plans for the reduction of greenhouse gas emissions. A summary of projections may also be contained in an adopted or certified prior environmental document for such a plan. Such projections may be supplemented with additional information such as a regional modeling program. Any such document shall be referenced and made available to the public at a location specified by the lead agency.

(2) When utilizing a list, as suggested in paragraph (1) of subdivision (b), factors to consider when determining whether to include a related project should include the nature of each environmental resource being examined, the location of the project and its type. Location may be important, for example, when water quality impacts are at issue since projects outside the watershed would probably not contribute to a cumulative effect. Project type may be important, for example, when the impact is specialized, such as a particular air pollutant or mode of traffic.

(3) Lead agencies should define the geographic scope of the area affected by the cumulative effect and provide a reasonable explanation for the geographic limitation used.

(4) A summary of the expected environmental effects to be produced by those projects with specific reference to additional information stating where that information is available, and

(5) A reasonable analysis of the cumulative impacts of the relevant projects. An EIR shall examine reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects.

(c) With some projects, the only feasible mitigation for cumulative impacts may involve the adoption of ordinances or regulations rather than the imposition of conditions on a project-by-project basis.

(d) Previously approved land use documents, including, but not limited to, general plans, specific plans, regional transportation plans, plans for the reduction of greenhouse gas emissions, and local coastal plans may be used in cumulative impact analysis. A pertinent discussion of cumulative impacts contained in one or more previously certified EIRs may be incorporated by reference pursuant to the provisions for tiering and program EIRs. No

further cumulative impacts analysis is required when a project is consistent with a general, specific, master or comparable programmatic plan where the lead agency determines that the regional or area wide cumulative impacts of the proposed project have already been adequately addressed, as defined in section 15152(f), in a certified EIR for that plan.

(e) If a cumulative impact was adequately addressed in a prior EIR for a community plan, zoning action, or general plan, and the project is consistent with that plan or action, then an EIR for such a project should not further analyze that cumulative impact, as provided in Section15183(j)."[2]

Tulare County is the geographic extent for most impact analysis. This geographic area is the appropriate extent because of the following reasons:

1. The proposed Project is a Tulare County and County of Tulare is the Lead Agency;
2. Tulare County General Plan polices applies to the proposed Project.

The basis for other resource specific cumulative impact analysis includes:

- For Air Quality and Green House Gas Emissions it is the San Joaquin Air Basin
- For Biological Resources it is the San Joaquin Valley
- For Hydrology it is the Tulare Lake Basin.

PAST, PRESENT, PROBABLE FUTURE PROJECTS

Tulare County Association of Governments (TCAG) Blueprint Scenario

Under the Tulare County Regional Blueprint Preferred Growth Scenario, TCAG suggested a 25% increase over the status quo scenario to overall density by 2050. The preferred growth scenario principles included directing growth towards incorporated cities and communities where urban development exists and where comprehensive services and infrastructure are/or will be provided. Another relevant preferred scenario is the creation of urban separators around cities. The project location is outside incorporated areas and would be consistent with the goal of separating urban boundaries.[3]

Tulare County 2030 General Plan

The Cumulative Analysis outlined in the Tulare County General Plan Update 2030 Recirculated Draft EIR notes regional population growth (which impart was developed by the Tulare County Association of Governments) and a number major projects. Regional population projections are provided in the table below.[4]

[2] Ibid., Section 15130 (e)
[3] TGAG Blueprint 2050, Preferred Scenario (2009)
[4] Tulare County 2030 General Plan Recirculated Draft EIR, page 5-4 to 5-5

Table 4-1
Regional Population Projections and Planning Efforts

Jurisdiction	General Plan Planning Timeframe	General Plan Buildout Population	Significant Environmental Impacts
City of Dinuba	2006-2026	33,750	Farmland conversion; conflicts with agricultural zoning and Williamson Act contracts; conversion of agricultural soils to non-agricultural use; regional air quality impacts; and climate change-greenhouse gases.
City of Woodlake			Unavailable.
City of Visalia	1991-2020	165,000	Air quality; biological resources; land use conflicts; noise; transportation/traffic; mass transit; agricultural resources; water supply; and visual resources.
City of Tulare	2007-2030	134,910	Farmland conversion; aesthetics; water supply; traffic; air quality; global climate change; noise; flooding from levee or dam failure; biological resources; and cultural resources.
City of Farmersville	2002-2025	12,160	Agricultural resources; agricultural land use conflicts; air quality; and traffic circulation.
City of Exeter			Information unavailable at time of analysis.
City of Lindsay	1990-2010	17,500	Air quality and farmland land conversion.
City of Porterville	2006-2030	107,300	Farmland conversion; air quality; noise; and biological resources.
City of Kingsburg	1992-2012	16,740	Farmland conversion and air quality.
City of Delano	2005-2020	62,850	Air quality; noise; farmland conversion; disruption of agricultural production; and conversion of agricultural soils to non-agricultural use.
County of Fresno	2000-2020	1,113,790	Farmland conversion; reduction in agricultural production; cancellation of Williamson Act Contracts; traffic; transit; bicycle facilities; wastewater treatment facilities; storm drainage facilities; flooding; police protection; fire protection; emergency response services; park and recreation facilities; library services; public services; unidentified cultural resources; water supply; groundwater; water quality; biological resources; mineral resources; air quality; hazardous materials; noise; and visual quality.
County of Kern	2004-2020	1,142,000	Air quality; biological resources; noise; farmland conversion; and traffic.
County of Kings*	1993-2005	149,100 (low) 228,000 (high)	Biological resources; wildlife movement; and special status species.

* The adopted Kings County General Plan did not identify a projected population for 2005. The General Plan does include population projections for 2010, which is included in this table.

SOURCE: City of Delano, 1999; City of Dinuba, 2008; City of Farmersville, 2003; City of Kingsburg, 1992; City of Lindsay, 1989; City of Porterville, 2007; City of Visalia, 2001, 1991; County of Fresno, 2000; County of Kern, 2004; County of Kings, 2009; DOF, 2007; TCAG, 2008.

In addition to the Regional Growth Projections used for the cumulative impact analysis, the Tulare County General Plan Update 2030 Recirculated Draft EIR noted the following Major Projects

- **Goshen**: Status – GPI allowed to proceed. On March 29, 2006, the Tulare County Resource Management Agency convened a meeting with 30 property owners, land developers, services providers, and their representatives, having a development interest in Goshen. The purpose of the meeting was to "…discuss the potential for joint cooperation amongst the various developers and property owners to achieve a well planned community and to foster the spirit of cooperation" towards completion of the Community Plan update and EIR. The proposed planning study area boundary would add approximately 3,277 acres to the existing Goshen UDB, as opposed to the Draft Goshen Community Plan UDB which adds 422 acres using a needs-based analysis patterned on historical growth trends extrapolated 20 years into the future. The revised boundary incorporates the GPI applicants' lands, the hamlet of West Goshen, and additional land to be held in reserve for future growth. The applicant's land excluding Mangano's "Westfield" totals 661 acres. The area is bounded in the north by Avenues 320 and 312, taking in West Goshen; in the west by Roads 52 and 56; in the south by State Hwy. 198; and in the east by Camp Road and Road 76 at the City of Visalia Sphere of Influence. This 'study' area will be the focus of technical analysis that will set a proposed Urban Development Boundary in which build-out will be contemplated for preparation of the new Goshen Community Plan, EIR and Infrastructure Master Plan. Since the study area involves lands not owned or controlled by the developers, the MOU agreement to be negotiated will contain a provision to reimburse the developers for expenses incurred when development authorized by the new plan occurs.

- **Yokohl Ranch**: Status – GPI allowed to proceed in February 2007. On September 13, 2005, the Tulare County Resource Management Agency received a request from the J.G. Boswell Company and the Eastlake Company, to initiate the formal process to amend the Tulare County General Plan, including the Foothill Growth Management Plan (FGMP), to change the land use designation for the 36,000 acre Yokohl Ranch property from 'Extensive Agriculture' to 'Planned Community Area'. According to the applicants, the proposed amendment will result in master planned communities that balance the needs for housing, neighborhood commercial uses, recreation, ranching operations and open space. As such, 40% (14,400 acres) of the ranch is proposed for development with 60% (21,600 acres) of the property to remain as untouched open space and ranchlands. The developed portions of the ranch will include the Village of Yokohl Ranch, an active adult community accessible to Yokohl Drive; and a Ranch Resort Lodge Enclave located in the northern reaches of the site, approximately four miles south of Lake Kaweah.

- **Rancho Sierra**: Status – GPA approved. The project site consists of 114.6 acres. The site was a golf course facility located on both sides of Liberty Avenue (Avenue 264), east of Road 124, south of the city of Visalia. There are 30 existing homes within the golf course area but not a part of this application. The intended use is to subdivide the site into 175 single family residential lots. The project has been approved.

- **Earlimart**: Status – GPI allowed to proceed January 2006. On September 9, 2005, the Tulare County Resource Management Agency received a request from the Earlimart Development Group, a land development partnership comprised of four business owners

with interests in 1,491 acres of private property located both within and outside of the existing Earlimart Urban Development Boundary. The Group is seeking authorization to file an amendment to the Tulare County General Plan, specifically the Earlimart Community Plan (1988). In addition to an updated Community Plan, an Infrastructure Master Plan and Program EIR for the update will also be prepared. The applicants proposed that a 7,680 acre planning study area be established. The area is bounded in the north by Avenue 68 (Deer Creek as a natural boundary), in the south by Avenue 36 (White River as a natural boundary), in the east by Road 144, and in the west by Road 120. This 'study' area will be the focus of technical analysis that will set the proposed Community Plan boundary for which the new Community Plan, EIR and Infrastructure Master Plan will be prepared. Since the study area involves lands not owned or controlled by the Development Group, the MOU agreement to be negotiated will contain a provision to reimburse the Development Group for expenses when development authorized by the new plan occurs. The Earlimart Development Group has indicated that they have contracts with the consulting firms of Hogle-Ireland, Inc., Provost & Pritchard Engineering Group, Inc. and TPG Consulting or other environmental consulting firm, to prepare the General Plan amendment. However, it is important that preparation of the EIR be managed by the County as Lead Agency for the project.

In addition to the Major Projects outlined in the Tulare County General Plan Update 2030 Recirculated Draft EIR, there are a number of other projects that may produce cumulative impacts. These projects are briefly described below.

- **Pena's –** The proposed project is for Peña's Material Recovery Facility (MRF) and Transfer Station (TS)' which currently sits on 18.01 acres that are being rezoned from AE 30 to M1 Light Industrial Zoning, and rezoning 6.7 acres and 11.3 acres from residential and industrial reserve zoning to industrial zoning. The land is currently operated by Peña's Disposal, Inc. and has a previously permitted peak processing capacity of 500 tons per day (TPD). This existing facility serves the unincorporated northern portions of Tulare County and the unincorporated southern portions of Fresno County, and the City of Orange Cove in Fresno County. Within the County of Tulare, the facility serves the cities of Dinuba and Porterville, the communities of Cutler, Orosi, London, Sultana, Traver, Seville and other smaller communities in the area that may need to utilize the facility for the recycling of source-separated recyclables, commingled recyclables, commercial and industrial rubbish, green material and wood wastes, construction and demolition wastes, and inert debris to assist in reaching the diversion goals of the California Integrated Waste Management Act of 1989 (AB 939).

- **South County Correctional Detention Facility in Porterville -** The proposed Project will require a rezoning of the project site, which is half in the County and half in the City of Porterville. The proposed project contains a build-out "footprint" for the proposed facility of approximately 15.0 acres with a new maximum security Type II facility as the primary structure. The proposed Project will consist of 250-cell double occupancy units (500 beds) and 14 special use beds for a total of 514 beds. In addition to the main detention facility, the proposed Project will also include support service components.

As the site is currently under agricultural production, the proposed Project will require new utilities infrastructure (such as electrical, gas, phone, etc.). It will also require streets/roads improvements, potable water systems, wastewater systems, and storm water drainage infrastructure. These will be constructed or expanded to meet facility demands. Where feasible, the Project will be extended to connect with existing potable water, wastewater, and storm water drainage infrastructure provided by City of Porterville. However, possible new construction of the above mentioned infrastructure may be necessary, and as such, will be evaluated.

- **Pixley Biogas -** The proposed project is for development of a biogas facility on 2.75 acre portion of an 8 acre parcel. The digester will extract methane gas, via an anaerobic manure digester. The facility will be used to produce 266 MMBTUS per day of biogas via an anaerobic digestion of manure feedstock from nearby dairies. The biogas produced will be used to fuel the Calgren bio-refinery facility, located adjacent and to the south of the project site, which will reduce the Calgren plant consumption of natural gas.

- **Harvest Power –** The proposed Project is for a Composting Expansion and Anaerobic Digester. The proposed Project will allow a maximum total tonnage for the composting to increase from 156,000 tons per year to a potential 216,000 tons per year. An additional 60,000 tons will be allowed at the proposed anaerobic digester facility. The facility will produce transportation fuel through a compressed natural gas (CNG) refueling station.

SUMMARY OF CUMULATIVE IMPACTS

In this summary section, mitigated impacts and immitigable impacts will be discussed. Checklist item criteria that would result in no impacts or less than significant impacts are discussed in the previous chapter and are not reiterated.

Unavoidable Impacts

There are no significant and unavoidable impacts. All cumulative impacts have been reduced below a level of significance through mitigation.

Less than Significant Impacts with Mitigation

There are a number of cumulative impacts that can be effectively mitigated. These impacts are listed in the Table 4-2.

Table 4-2
Checklist Items with Less than Significant Impacts with Mitigation

Impact Section	Checklist Item No.	Checklist Criteria
Aesthetics	3.1 c)	Substantially degrade the existing visual character or quality of the site and its surroundings
Aesthetics	3.1 d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?
Cultural Resources	3.5 b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?
Cultural Resources	3.5 c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?
Cultural Resources	3.5 d)	Disturb any human remains, including those interred outside of formal cemeteries?
Greenhouse Gas Emissions	3.7 a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
Greenhouse Gas Emissions	3.7 b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?
Noise	3.12 a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
Noise	3.12 d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?
Transportation/Traffic	3.16 a)	Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?
Transportation/Traffic	3.16 b)	Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other

		standards established by the county congestion management agency for designated roads or highways?
Transportation/Traffic	3.16 f)	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Less than Significant Impact

Cumulative impacts that have less than significant impacts are listed in Table 4-3.

Table 4-3
Checklist Items with Less than Significant Impacts

Agricultural Lands & Forestry	3.1 b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?
Air Quality	3.3 a)	Would the project conflict with or obstruct implementation of the applicable air quality plan?
Air Quality	3.3 b)	Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?
Air Quality	3.3 c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?
Air Quality	3.3 d)	Expose sensitive receptors to substantial pollutant concentrations?
Air Quality	3.3 e)	Create objectionable odors affecting a substantial number of people?
Biological Resources	3.4 a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?
Geology & Soils	3.6 a)	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

		i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. ii) Strong seismic ground shaking? iii) Seismic-related ground failure, including liquefaction? iv) Landslides?
Geology & Soils	3.6 b)	Result in substantial soil erosion or the loss of topsoil?
Geology & Soils	3.6 c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?
Geology & Soils	3.6 d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?
~~Geology & Soils~~	~~3.6 e)~~	~~Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?~~
Hazards & Hazardous Materials	3.8 a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
Hazards & Hazardous Materials	3.8 b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
Hydrology & Water Quality	3.9 a)	Violate any water quality standards or waste discharge requirements?
Hydrology & Water Quality	3.9 b)	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 (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support

		existing land uses or planned uses for which permits have been granted)?
Land Use & Planning	3.10 b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?
Mineral Resources	3.11 a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?
Noise	3.12 b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?
Noise	3.12 c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?
Population & Housing	3.13 a	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?
Public Services	3.14 a)	School?
Public Services	3.14 a)	Parks?
Public Services	3.14 a)	Other public facilities?
Utilities & Services Systems	3.17 a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?
Utilities & Services Systems	3.17 c)	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

No Impact

Cumulative impacts that have no impacts are listed in Table 4-4.

Table 4-4
Checklist Items with No Impacts

Aesthetics	3.1 a)	Have a substantial adverse effect on a scenic vista?
Aesthetics	3.1 b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?
Agricultural Lands & Forestry	3.2 a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as

		shown on the maps prepared pursuant to the FMMP of the California Resources Agency, to non-agricultural uses?
Agricultural Lands & Forestry	3.2 c)	Conflict with existing zoning for, or cause rezoning of forest land (as defined in Public Resources Code § 12220(g), timberland (as defined by Public Resources Code § 4526), or timberland zoned Timberland Production (as defined by Government Code § 51104(g))?
Agricultural Lands & Forestry	3.2 d)	Result in the loss of forest land or conversion of forest land to non-forest use?
Agricultural Lands & Forestry	3.2 e	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of agricultural use or conversion of forest land to non-forest use?
Biological Resources	3.4 b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?
Biological Resources	3.4 c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
Biological Resources	3.4 d)	Interfere substantially 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?
Biological Resources	3.4 e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
Biological Resources	3.4 f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?
Cultural Resources	3.5 a)	Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?
Geology & Soils	3.6 e)	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the

		disposal of waste water?
Hazards & Hazardous Materials	3.8 c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
Hazards & Hazardous Materials	3.8 d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?
Hazards & Hazardous Materials	3.8 e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?
Hazards & Hazardous Materials	3.8 f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?
Hazards & Hazardous Materials	3.8 g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
Hazards & Hazardous Materials	3.8 h)	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?
Hydrology & Water Quality	3.9 c)	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?
Hydrology & Water Quality	3.9 d)	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?
Hydrology & Water Quality	3.9 e)	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?
Hydrology & Water Quality	3.9 f)	Otherwise substantially degrade water quality?
Hydrology & Water Quality	3.9 g)	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?
Hydrology & Water Quality	3.9 h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?
Hydrology & Water Quality	3.9 i)	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?
Hydrology & Water Quality	3.9 j)	Inundation by seiche, tsunami, or mudflow?
Land Use & Planning	3.10 a)	Physically divide an established community?
Land Use & Planning	3.10 c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?
Mineral Resources	3.11 b)	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?
Noise	3.12 e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?
Noise	3.12 f)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?
Population & Housing	3.13 b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?
Population & Housing	3.13 c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?
Public Services	3.14 a)	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire protection?
Public Services	3.14 a)	Police protection?
Recreation	3.15 a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?
Recreation	3.15 b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect

		on the environment?
Transportation/Traffic	3.16 c)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?
Transportation/Traffic	3.16 d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
Transportation/Traffic	3.16 e)	Result in inadequate emergency access?
Utilities & Service Systems	3.17 b)	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
Utilities & Service Systems	3.17 d)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?
Utilities & Service Systems	3.17 e)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?
Utilities & Service Systems	3.17 f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?
Utilities & Service Systems	3.17 g)	Comply with federal, state, and local statutes and regulations related to solid waste?

REFERENCES

2013 CEQA Guidelines

ALTERNATIVES
Chapter 5

INTRODUCTION

CEQA Guidelines §15126.6 require that a reasonable range of Alternatives to the proposed project be discussed in the EIR. Specific requirements include the following:

- CEQA Guidelines §15126.6(a): Alternatives to the proposed Project. An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.
- CEQA Guidelines §15126.6(b): Purpose. Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.
- CEQA Guidelines §15126.6(c): Selection of a range of reasonable alternatives. The range of potential alternatives to the proposed project shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects. The EIR should briefly describe the rationale for selecting the alternatives to be discussed. The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination. Additional information explaining the choice of alternatives may be included in the administrative record. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are:(i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts.
- CEQA Guidelines §15126.6(d): Evaluation of alternatives. The EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. A matrix displaying the major characteristics and significant environmental effects of each alternative may be used to summarize the comparison. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project

as proposed.

- CEQA Guidelines §15126.6(e): "No project" alternative.
  (1) The specific alternative of "no project" shall also be evaluated along with its impact. The purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. The no project alternative analysis is not the baseline for determining whether the proposed project's environmental impacts may be significant, unless it is identical to the existing environmental setting analysis which does establish that baseline (see Section 15125).
  (2) The "no project" analysis shall discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.
  (3) A discussion of the "no project" alternative will usually proceed along one of two lines:
    (A) When the project is the revision of an existing land use or regulatory plan, policy or ongoing operation, the "no project" alternative will be the continuation of the existing plan, policy or operation into the future. Typically this is a situation where other projects initiated under the existing plan will continue while the new plan is developed. Thus, the projected impacts of the proposed plan or alternative plans would be compared to the impacts that would occur under the existing plan.
    (B) If the project is other than a land use or regulatory plan, for example a development project on identifiable property, the "no project" alternative is the circumstance under which the project does not proceed. Here the discussion would compare the environmental effects of the property remaining in its existing state against environmental effects which would occur if the project is approved. If disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this "no project" consequence should be discussed. In certain instances, the no project alternative means "no build" wherein the existing environmental setting is maintained. However, where failure to proceed with the project will not result in preservation of existing environmental conditions, the analysis should identify the practical result of the project's non-approval and not create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment.
    (C) After defining the no project alternative using one of these approaches, the lead agency should proceed to analyze the impacts of the no project alternative by projecting what would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current

plans and consistent with available infrastructure and community services.

- CEQA Guidelines §15126.6(f): (f) Rule of reason. The range of alternatives required in an EIR is governed by a "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project. The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision making.
  - (1) Feasibility. Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). No one of these factors establishes a fixed limit on the scope of reasonable alternatives.
  - (2) Alternative locations.
    - (A) Key question. The key question and first step in analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR.
    - (B) None feasible. If the lead agency concludes that no feasible alternative locations exist, it must disclose the reasons for this conclusion, and should include the reasons in the EIR. For example, in some cases there may be no feasible alternative locations for a geothermal plant or mining project which must be in close proximity to natural resources at a given location.
    - (C) Limited new analysis required. Where a previous document has sufficiently analyzed a range of reasonable alternative locations and environmental impacts for projects with the same basic purpose, the lead agency should review the previous document. The EIR may rely on the previous document to help it assess the feasibility of potential project alternatives to the extent the circumstances remain substantially the same as they relate to the alternative.
  - (3) An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative.

"15021. Duty to minimize environmental damage and balance competing public objectives

(a) CEQA establishes a duty for public agencies to avoid or minimize environmental damage where feasible.
  - (1) In regulating public or private activities, agencies are required to give major consideration to preventing environmental damage.
  - (2) A public agency should not approve a project as proposed if there are feasible alternatives or mitigation measures available that would substantially lessen any significant effects that the project would have on the environment.

(b) In deciding whether changes in a project are feasible, an agency may consider specific economic, environmental, legal, social, and technological factors.

(c) The duty to prevent or minimize environmental damage is implemented through the findings required by Section 15091.

(d) CEQA recognizes that in determining whether and how a project should be approved, a public agency has an obligation to balance a variety of public objectives, including economic, environmental, and social factors and in particular the goal of providing a decent home and satisfying living environment for every Californian. An agency shall prepare a statement of overriding considerations as described in Section 15093 to reflect the ultimate balancing of competing public objectives when the agency decides to approve a project that will cause one or more significant effects on the environment."[1]

FACTORS CONSIDERED IN ANALYSIS OF ALTERNATIVES

In this Alternatives analysis the following criteria will be used:

Evaluation Criteria 1: Project Specific Elements

- The expansion will allow for annual aggregate transporting of 800,000, an increase from 200,000 tons annually;
- 1 to 10 additional employees;
- 44,000 trips per year from 11,000 trips per year;
- Production will be increased by 6.8 million tons of rock. The total production of aggregate will be 10.8 million tons over the course of the existing 25 year period of the existing permit from 1.9 million tons of rock and 2.1 million tons of imported recycled concrete; and
- Excavating to 350' Mean Sea Level (MSL) versus the 400' MSL currently allowed under the existing permit.

Evaluation Criteria 2: Project Objectives

- Increase Aggregate Production;
- Expanded Practice of Recycling Concrete; and
- Reclamation and Water Basin Recharge

Evaluation Criteria 3: Minimize Costs

Although there may be many theoretical alternatives, there are only a few alternatives that could potentially be implemented due to costs involved in an alternative. Considerable increases in costs can render a project alternative infeasible. Considerable costs include land acquisition costs, increased utility costs, additional costs to undertake an entitlement and environmental process, and delays in realizing the desired output potential (in this instance, an increase of tonnage mined) thus resulting in reduced availability of construction material.

[1] 2013 CEQA Guidelines, Section 15021

Evaluation Criteria 4: Efficient Business Operations

As the proposed Project involves an expansion of an existing business, operational efficiency is a major concern in the long-term viability of the business. Operational efficiency affects both operational costs and operational effectiveness through the maximization of existing buildings and equipment. Providing alternatives that complicates business operations or makes business operations inefficient is not desirable. For instance, relocating the mining operations to another site could significantly increase vehicle miles traveled resulting in higher fuel consumption resulting in higher fuel costs, thus reducing operational efficiency.

Evaluation Criteria 5: Reduce (Lessen) Significant Impacts

Each alternative should be analyzed to assess the potential to reduce or entirely avoid significant impacts.

ALTERNATIVES ANALYSIS

Alternative 1: No Project

This Alternative by definition would not meet the objectives of the proposed Project.

Alternative 2: Alternative Site (Project located on another parcel)

An Alternative Site would have to be similar in quality and quantity of rock material. It would also entail acquisition of an Alternative Site. An Alternative Site has the potential to create the same or more impacts (for example aesthetics, conversion of agricultural land, air quality, biological, cultural, traffic, etc.) at another site which would subsequently be converted into an active mining operation. The Applicant would have to initiate a new County of Tulare entitlement process (for example, a Special Use Permit and SMARA Permit), re-initiate the environmental review process, receive new permits from other local agencies (for example, Valley Air District or Water Quality Control Board), and receive state new mining and reclamation permits from the state Department of Conservation, Division of Mines. Lastly, an Alternative Site may not be able to conform to the Tulare County General Plan Policies outlined in Chapter 3.11 Mineral Resources.

Alternative 3: Reduced Yearly Tonnage

One potential alternative is to allow a Reduced Yearly Tonnage increase. This Alternative would increase the amount of time required to mine the site to the proposed depth. Reclamation would occur later than proposed. Also, the availability of construction material derived from the operation would be reduced resulting in potential shortages of material needed to complete construction-related projects, increased construction-related costs due to delays in delivering material, and delays in completing construction-related projects.

Alternative 4: Reduced Depth

One potential alternative is a Reduced Depth of the proposed Project. This alternative would result in a lower total amount of material mined at the site. Reduced Depth would also be compounded by reduced yearly tonnage and the potential impacts described in Alternative 3.

ALTERNATIVES NOT CONSIDERED

Alternative Site Configuration

Environmental Impact Reports typically analyze site configuration in the Alternatives Analysis. An Alternative site configuration is not analyzed in this report, as the structures and equipment locations for mining-related operations are temporary and will shift during the duration of material excavation.

Alterative Materials Excavation

The Project site is not appropriate for the extraction of other mineral resources. There is no readily available information, for instance, that petroleum extraction would be a viable mineral resource at or in the vicinity of this location. In addition, the Tulare County 2030 General Plan noted mineral resource zones located east of Visalia and not in the vicinity of the Project site.

Alternative Reclamation or End Use

The proposed Reclamation Plan includes areas for grazing, as is typical for most surface mining projects in agricultural areas. If the site was to be reclaimed to allow crops to be grown on site, a substantial amount of backfill would be required. Importing of fill material would result in increased emissions from earthmoving equipment (such as bulldozers and front loaders) and heavy-duty haul trucks, as well as additional traffic impacts on the local roadways. Additional traffic would be greater than total traffic generated from mining-related operations. Imported fill tends to contract and a greater volume of fill will be required than the volume of rock that is exported. Due to the environmental impacts, the Alternative Reclamation of End Use is not being considered.

ALTERNATIVES MATRIX

Table 5-1
Alternatives Analysis Table

	Alternative 1 No Project	Alternative 2 Alternative Site	Alternative 3 Reduced Yearly Tonnage	Alternative 4 Reduced Mining Depth
Project Elements	No	Yes	No	No
Meet Objectives	No	Yes	No	No
Minimize Cost	Low Cost	High Cost	Moderate Cost	High Cost

Efficient Business Operations	No	No	No	No
Reduce Significant Impacts	Yes	No	Yes	Unknown

Only Alternatives 1 and 3 could potentially result in ~~less impacts~~fewer impacts than the proposed Project's. These alternatives; however, would not meet the objectives of the proposed Project.

ALTERNATIVES ANALYZED

Comparative assessment of potential impacts

Table 5-2
Potential Impact Analysis

	No Project #1	Located at Another Parcel # 2	Reduced Yearly Tonnage # 3	Reduced Mining Depth # 4
Aesthetics	Less	Similar	Similar	Similar
Agriculture and Forestry Resources	Less	Similar	**More**	Similar
Air Quality	Less	Similar	Similar	Similar
Biological Resources	Similar	Similar	Similar	Similar
Cultural Resources	Similar	Similar	Similar	Similar
Geology and Soils	Less	Similar	Similar	Similar
Greenhouse Gas Emissions	**More**	**More**	**More**	Similar
Hazards and Hazardous Materials	Less	Similar	Similar	Similar
Hydrology and Water Quality	Less	Similar	Similar	**More**
Land Use and Planning	Similar	Similar	Similar	Similar
Mineral Resources	Similar	Similar	Similar	Similar
Noise	Less	Similar	Similar	Similar
Population and Housing	Similar	Similar	Similar	Similar
Public Services	Less	Similar	Similar	Similar
Recreation	Similar	Similar	Similar	Similar
Transportation and Traffic	Less	Similar-to-More	Similar	Similar
Utilities and Service Systems	Similar	Similar	Similar	Similar
Mandatory Findings of Significance	Similar	Similar	Similar	Similar

Economic & Social Effects And Growth Inducing Chapter 6

INTRODUCTION

This chapter discusses economic, social and growth inducing effects of the Project. Table 6-1 provides the CEQA requirements and a summary of the impact analysis.

Table 6-1
Summary of Economic, Social and Growth Inducing Impacts

Topic	Summary of Impact	CEQA Requirement
Economic Impact	The proposed Project will not result in negative impacts to the region. It may result in an increase in economic benefits to the region, since the proposed Project will provide up to 10 new jobs.	CEQA does not have specific requirements for evaluating the economic impacts of a proposed Project. Section 15131 of CEQA Guidelines states that "Economic or social information may be included in an EIR or may be presented in whatever form the agency desires."
Social Impact	The proposed Project will not result in a disproportionate effect on minority populations, low income populations, or Native Americans. The proposed Project does not pose any adverse environmental justice issues that would require mitigation.	The social impacts of a project include environmental justice considerations. California Government Code Section 65040.12 defines Environmental Justice as "the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations and policies."
Growth Inducing Effect	The proposed Project will not result in significant growth inducing impacts. The proposed Project may result in up to 10 new jobs. The Project will not result in new housing. Growth inducing impacts will be less than significant.	CEQA Guidelines § 15126 (d) makes recommendations for analyzing impacts due to growth inducement, including discussing ways in which the project could foster economic or population growth, the construction of additional housing, or other factors which could remove obstacles to population growth or encourage and facilitate other activities which could impact the environment individually or cumulatively.

Therefore, implementation of the proposed Project will result in less than significant environmental impacts, either individually or cumulatively, caused by either economic, social, or growth inducing effects. No mitigation measures are required.

DEMOGRAPHICS

"Tulare County has one of the highest rates of unemployment in California and the nation, due in

large part to the seasonal nature of agricultural employment. "The unemployment rate in the Tulare County was 15.9 percent in February 2013, down from a revised 16.8 percent in January 2013, and below the year-ago estimate of 17.6 percent. This compares with an unadjusted unemployment rate of 9.7 percent for California and 8.1 percent for the nation during the same period."[1] The general demographic information in found in Table 6-2.

Table 6-2
Profile of General Population and Housing Characteristics, 2010[2]

Demographic Profile Data	Tulare County
Population	
Total	442,179
%Hispanic or Latino	60.6%
% not Hispanic or Latino	39.4%
White alone	27.5%
Black or African American alone	0.4%
Asian alone	0.2%
Some other race alone	0.1%
Two or more races	1.4%
Housing	
Total housing units	141,696
Occupied Housing Units	130,352
Vacant housing units	11,344
Owner-occupied housing units	76,586 (58.8%)
Renter-occupied housing units	53,766 (41.2%)
Homeowner vacancy rate (%)	2.4%
Renter vacancy rate (%)	5.8%

ECONOMIC IMPACTS

Under CEQA Guidelines 15131, "[e]conomic or social information may be included in an EIR or may be presented in whatever form the agency desires.

(a) Economic or social effects of a project shall not be treated as significant effects on the environment. An EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes. The intermediate economic or social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus of the analysis shall be on the physical changes.

(b) Economic or social effects of a project may be used to determine the significance of physical changes caused by the project. For example, if the construction of a new freeway or rail line divides an existing community, the construction would be the physical change, but the social effect on the community would be the basis for determining that the effect

[1] State of California Employment Development Department, Labor Market Information Division, (March 29, 2013) http://www.calmis.ca.gov/file/lfmonth/visa$pds.pdf
[2] U.S. Census Bureau, 2010 Demographic Profile Data http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml

would be significant. As an additional example, if the construction of a road and the resulting increase in noise in an area disturbed existing religious practices in the area, the disturbance of the religious practices could be used to determine that the construction and use of the road and the resulting noise would be significant effects on the environment. The religious practices would need to be analyzed only to the extent to show that the increase in traffic and noise would conflict with the religious practices. Where an EIR uses economic or social effects to determine that a physical change is significant, the EIR shall explain the reason for determining that the effect is significant.

(c) Economic, social, and particularly housing factors shall be considered by public agencies together with technological and environmental factors in deciding whether changes in a project are feasible to reduce or avoid the significant effects on the environment identified in the EIR. If information on these factors is not contained in the EIR, the information must be added to the record in some other manner to allow the agency to consider the factors in reaching a decision on the project."[3]

Economic Benefits of the proposed Project

The proposed Project will result in up to 10 new jobs. As the County of Tulare obtains tax revenue from the sale of the crushed rock and recycled concrete, there is an economic benefit to the County. The proposed Project will allow for the extraction of more rock than the existing use; thus Tulare County will receive more tax revenue.

SOCIAL EFFECTS

Environmental Justice

"The basis for environmental justice lies in the Equal Protection Clause of the U.S. Constitution. The Fourteenth Amendment expressly provides that the states may not "deny to any person within [their] jurisdiction the equal protection of the laws" (U.S. Constitution, amend. XIV, §1).

On February 11, 1994, President Clinton signed Executive Order (E.O.) 12898, titled "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations." The executive order followed a 1992 report by the U.S. Environmental Protection Agency (U.S. EPA) indicating that "[r]acial minority and low-income populations experience higher than average exposures to selected air pollutants, hazardous waste facilities, and other forms of environmental pollution." Among other things, E.O. 12898 directed federal agencies to incorporate environmental justice into their missions."[4]

Environmental Justice in Cal Recycle Strategy

The Integrated Waster Management Board has committed to Environmental Justice as noted in their 2001 Strategic Plan. "[T]he Board is committed to protecting the environment and public health and safety in a manner that does not unfairly affect any group. Through the objectives and

[3] 2013 CEQA Guidelines, Section 15131
[4] General Plan Guidelines, page 22

strategies listed below, we will examine all of our programs and activities to identify opportunities to reach out to low-income and minority populations to ensure that we provide the information and technical assistance needed to participate in a meaningful manner; and to address the disproportionate impacts of pollution on low-income and minority populations."[5]

Inappropriateness of Affordable Housing

The proposed Project is located in the AE-20 zone and is subject to the Rural Valley Lands Plan (RVLP) which designates the site for Agriculture. The Project site is not suitable for affordable housing due to the currently allowed agricultural zoning. Typically, affordable housing projects require high-densities to maintain economic and financial viability. Low densities typically do not result in enough income volume to pay for the cost of construction. In addition, the Project site is not located adjacent to a bus line or within the central portion (downtown) of the nearest communities of Culter and Orosi (approximately 3 miles west), which would place additional hardships and increase the cost of living for potential low-income residents.

The 2008 Regional Housing Needs Assessment (RHNA) allocated a total 7,035 units to unincorporated areas of the County to meet the January 1, 2007 - June 30, 2014 existing and projected housing need. The allocation included 1,147 units for extremely low income households; 1,147 units for very low income; 2,132 units for low income, 2,138 units for moderate income; and 471 units for above moderate income. The Tulare County Housing Element was certified by the State Department of Housing and Community Development (HCD) in June 2012. It included an Adequate Sites Inventory, which specified that Cutler-Orosi needs 1,487 new dwelling units on vacant or underutilized sites, in order to be in compliance with the RHNA component of Housing Element Law. Per the Adequate Sites Inventory (Table 7E in the 2008 County Housing Element), Cutler-Orosi has adequate sites to meet the required 1,487 housing units needed during the planning period without taking into account the Project.

Appropriateness of location

The Project site is surrounded agricultural uses. This location is more favorable than a location within a central portion of the community of Culter-Orosi. A downtown location would impact more residences, a school, and other businesses. A new mining facility, as opposed to the expansion project, would likely result in adverse land use compatibility impacts. As noted in Chapter 3.10 Land Use & Planning, using the site to accommodate expansion is consistent with the Tulare County 2030 General Plan

GROWTH INDUCEMENT

As outlined in the CEQA Guidelines § 15126.2 (d), growth-inducing impact of the proposed Project should "[d]iscuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a waste water treatment plant might, for example, allow

[5] Integrated Waster Management Board, Strategic Plan, 2001, page 20

for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment."[6]

Generally, growth inducing impacts are a result of very large businesses or very large housing developments. A large influx of jobs or people would require additional services which could potentially induce growth related impacts. The proposed Project involves an expansion of an existing mining facility. Although the production of minerals and resources support growth, this production does not induce growth. Additionally, the proposed Project is estimated to result in up to 10 new jobs, most of these are low skill jobs and would be available to any able bodied person. As these jobs will not require high skilled labor, many of the new employees are anticipated to be current, local area residents. As such, the proposed Project will not significantly induce growth.

See summary in the Table 6-3.

Table 6-3
Growth Impacts

Potential Growth Inducing Impacts	Discussion
Economic/Population Growth	The proposed Project will result in up to 10 new jobs, which will result in increased economic growth. Although the proposed Project will result in an economic benefit for Tulare County, the proposed Project will not induce substantial growth.
Foster the Construction of Additional Housing	The proposed Project will not result in a need for additional housing.
Other Activities	The proposed Project will not induce other growth related activities.

As noted in Table 6-3, less than significant growth inducing impacts are anticipated.

[6] 2013 CEQA Guidelines, Section 15126.2

UNMITIGABLE IMPACTS
Chapter 7

NO ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED

Under CEQA Guidelines Section 15126.2 (b), "[w]here there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the Project is being proposed, notwithstanding their effect, should be described."[1] This analysis should include a description of any significant impacts, including those which can be mitigated but not reduced to a level of insignificance.

This Project will not result in a significant and unavoidable impact. All impacts have been found to be less than significant, or have been mitigated to a level considered less than significant.

NO IRREVERSIBLE IMPACTS

Under CEQA Guidelines Section 15126.2 (c), "[u]ses of nonrenewable resources during the initial and continued phases of the Project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with the Project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified. (See Public Resources Code section 21100.1 and Title 14, California Code of Regulations, section 15127 for limitations to applicability of this requirement.)"[2]

The resources committed to the Project are standard resources necessary for the construction and operation of the proposed Anaerobic Digester. Through "green" development practices including air quality, and greenhouse gas emission reductions through material, product choices and through conservation of electricity and water, this Project will reduce the irreversible life-cycle costs of the Project. In addition, the proposed Project will reduce Greenhouse Gas (GHG) Emissions. The proposed Project will be in compliance with the goals of AB32 and the Climate Change Scoping Plan that outlines GHG reductions to 1990 levels.

As contained in CEQA Guidelines Section 15043, "[a] public agency may approve a Project even though the Project would cause a significant effect on the environment, if the agency makes a fully informed and publicly disclosed decision that:

(a) There is no feasible way to lessen or avoid the significant effect (see Section 15091); and
(b) Specifically identified expected benefits from the Project outweigh the policy of reducing

[1] 2013 CEQA Guidelines, Section 15126.2 (b)
[2] 2013 CEQA Guidelines, Section 15126.2 (c)

or avoiding significant environmental impacts of the Project."[3]

An agency may prepare a statement of overriding considerations. As noted in CEQA Guidelines Section 15093, "CEQA requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of a proposed Project against its unavoidable environmental risks when determining whether to approve the Project. If the specific economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of a proposed Project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered "acceptable."[4]

"When the lead agency approves a Project which will result in the occurrence of significant effects which are identified in the final EIR but are not avoided or substantially lessened, the agency shall state in writing the specific reasons to support its action based on the final EIR and/or other information in the record. The statement of overriding considerations shall be supported by substantial evidence in the record."[5]

"If an agency makes a statement of overriding considerations, the statement should be included in the record of the Project approval and should be mentioned in the notice of determination. This statement does not substitute for, and shall be in addition to, findings required pursuant to Section 15091."[6]

NO STATEMENT OF OVERRIDING CONSIDERATIONS

Based on the analysis contained in this EIR, There is No Environmental Impacts That Cannot Be Avoided and there is no irreversible impact; therefore, a Statement of Overriding Considerations is not necessary. The Project's merits and objectives are discussed in the Project Description and are found to be consistent with the intent of Tulare County 2030 General Plan. In addition, the Project's merits ~~would~~ outweigh any unavoidable and unmitigatable impacts ~~to warrant~~warranting a Statement of Overriding Considerations.

PROJECT BENEFIT STATEMENTS

Project Benefit # 1: **Increase Aggregate Production**

Given aggregate demands in Tulare County and only an 11 to 20 year supply over the next 50 years, the existing supply in the northern portion of the County will only be met with all the existing facilities and/or their expansions. The Applicant's objective of expanding its operations helps Tulare County and the State of California meet this demand in a more locally beneficial and efficient way. Any expansion will help meet the demand, but even with this expansion, the northern portion of the County can only meet its demand for the next 20 years, before other sources of aggregate must be

[3] 2013 CEQA Guidelines, Section 15043
[4] Ibid., Section 15093 (a)
[5] Ibid., Section 15093 (b)
[6] Ibid., Section 15093 (c)

found.

Project Benefit # 2: Expanded Practice of Recycling Concrete

According to Cal Recycle in their 2008 survey, Composition of California's Overall Disposal Waste Stream, concrete makes up about 1.2% of all waste material in the State of California. By the end of FY 2005, the goal was to ensure that the diversion rate for nonhazardous solid waste is greater than 40 percent. Requirements for reducing the generation of solid waste are contained in Executive Order 13101.[7] "The Legislature and Governor Brown set an ambitious goal of 75 percent recycling, composting or source reduction of solid waste by 2020."[8] For recycling and waste prevention, each agency is required to establish a goal for diversion of solid waste from landfilling or incineration. Although concrete contributes less than 1% of the waste generated in the State, it does carry potential hazardous pollutants in lye, fly ash, and other inert materials, and any waters that mix with recycled or mixed concrete batches requires treatment prior to discharge.[9] In addition there is the added cost for disposing concrete that results in greater tipping fees. The air pollutants from concrete mixing are also of special concern to the US EPA.[10] Therefore, the Project's re-use of recycled concrete material is a benefit.

Objective 3: Reclamation of Agricultural Land and Potential for Water Basin Recharge

The Tulare County General Plan (TCGP) focuses on potential reclamation opportunities, in order to restore some of the depleted ground water table-, but is not the purpose. In the TCGP, under Environmental Conditions for Water, Principle 3, it states the goal of Tulare County is to identify and encourage the development of locations where water recharge systems can be developed to replenish water supplies.

Under **HS-5.4 Multi-Purpose Flood Control Measures,** The County shall encourage multipurpose flood control projects that incorporate recreation, resource conservation, preservation of natural riparian habitat, and scenic values of the County's streams, creeks, and lakes. Where appropriate, the County shall also encourage the use of flood and/or stormwater retention facilities for use as groundwater recharge facilities *[New policy based on ERME IV-C; Public Safety; Recommendation 4; Pg. 116].*[11]

WR-1.5 Expand Use of Reclaimed Wastewater To augment groundwater supplies and to conserve potable water for domestic purposes, the County shall seek opportunities to expand groundwater recharge efforts *[Revised Existing Water Resources Policy 2.2].* [12]

The Project will reclaim the land to an open space condition with 2:1 slopes that will continue to capture and percolate water into the ground for ground water recharge purposes in fulfillment of the Tulare County Goals.

[7] USACE, Methods for Reduction, Reuse, and Recycling of Demolition Waste, (2002), page 1-2
[8] http://www.calrecycle.ca.gov/75percent/
[9] See Title 27, California Water Code
[10] See EPA Guideline 427/09, Concrete Batching
[11] See TCGP Goals and Poly Report, 2008
[12] Ibid.

REFERENCES

2013 CEQA Guidelines

Mitigation Monitoring Reporting Program
Chapter 8

~~The~~ This Mitigation Monitoring and Reporting Program (MMRP) has been prepared in compliance with State law and the Environmental Impact Report (EIR) (State Clearinghouse No.) prepared for the project by the County of Tulare.

The California Environmental Quality Act (CEQA) Section 21081.6 requires adoption of a reporting or monitoring program for those measures placed on a project to mitigate or avoid adverse effects on the environment.[1] The law states that the reporting or monitoring program shall be designed to ensure compliance during project implementation. The Mitigation Monitoring and Reporting Program contains the following elements:

• **Action and Procedure.** The mitigation measures are recorded with the action and procedure necessary to ensure compliance. In some instances, one action may be used to verify implementation of several mitigation measures.

• **Compliance and Verification.** A procedure for compliance and verification has been outlined for each action necessary. This procedure designates who will take action, what action will be taken and when, and to whom and when compliance will be reported.

• **Flexibility.** The program has been designed to be flexible. As monitoring progresses, changes to compliance procedures may be necessary based upon recommendations by those responsible for the Mitigation Monitoring and Reporting Program. As changes are made, new monitoring compliance procedures and records will be developed and incorporated into the program.

[1] Public Resource Code §21081.6

Table 8-1
Mitigation Monitoring Reporting Program

Mitigation Monitoring Reporting Program							
Mitigation Measure		**Monitoring Timing/ Frequency**	**Action Indicating Compliance**	**Monitoring Agency**	**Verification of Compliance**		
					Initials	**Date**	**Remarks**
Aesthetics							
1-1	**The Project site has an existing berm and shall continue to have and maintain an 8-foot berm along the entire edge of the project site (not including location of the driveway).**	Ongoing monitoring during operations	Verification by County of incorporation of project design features	County of Tulare Planning Department			
1-2	**All exterior lighting shall be angled downward and adjusted to deflect and/or shield direct rays away from public roadways and adjacent properties.**	~~Approval of permit amendment~~Ongoing monitoring	Verification by County of incorporation of project design features	County of Tulare Planning Department			
Air Quality							
3-1	**During operation of the Project, off-road equipment used on the Project site (e.g., loaders, excavators, backhoes, dozers, etc.) shall be U.S. Environmental Protection Agency Tier 3-certified or higher, with the exception of a maximum total of 1,000 hours per year allowed for Tier 2 equipment**	~~Approval of permit amendment~~Ongoing monitoring	Verification by County of incorporation of project design features	County of Tulare Planning Department			
Cultural Resources							
5-1	**In the event that archaeological or paleontological resources are discovered during site excavation, the County shall require that grading and construction work on the project site be suspended until the significance of the features can be determined by a qualified archaeologist or paleontologist. In this event,**	Ongoing monitoring during subsurface excavation	Retention of professional paleontologist/ ongoing monitoring/ submittal of Report of Findings, if	County of Tulare Planning and Public Works Department			

Mitigation Monitoring Reporting Program							
Mitigation Measure		**Monitoring Timing/ Frequency**	**Action Indicating Compliance**	**Monitoring Agency**	**Verification of Compliance**		
					Initials	**Date**	**Remarks**
	the property owner shall retain a qualified archaeologist/ paleontologist to make recommendations for measures necessary to protect any site determined to contain or constitute an historical resource, a unique archaeological resource, or a unique paleontological resource or to undertake data recover, excavation analysis, and curation of archaeological or paleontological materials. County staff shall consider such recommendations and implement them where they are feasible in light of project design as previously approved by the County.		applicable				
5-2	**The property owner shall avoid and minimize impacts to paleontological resources. If a potentially significant paleontological resource is encountered during ground disturbing activities, all construction within a 100-foot radius of the find shall immediately cease until a qualified paleontologist determines whether the resources requires further study. The owner shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. The paleontologist shall notify the Tulare County Resource Management Agency and the project proponent of the procedures that must be followed before construction is allowed to resume at the location**	Ongoing monitoring during subsurface excavation	Retention of professional paleontologist/ ongoing monitoring/ submittal of Report of Findings, if applicable	County of Tulare Planning and Public Works Department			

Mitigation Monitoring Reporting Program							
Mitigation Measure		**Monitoring Timing/ Frequency**	**Action Indicating Compliance**	**Monitoring Agency**	**Verification of Compliance**		
					Initials	**Date**	**Remarks**
	of the find. If the find is determined to be significant and the Tulare County Resource Management Agency determines avoidance is not feasible, the paleontologist shall design and implement a data recovery plan consistent with applicable standards. The plan shall be submitted to the Tulare County Resource Management Agency for review and approval. Upon approval, the plan shall be incorporated into the project.						
5-3	**Consistent with Section 7050.5 of the California Health and Safety Code and (CEQA Guidelines) Section 15064.5, if human remains of Native American origin are discovered during project construction, it is necessary to comply with State laws relating to the disposition of Native American burials, which fall within the jurisdiction of the Native American Heritage Commission (Public Resources Code Sec. 5097). In the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps should be taken:** **1. There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent**	Ongoing monitoring during subsurface excavation	Retention of professional paleontologist/ ongoing monitoring/ submittal of Report of Findings, if applicable	County of Tulare Planning and Public Works Department			

Mitigation Monitoring Reporting Program						
Mitigation Measure	Monitoring Timing/ Frequency	Action Indicating Compliance	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
human remains until: **a. The Tulare County Coroner/Sheriff must be contacted to determine that no investigation of the cause of death is required; and** **b. If the coroner determines the remains to be Native American:** **i. The coroner shall contact the Native American Heritage Commission within 24 hours.** **ii. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American.** **iii. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code section 5097.98, or** **2. Where the following conditions occur, the**						

Mitigation Monitoring Reporting Program							
Mitigation Measure		**Monitoring Timing/ Frequency**	**Action Indicating Compliance**	**Monitoring Agency**	**Verification of Compliance**		
					Initials	**Date**	**Remarks**
	landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance. **a. The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission.** **b. The descendant fails to make a recommendation; or** **c. The landowner or his authorized representative rejects the recommendation of the descendent.**						
Greenhouse Gas Emissions							
7-1	**During operation of the project, stationary equipment permitted by the San Joaquin Valley Air Pollution Control District shall be electric.**	~~At time of operation~~Ongoing monitoring	~~Measures are to be noted in construction documents~~During SMARA Permit inspection	County of Tulare Planning Department			
Noise							
12-1	**Provide all hearing protection measures outlined in MSHA's Noise Standard Actions required by Mine Operators.**	Ongoing monitoring	~~Measures are to be noted in construction documents~~	County of Tulare Planning Department			

Mitigation Monitoring Reporting Program							
Mitigation Measure		**Monitoring Timing/ Frequency**	**Action Indicating Compliance**	**Monitoring Agency**	**Verification of Compliance**		
					Initials	**Date**	**Remarks**
12-2	**If the applicant amends the SMARA Contract for renewal in 2030, the applicant shall conduct another noise study at receptor #6. If it found that the Project's noise impacts exceed the General Plan's threshold of 60 leq(h) the Project shall pay its fair share of Design and Planting costs for dense trees and shrubs in order to reduce the noise impact to receptor #6 to a level less than the General Plan threshold of 60 leq(h). Upon amending the SMARA contract for renewal the applicant shall conduct another noise study at receptor #6. If it found that the Project's noise impacts exceed the General Plan threshold of 60 leq(h) the Project shall pay its fair share of Design and Planting costs for dense trees and shrubs in order to reduce the noise impact to receptor #6 to a level less than the General Plan threshold of 60 leq(h).**	~~Prior to Issuance of Permit Renewal~~Ongoing	Approval of Renewal Permit	County of Tulare Planning Department			
Transportation/Traffic							
16-1	**At the time of permit expiration in 2020, should the applicant choose to amend the permit to extend the life of the proposed surface mining permit, the applicant shall have a traffic study conducted at that time and pay the pro-rata share fee outlined by Caltrans for the impacts found to occur at that time. In the year 2035, if**	Prior to Issuance of Permit Renewal	Approval of Permit Renewal	County of Tulare Planning and Public Works			

Mitigation Monitoring Reporting Program						
Mitigation Measure	Monitoring Timing/ Frequency	Action Indicating Compliance	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
the Project is still in operation, the project shall pay for its fair share of the following improvements. **<u>SR 201 at SR 63</u>** • **Install traffic signal.** • **Widen the eastbound approach to 1 left turn lane and 1 through/right-turn lane (adding 1 dedicated left turn lane).** • **Widen the westbound approach to 1 left turn lane and 1 through/right-turn lane (adding 1 dedicated left turn lane).** • **Widen the northbound approach to 1 left turn lane, 1 through lane, and 1 through/right-turn lane (adding 1 through lane).** • **Widen the southbound approach to 1 left turn lane, 1 through lane, and 1 through/right-turn lane (adding 1 through lane).** **<u>Avenue 416 (El Monte Way) at SR 63</u>** • **Widen the eastbound approach to 1 left turn lane, 1 through lane, and 1**						

Mitigation Monitoring Reporting Program							
Mitigation Measure	Monitoring Timing/ Frequency	Action Indicating Compliance	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
through/right-turn lane (adding 1 dedicated left turn lane). • **Widen the westbound approach to 1 left turn lane, 1 through lane, and 1 through/right-turn lane (adding 1 dedicated left turn lane).** • **Widen the northbound approach to 1 left turn lane, 1 through lane, and 1 through/right-turn lane (adding 1 dedicated left turn lane).** • **Widen the southbound approach to 1 left turn lane, 1 through lane and 1 through/right-turn lane (adding 1 dedicated left turn lane).** **Avenue 416 (El Monte Way) at SR 63** • **Widen the eastbound approach to 1 left turn lane, 2 through lanes, and 1 right-turn lane (adding 1 dedicated right-turn lane).**						
Mandatory Findings of Significance (See Mitigation Measures already proposed above for Cultural, and Cumulatively Significant Impacts						

Report Preparation
Chapter 9

INTRODUCTION

Key persons from the County of Tulare and the consulting firms that contributed to preparation of the ~~Draft~~Final Environmental Impact Report (~~Draft~~Final EIR) are identified below:

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