COUNTY OF TULARE

RESOURCE MANAGEMENT AGENCY

5961 South Mooney Boulevard
Visalia, CA 93277

Deer Creek Rock SMARA Permit Amendment

Final Environmental Impact Report

February, 2015

Prepared by

County of Tulare Resource Management Agency Planning Branch
Environmental Planning Division

February 17, 2015

Deer Creek Rock SMARA Permit Amendment
Final Environmental Impact Report (SCH No.

These attached documents complete the Final Environmental Impact Report (FEIR) for the above referenced project.

I. Responses to Comments (Chapter 10 of the FEIR)

II. Mitigation Monitoring and Reporting Program (Chapter 8 of the FEIR)

III. State of Overriding Considerations

IV. Errata Pages (Corrections made to pages of the Draft EIR)

V. Findings of Fact ("Exhibit "B" for the FEIR Resolution)

INTRODUCTION & RESPONSE TO COMMENTS Chapter 1

INTRODUCTION

The Draft Environmental Impact Report (Draft EIR or EIR) for the Deer Creek Rock Project was made available for public review and comment for a period of 45 days from December 5, 2014 through January 20, 2015. The purpose of this document is to present public comments and responses to comments received on the Deer Creek Rock Draft Environmental Impact Report (SCH # 2014081023).

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 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 additional 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., underline), indicating additions. Corrections of typographical errors have been made throughout the document and are not indicated by ~~strikeout~~ or underline 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 Deer Creek 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 Deer Creek 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 Deer Creek Rock Project Draft EIR was distributed to 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*. The Draft EIR's Notice of Availability (NOA) was also published in the *Visalia Times Delta*, a newspaper of general circulation, on December 5, 2014, as required by CEQA.

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

Terra Bella Branch Library – Tulare County
23825 Avenue 92
Terra Bella, CA 93270-0442

In addition, the Deer Creek 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/deer-creek-mine-pmr-14-002-deir/

RELEVANT CEQA SECTIONS (SUMMARY)

See Complete Sections in CEQA Guidelines Sections 15088 to 15384, et seq. which can be accessed at:
https://govt.westlaw.com/calregs/Browse/Home/California/CaliforniaCodeofRegulations?guid=I95DAAA70D48811DEBC02831C6D6C108E&originationContext=documenttoc&transitionType=Default&contextData=(sc.Default)]

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.

a) 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 proposal project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered "acceptable."
(b) 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.
(c) 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.

Section 15095. Disposition of a Final EIR.
The lead agency shall:
(a) File a copy of the final EIR with the appropriate planning agency of any city, county, or city and county where significant effects on the environment may occur.
(b) Include the final EIR as part of the regular project report which is used in the existing project review and budgetary process if such a report is used.
(c) Retain one or more copies of the final EIR as public records for a reasonable period of time.
(d) Require the applicant to provide a copy of the certified, final EIR to each responsible agency.

Section 15151. Standards for Adequacy of an EIR.
An EIR should be prepared with a sufficient degree of analysis to provide decisionmakers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.

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.

RESPONSES TO COMMENTS

COMMENT LETTERS RECEIVED ON THE DRAFT EIR

The County of Tulare received two comment letters on the Draft EIR during the designated comment period (between December 5 and January 20, 2015). 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 California Department of Conservation, Office of Mining and Reclamation, December 16, 2014.

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 January 5, 2015.

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	Department of Conservation - Office of Mine Reclamation, December 16, 2014
Comment Letter 2	Caltrans, e-mail received December 15, 2014
Comment Letter 3	San Joaquin Valley Unified Air Pollution Control District, January 20, 2015

Comments from adjacent property owner's:

None received.

Comments from supporters of the proposed Project:

None received.

COMPREHENSIVE LIST OF RESPONSES

Comment Letter 1 – Department of Conservation - OFFICE OF MINE RECLAMATION, DECEMBER 16, 2014

Comment Subject: Proposed Amended Reclamation Plan

Comment: *"OMR has no specific comments on the DEIR."*

Response: Staff appreciates the Office of Mine Reclamation's (OMR) comment that OMR has no specific comments on the DEIR; this indicates that the DEIR met the objectives of considering OMR's purview regarding

SMARA-related project.

Staff also agrees that the Reclamation Plan for Deer Creek Rock should reference or include all pertinent information from the 2005 Reclamation Plan. Staff has updated the proposed Amended Reclamation Plan accordingly. The comment does not address CEQA related issues of the DEIR.

Comment: *"The project description calls for amendments to the surface mining permits. No other changes to the approved reclamation plan are proposed besides the increase in annual production. However, this change - along with the changes to the permits and any other new information such as the mine name, applicable acreages, updated maps, etc. – require amendments to update the reclamation plan in order for the approved reclamation plan to accurately reflect current and planned mining and reclamation activities. Any mitigation measures resulting from the CEQA review that have an effect on mining and reclamation should also be incorporated into the amended reclamation plan. Even if the changes are considered minor rather than substantial, a revised amended reclamation plan for the Deer Creek Mine (or Deer Creek Quarry) must be prepared and forwarded to OMR for review."*

Response: Staff has reviewed the Office of Mine Reclamation's comment letter and agrees that the comment does not address CEQA related issues of the DEIR. A condition of approval has been included in the permit that requires the applicant to increase annual production and number of heavy-duty truck trips per day and annually. As part of the permit amendment process, the County will require the applicant to update information such as the mine name, applicable acreages, updated maps, and require amendments to update the reclamation plan in order for the approved reclamation plan to accurately reflect current and planned mining and reclamation activities. RMA agrees that Mitigation Measures resulting from the CEQA review that have an effect on mining and reclamation will also be incorporated into the amended reclamation plan.

Comment Letter 2 – CALTRANS DISTRICT 6, RECEIVED VIA E-MAIL, DECEMBER 15, 2014

Comment Subject: DEIR and Traffic Impact Analysis (TIS)

Comment: *"Caltrans has "NO COMMENT" on the DEIR. As noted below, Caltrans reviewed the TIS on 10.1.2104 and found it satisfactory."*

Response: No response necessary. As noted by Caltrans, the agency has no comments and in their judgment determined that the Traffic Impact

Analysis (TIS) was satisfactory and no additional comments were necessary from Caltrans.

Comment Letter 3 – SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, JANUARY 2015, 2014

Comment Subject: Draft EIR for Deer Creek Rock SMARA Permit Amendment

Comment: *The District summarized the Project and its location.*

Response: No response is necessary as the District provided introductory remarks and a summary of the project to open the letter.

Comment: *"On Page ES-2, the Draft EIR states, "The applicant is proposing to increase production of the existing mining permit from 400,000 to 500,000 tons of aggregate annually to 950,000 tons of aggregate annually through lateral expansion of the excavating site within the existing approved site." However, on Page 2-3, the Draft EIR states, "The applicant is not proposing to increase production of the existing mining permit nor is any lateral or depth expansion proposed." These two statements are inconsistent. Therefore, the District recommends reviewing and revising these statements for accuracy."*

Response: A clarification will be included in the errata of the Draft EIR stating the applicant is proposing to increase production through the lateral expansion of the excavating site within the existing footprint of the approved site. No changes to the analysis or in the environmental findings in the Draft EIR would result from this correction.

Comment: *"On Page ES-2 and 2-3, the Draft EIR estimates the number of increased truck hauling trips to 376 round trips per day. However, throughout the document, 375 round trips per day are listed. The District recommends reviewing and revising the document for consistency"*

Response: The correct number is 375 roundtrips, which was used in the analysis of project impacts. The correction will be noted in the errata of the Final EIR. No changes to the analysis or in the environmental findings in the Draft EIR would result from this correction.

Comment: *"On Page ES-2 and 2-3, the Draft EIR states that the heavy duty truck trips are expected to increase from 22,500 to 42,300 annual round trips. However, in Appendix B, Page 2, the Air Quality and Greenhouse Gas Analysis Report states that currently there are approximately 20,000 (40,000 round trips) heavy duty diesel trucks accessing the site during the operating year. This is inconsistent with*

the information presented in the Draft EIR. Therefore, the District recommends clarification of this apparent discrepancy and revisions to the Draft EIR and/or appendices as necessary."

Response: Appendix B-Air Quality and Greenhouse Gas Analysis Report reported the existing number of haul truck trips based on the current permitted amount of 500,000 tons and the 25-ton capacity haul trucks reported by the applicant. Corrections to the Draft EIR will be noted in the errata of the Final EIR. Regardless, the air quality analysis was based on the correct number of proposed new trips, therefore the discrepancy in the existing trips in the Draft EIR does not have any bearing on the findings of the report.

Comment: *"The Draft EIR states that the operating hours are from 7:00 am to 6:00 pm Monday through Friday in addition to work on the weekends to meet demands. Based on this information, the number of days of operation per year is 260 days or more. However, the number of days per year used in the operational emissions analysis is 225 days. The District recommends clarification of this apparent discrepancy in the number of operational days and revisions to the Draft EIR as necessary."*

Response: The air quality analysis was based on the applicant provided operating schedule of 45 weeks out of the year. While some work may occur during weekends, the total number of days of operation would not exceed 225 days. During the year production is expected to increase during the spring/summer months (e.g. work on weekends to meet demand) and curtail in winter months (less demand) resulting in fewer days worked per week during slower periods.

Comment: *"Table 3.3-4 and Table 3.3-6 incorrectly list a threshold of 500 tons for SOx. The District would like to clarify that the threshold for SOx is 27 tons per year. Therefore, the District recommends revising the tables to reflect the correct threshold for SOx. Although the threshold is incorrect, it does not appear that there would be a significant impact for SOx."*

Response: Tables 3.3-4 and 3.3-6, of Chapter 3.3 Air Quality, will be revised in the errata of the Final EIR to reflect the correct SOx threshold. Importantly, no changes to the analysis or in the environmental findings contained in the Draft EIR would result from this inadvertency.

Comment: *Table 3.3-4 through Table 3.3-11, incorrectly list either a threshold of 15 tons or 500 tons for CO. The District would like to clarify that the threshold for CO is 100 tons per year. Therefore, the District*

recommends revising the tables to reflect the correct threshold for CO. Although the threshold is incorrect, it does not appear that there would be a significant impact for CO.

Response: Tables 3.3-4 and 3.3-6, of Chapter 3.3 Air Quality, will be revised in the errata of the Final EIR to reflect the correct CO threshold. Importantly, no changes to the analysis or in the environmental findings contained in the Draft EIR would result from this inadvertency.

Comment: *"In Appendix B, Page 7, the Air Quality and Greenhouse Gas Analysis Report states that "The project would not conflict with or obstruct implementation of the applicable air quality plan." However, on Page 76, the Air Quality and Greenhouse Gas Analysis Report states that, "The project would conflict with or obstruct implementation of the applicable air quality plan." These two statements are inconsistent. Therefore, the District recommends reviewing and revising these statements for accuracy."*

Response: The word "not" was omitted on Page 76 in the statement "The project would conflict with or obstruct implementation of the applicable air quality plan." The sentence will be revised in the errata of the Final EIR as follows:

"The project would not conflict with or obstruct implementation of the applicable air quality plan."

Comment: **"***In Appendix B, Page 72, the Air Quality and Greenhouse Gas Analysis Report states that emissions for employee trips are modeled in CalEEMod in the construction phases under worker trips. However, the emissions for worker trips are not presented in the emissions Table 3.3-4 through Table 3.3-11. Therefore, the District recommends including emissions from employees in Table 3.3-4 through Table 3.3-11."*

Response: As noted in Appendix B – Air Quality and Greenhouse Gas Analysis Report, the emissions are included in the On-Site Mobile emissions under non-Permitted, the Tables 16-23 of the Appendix B state that emissions estimate shown include the offsite worker vehicle trips. Although Tables 3.3-4 through Table 3.3-11 did not include this notation, the worker emissions are accounted for. The tables will be revised to correct the source description in the errata of the Final EIR.

Comment: **"***The District does not require chronic and acute risks from truck travel and idling emissions to be estimated. The cancer risks from*

DPM emissions are going to be much more significant than any chronic or acute risks."

Response: Although a quantitative non-cancer chronic and acute risk analysis for truck travel and idling is not requested or required per SJVAPCD guidance, it has been included in the EIR in order to provide additional disclosure of potential health risks associated with implementation of the proposed project and a more conservative assessment of the project impacts. No change in environmental significance findings or mitigation measures results from including these additional sources in the analysis.

Comment: *"A Mitigation Measure to limit truck idling time to 5 minutes per truck is included, but it exempts trucks in an active queue. Allowing trucks to idle while in an active queue defeats the purpose of the Mitigation Measure."*

Response: Mitigation Measure 3-2 that limits truck idling to 5 minutes per truck was provided in the DEIR as a best practice measure for criteria pollutants and to enhance compliance with State idling regulations and no emission reductions were claimed for this measure for criteria pollutants or for toxic air contaminant (TAC) emissions. The mitigation measure was not referenced in the HRA. The calculations provided in the HRA were based on the idling limits provided in the California Code of Regulations and did not utilize or rely on Mitigation Measure 3-2. No change to the HRA is required or to the significance findings of the DEIR is required.

Comment: *"There is no detailed explanation of the emission estimates. Tables should be provided to clarify all emission calculations. (There is a copy of the CALEEMOD run where emissions from off-road diesel equipment were calculated.)"*

Response: The HRA provided detail regarding the modeling in the HRA Section 4.0 Modeling Parameters and Assumptions and the modeling appendix accompanying the HRA; however, additional details are provided below per the SJVAPCD's request. In addition, all modeling files used in preparation of the HRA were provided to the SJVAPCD for its review of the DEIR and HRA. The HRA analyzed one area source, two line volume sources, and three point sources in the AERMOD model. The area source modelled the emissions created from the off-road equipment and the area source parameters have been detailed on pages 9 and 10 of the HRA. The two line sources modeled the onsite truck travel, with one line source representing the portion of the haul

truck trips that would occur on the project site and the other representing the maintenance truck trips on the project site. The two line volume source parameters have been detailed on page 10 of the HRA. The three point sources modeled the three most likely places on the project site where idling may occur, with two of the locations representing idling from the haul trucks at the scale and aggregate loading area and the third representing idling from the maintenance trucks. In order to provide additional information about how the emission rate from each source was calculated, printouts of the spreadsheets used for the emission calculations have been provided as Attachment A [of the HRA].

Comment: *"Based upon modeling results provided, the maximum cancer risk for a residential receptor is 9.9 in a million. This estimated risk is below the District's threshold. The results provided differ from those included in the report. The results provided were verified by the District by rerunning the model."*

Response: The modeling results presented in the DEIR were not updated to reflect revised modeling from the final version of the HRA. The results in the DEIR did not account for Mitigation Measure 3-3 and 3-4 that require the off-road equipment to meet the year 2019 NOx emissions standards by 2018 and to meet the year 2020 NOx emissions standards by 2019 as well as some other minor modifications to the AERMOD modeling. The HRA provided in the DEIR Appendix provided the correct results. The corrected HRA portion of the Draft EIR will be provided in the errata to the Final EIR as shown below:

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 3.3-14, the proposed Project would create the highest concentration of DPM at Sensitive Receptor 3, which is at the home located northwest of the Project site and would experience an annual concentration of 0.0148 µg per m3. Sensitive Receptor 3 was found to result in a cancer risk increase of 6.1 per million people. All diesel emissions concentrations at the nearby sensitive receptors were found to be below the 10.0 in a million cancer risk threshold established by the District. Therefore, no significant long-term health impacts would occur from the operation of diesel trucks and equipment on the Project site.

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[1]. As noted in Table 3.3-14, the maximum cancer risk at any sensitive receptor was estimated to be 6.1 in 1,000,000 people. A cancer risk of 6.1 in a million is the likelihood that up to 6.1 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.

In addition to the cancer risk from exposure to DPM, there is also the potential DPM exposure may result in adverse health impacts from acute and chronic illnesses, which are detailed below.

Chronic Health Impacts

Chronic health effects are characterized by prolonged or repeated exposure to a TAC over many days, months, or years. Symptoms from chronic health impacts may not be immediately apparent and are often irreversible. The chronic hazard index is based on the most impacted sensitive receptor from the proposed Project and is calculated from the annual average concentrations of PM_{10}.

The AERMOD model found that the annual concentration at the nearest sensitive receptor is 0.0148 µg/m3 for DPM equivalent chronic non-cancer risk emissions. The resulting Hazard Index is 0.00296, which is significantly less than the threshold of 1.0 or greater. Therefore, the ongoing operations of the proposed Project would result in a less than significant impact due to the non-cancer chronic health risk from TAC emissions created by the proposed Project.

Acute Health Impacts

Acute health effects are characterized by sudden and severe exposure and rapid absorption of a TAC. Normally, a single large exposure is involved. Acute health effects are often treatable and reversible. The acute hazard index is calculated from the maximum hourly concentrations of $PM_{2.5}$ and total organic gases (TOG) at the point of

[1] San Joaquin Valley Air Pollution Control District. 2014. Draft Guidance for Assessing and Mitigating Air Quality Impacts. http://www.valleyair.org/transportation/GAMAQI-2014/DRAFT_GAMAQI_2014_July_7.pdf . Accessed July, 2014.

maximum impact (PMI), which has been calculated with the AERMOD model.

The AERMOD model found that the proposed Project would create maximum hourly concentrations of 0.305 µg/m3 of PM10 and 0.788 µg/m3 of TOG at the PMI. Table 3.3-13 provides a list of TAC pollutants from diesel emissions that have the potential to cause acute health risks, the associated pollutant analyzed in the AERMOD model, the ratio of the pollutant to total diesel emissions, the AREL for each pollutant, and the calculated Acute Hazard Index for each pollutant.

Table 3.3-13 shows that the total acute hazard index from the proposed Project would be 0.0024. The criterion for significance is an Acute Hazard Index increase of 1.0 or greater, as established by the District. Therefore, the on-going operations of the proposed project would result in a ***Less Than Significant Impact*** due to the non-cancer acute health risk from TAC emissions created by the proposed Project.

Comment: *"Given the above comments [that is, District comments 9a -9d], risks to which sensitive receptors would be exposed are less than significant if the emission calculations are correct."*

Response: The District's comments are noted and a table provided as Attachment A details the calculations used to generate the emissions estimate. We are pleased that the District re-ran the modeling and concluded that impacts would be less than significant. Validating the HRA outputs that thresholds would not be exceeded as a result of this Project satisfies CEQA requirements pertinent to this resource.

Comment: *"The proposed project may require District permits. Prior to the start of construction the project proponent should contact the District's Small Business Assistance Office at (559) 230-5888 to determine if an Authority to Construct (ATC) is required."*

Response: We concur. The applicant has been provided with a copy of the District's letter and has been made aware of this recommendation.

Comment: *"The proposed project may be subject to the following District rules: Regulation VIII (Fugitive PM10 Prohibitions), Rule 4102 (Nuisance), Rule 4601 (Architectural Coatings), and Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations). In the event an existing building will be renovated, partially demolished or removed, the project may be subject to District Rule 4002 (National Emission Standards for Hazardous Air Pollutants). The above list of rules is neither exhaustive nor exclusive. To identify other District rules or regulations that apply to this project or to*

obtain information about District permit requirements, the applicant is strongly encouraged to contact the District's Small Business Assistance Office at (559) 230-5888. Current District rules can be found online at: www.valleyair.org/rules/1ruleslist.htm."

Response: The applicant has been provided with a copy of the District's letter and has been made aware of available assistance. The Draft EIR and the Air Quality and Greenhouse Gas Analysis Report (Appendix B) acknowledged the potential rules that the project may be subject to on page 3.3-13 of the Draft EIR and page 9 of Appendix B.

Comment: *"The District recommends that a copy of the District's comments be provided to the project proponent."*

Response: Comment noted, the County has provided the applicant with a copy of the Air District's comments.

PROJECT SUMMARY

The County of Tulare is proposing the Deer Creek Rock SMARA Permit Amendment Project application (PMR 14-002) for an amendment to Surface Mining Permit and Reclamation Plan PMR 01-001, PMR 09-002, and PSP 01-055 (ZA) to allow for expanded operations at this site. The Applicant requests modification of the current permit conditions to increase annual production by 450,000 tons per year (from a maximum of 500,000 tons per year to a maximum of 950,000 tons per year) and increase truck hauling by 176 round trips per day (from a maximum of 200 round trips per day to a maximum of 376 round trips per day). The Applicant is not requesting an increase of excavation depth, there would be no change to the estimated total rock production of 40,000,000 tons of rock material during the estimated 50 years of operation, .and there would be no change to the approved reclamation plan. The Project site is located in Section 21, Township 22 South, Range 28 East, MDB&M and includes Assessor Parcel Numbers 305-190-018 and 305-190-020. The site is zoned AE-20 (Exclusive Agriculture, 20 acre minimum) and AE-10 (Exclusive Agriculture, 10 acre minimum), which allows surface mining with the approval of a surface mining permit and reclamation plan). The Project site is not located on Williamson Act-contracted land.

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 *Final Environmental Impact Report (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."[2]

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 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..."[3]

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

[2] CEQA Guidelines, Section 15002 (a)
[3] CEQA Guidelines, Section 15002 (f)

decides to approve a project that will cause one or more significant effects on the environment."[4]

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."[5] (See Chapter 7)

This *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

[4] Ibid., Section 15021
[5] 2013 CEQA Guidelines, Section 15002 (h)

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."[6]

As the Project will have no significant and unavoidable effects; a Statement of Overriding Considerations is not necessary or required as part of this Final EIR.

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 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.)

[6] Ibid., Section 15126.2

(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."[7]

ORGANIZATION OF THE EIR

With the exception of Chapter 10, Response to Comments, of the EIR consists of the following sections:

Executive Summary

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

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. he 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.

[7] 2013 CEQA Guidelines, Section 15126.4

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 begins 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 outlines 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 outlines 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 is reviewed for potential cumulative impacts.

Mitigation Measures

Mitigation Measures are proposed as deemed applicable.

Conclusion

Each conclusion outlines 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 are be identified.

Definitions/Acronyms

Some sub-chapters of Chapter 3 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.

CHAPTER 10

Contains the Response to Comments received during the 45-day review period.

APPENDICES

Following the main body of text in the 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 beginning on August 8, 2014 for a 30-day comment period ending September 8, 2014. Tulare County RMA received the following two comments on the NOP. Comments were received from the following agencies, individuals, and/or organizations:

- Native American Heritage Commission, August 12, 2014
- David Deel, Department of Transportation, District 6, September 5, 2014
- San Joaquin Valley Air Pollution Control District, September 9, 2014

A copy of the NOP is included in **Appendix A,** along with copy of the 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."[8]

A scoping meeting was duly noticed in a newspaper of general circulation (Visalia Times-Delta) and held on August 21, 2014. 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. The Draft EIR was circulated publicly for comment beginning on December 5, 2014. Following completion of the 45-day public review period ending on January 20, 2014, staff prepared responses to comments and a Final EIR has been completed. The Final EIR was then 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

[8] CEQA Guidelines, Section 15103

Determination will then be filed with the County Tulare County Clerk and also forwarded to the State of California, Office of Planning and Research.

ORGANIZATIONS CONSULTED

1) California Air Resources Board (ARB)
2) California Department of Conservation, 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

The following interested persons/parties are also included in this notification:

Mary Beatie: mbeatie@ppeng.com
Houston Wells: houstonwells@sbcglobal.net
Jim Oliver: joliver@wcsg.com
Kevin Oliver: koliver@wcsg.com
David Cruce: david@papichconstruction.com
Mitch Brown: mbci@ocsnet.net
Jason Papich: Jason@papichconstruction.com
Mark Brower: mbower@papichconstruction.com

ATTACHMENT "A"

Response to Department of Conservation - Office of Mine Reclamation Comments

RESOURCE MANAGEMENT AGENCY

5961 South Mooney Blvd
Visalia, CA 93277.
Phone (559) 624-7000
Fax (559) 730-2653

Michael Bond, Public Works (Interim)
Roger Hunt, Administration

JAKE RAPER JR., AICP, DIRECTOR

MICHAEL C. SPATA, ASSOCIATE DIRECTOR

February 17, 2015

Beth Hendrickson, Manager
Environmental Services Unit
Department of Conservation
Office of Mine Reclamation
801 K Street
MS 09-06
Sacramento, CA 95814

Subject: Response to Comments, DEIR – Deer Creek Rock Project, SCH No. 2014081023

Dear Ms. Hendrickson,

Thank you for providing the Department of Conservation, Office of Mine Reclamation (OMR) written comments (see Attachment 1) regarding Deer Creek Rock Project (Project) DEIR; SCH No. 2014081023. The County of Tulare acknowledges and recognizes the OMR's authority and expertise regarding SMARA-related matters. The Final EIR (Attachment 2) includes responses to OMR's comments.

Comment Subject: Draft EIR for Deer Creek Rock SMARA Permit Amendment

Comment: *"OMR has no specific comments on the DEIR."*

Response: Staff appreciates the Office of Mine Reclamation's (OMR) comment that OMR has no specific comments on the DEIR; this indicates that the DEIR met the objectives of considering OMR's purview regarding SMARA-related project.

Staff also agrees that the Reclamation Plan for Deer Creek Rock should reference or include all pertinent information from the 2005 Reclamation Plan. Staff has updated the proposed Amended Reclamation Plan accordingly. The comment does not address CEQA related issues of the DEIR.

Comment: *"The project description calls for amendments to the surface mining permits. No other changes to the approved reclamation plan are proposed besides the increase in annual production. However, this change - along with the changes to the permits and any other new information such as the mine name, applicable acreages, updated maps, etc. – require amendments to update the reclamation plan in order for the approved reclamation plan to accurately reflect current and planned mining and reclamation activities. Any mitigation measures resulting from the CEQA review that have an effect on mining and reclamation should also be incorporated into the amended reclamation plan. Even if the changes are considered minor rather than substantial, a revised amended reclamation plan for the Deer Creek Mine (or Deer Creek Quarry) must be prepared and forwarded to OMR for review."*

Response: Staff has reviewed the Office of Mine Reclamation's comment letter and agrees that the comment does not address CEQA related issues of the DEIR. A condition of approval has been included in the permit that requires the applicant to increase annual production and number of heavy-duty truck trips per day and annually. As part of the permit amendment process, the County will require the applicant to update information such as the mine name, applicable acreages, updated maps, and require amendments to update the reclamation plan in order for the approved reclamation plan to accurately reflect current and planned mining and reclamation activities. RMA agrees that Mitigation Measures resulting from the CEQA review that have an effect on mining and reclamation will also be incorporated into the amended reclamation plan.

In closing, we sincerely appreciate the OMR's comments; your comments have been very insightful and useful toward ensuring that the proposed Project complies with Department of Conservation, Office of Mine Reclamation rules and regulations, and with the California Environmental Quality Act.

If you have any questions regarding the above, please contact me at (559) 624-7121.

Best Regards,

Hector Guerra, Chief
Environmental Planning Division

Attachment (1) "DEER CREEK ROCK SMARA PERMIT AMENDMENT PROJECT" comments dated December 16, 2014; signed by Beth Hendrickson and John R. Wesling
(2) Final EIR (includes Response to DOC - OMR comments)

cc: file

DEPARTMENT OF CONSERVATION
OFFICE OF MINE RECLAMATION
801 K STREET • MS 09-06 • SACRAMENTO, CALIFORNIA 95814
PHONE 916 / 323-9198 • FAX 916 / 445-6066 • TDD 916 / 324-2555 • WEB SITE conservation.ca.gov

December 16, 2014

VIA EMAIL: hguerra@co.tulare.ca.us
ORIGINAL SENT BY MAIL

Mr. Hector Guerra
Tulare County Resource Management Agency
Planning Branch
5961 S. Mooney Blvd.
Visalia, CA 93277-9394

Dear Mr. Guerra:

DEER CREEK ROCK SMARA PERMIT AMENDMENT PROJECT
DRAFT ENVIRONMENTAL IMPACT REPORT
CALIFORNIA MINE ID # 91-54-0021, PMR #14-002, SCH # 2014081023

The Department of Conservation's Office of Mine Reclamation (OMR) has reviewed the Draft Environmental Impact Report (DEIR) for the proposed expansion of the Deer Creek Mine. The project title is listed as: "Deer Creek Rock SMARA Permit Amendment Project" and "Deer Creek Rock Surface Mining Permit and Reclamation Plan". The applicant, Deer Creek Rock, is proposing to continue mining aggregate on 98 acres of a 118-acre project site for a period of 50 years. The applicant proposes to increase maximum annual production from the currently permitted 500,000 tons to 950,000 tons.

The project site is southeast of Porterville. OMR staff conducted a site visit and wrote a comment letter dated September 28, 2012 on the reclamation plans for the Shannon and Jaxon Mines. The plan approved in 2012 is titled "Reclamation Plan for Shannon Mine and Jaxon Enterprises Mine" and applies to 158 acres. This acreage does not match the number of acres listed for the current project and it remains unclear whether the two former mines were combined into the one currently known as the Deer Creek Mine (or Deer Creek Quarry) under California Mine ID #91-54-0021.

OMR has no specific comments on the DEIR. The following comments pertain to requirements under California's Surface Mining and Reclamation Act of 1976 (SMARA) for the proposed project.

The project description calls for amendments to the surface mining permits. No other changes to the approved reclamation plan are proposed besides the increase in annual production. However, this change - along with the changes to the permits and any other new information such as the mine name, applicable acreages, updated maps, etc. -

require amendments to update the reclamation plan in order for the approved reclamation plan to accurately reflect current and planned mining and reclamation activities. Any mitigation measures resulting from the CEQA review that have an effect on mining and reclamation should also be incorporated into the amended reclamation plan. Even if the changes are considered minor rather than substantial, a revised amended reclamation plan for the Deer Creek Mine (or Deer Creek Quarry) must be prepared and forwarded to OMR for review.

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

Sincerely,

Beth Hendrickson, Manager
Environmental Services Unit

John R. Wesling
Senior Engineering Geologist
Engineering Geology Unit

REGISTERED GEOLOGIST
JOHN R. WESLING
No. 1719
CERTIFIED
ENGINEERING
GEOLOGIST
Exp. 5/31/2015
STATE OF CALIFORNIA

cc: Alexandra Borack
OGER

ATTACHMENT "B"

Response to Comments - Caltrans

RESOURCE MANAGEMENT AGENCY

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Michael Bond, Public Works (Interim)
Roger Hunt, Administration

JAKE RAPER JR., AICP, DIRECTOR

MICHAEL C. SPATA, ASSOCIATE DIRECTOR

February 17, 2015

David Deel, Associate Transportation Planner
North Planning Branch
Department of Transportation – District 6
P.O. Box 12616
Fresno, CA 93778-2616

Subject: Response to Comments, DEIR – Deer Creek Rock Project, SCH No. 2014081023

Dear Mr. Deel,

Thank you for providing the Department of Transportation – District 6 (Caltrans) written comments (see Attachment 1) regarding Deer Creek Rock Project (Project) DEIR; SCH No. 2014081023. The County of Tulare acknowledges and recognizes the Caltrans' authority and expertise regarding transportation-related matters which may impact State facilities. The Final EIR (Attachment 2) includes responses to Caltrans' comments.

Comment Subject: DEIR and Traffic Impact Analysis (TIS)

Comment: *"Caltrans has "NO COMMENT" on the DEIR. As noted below, Caltrans reviewed the TIS on 10.1.2104 and found it satisfactory."*

Response: No response necessary. As noted by Caltrans, the agency has no comments and in their judgment determined that the Traffic Impact Analysis (TIS) was satisfactory and no additional comments were necessary from Caltrans.

In closing, we sincerely appreciate the Caltrans' comments; your comments have been very insightful and useful toward ensuring that the proposed Project complies with Department of Transportation requirements in regards to transportation-related matters which may impact State facilities and with the California Environmental Quality Act.

If you have any questions regarding the above, please contact me at (559) 624-7121.

Best Regards,

Hector Guerra, Chief
Environmental Planning Division

Attachment (1) E-mail received from Mr. David Deel, December 15, 2014 and "6-TUL-190-20.20+/- 2135 IGR/CEQA NOP FOR DEIR PMR 14-002 DEER CREEK ROCK MINE EXPANSION ACH #2014081023"
(2) Final EIR (includes Response to Caltrans comments)

cc: file

From: "Deel, David@DOT" <david.deel@dot.ca.gov>
To: Hector Guerra <HGuerra@co.tulare.ca.us>
CC: "Navarro, Michael@DOT" <michael.navarro@dot.ca.gov>
Date: 12/15/2014 3:20 PM
Subject: Deer Creek Rock Company, Mining Permit (PMR 14-002) - DEIR - SCH#2014081023

Hector -

Caltrans has "NO COMMENT" on the DEIR.
As noted below, Caltrans reviewed the TIS on 10/1/2014 and found it satisfactory.

Thank You!

DAVID DEEL - CALTRANS D6 - Desk 559.488.7396

-----Original Message-----
From: Hector Guerra [mailto:HGuerra@co.tulare.ca.us]
Sent: Tuesday, November 18, 2014 10:52 AM
To: Deel, David@DOT; Jason Ellard
Subject: Earlier query regarding: RE: Deer Creek Rock Company, Mining Permit EIR - traffic analysis

Thanks Jason, you are correct; I did indeed receive them.

Thanks for the comment David, even a no comment response is much appreciated.

Best Regards,
Hector

>>> "Deel, David@DOT" <david.deel@dot.ca.gov> 10/01/2014 9:12 AM >>>
Jason & Hector -

Caltrans has complete review of the TIS which appears satisfactory and have no additional comments on the report.

Respectfully,

DAVID DEEL
Associate Transportation Planner
IGR & Transit Representative - Tulare County Office of Planning & Local Assistance - North Section
Desk: 559.488.7396

CALTRANS - District 6
P.O. Box 12616
Fresno, CA 93778-2616

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From: Jason Ellard [mailto:jellard@vrpatechnologies.com]
Sent: Thursday, September 11, 2014 3:35 PM

To: Hector Guerra
Cc: Deel, David@DOT
Subject: Deer Creek Rock Company, Mining Permit EIR - traffic analysis

Good Afternoon Hector,

I have attached the traffic analysis for the Deer Creek Rock Company for your review.

Thanks

[cid:image002.jpg@01CEC8EA.B704CA50]
Traffic Engineering . Transportation Planning .
Environmental Assessment . Public Outreach

A DBE, WBE, UDBE, SBE Firm

Jason Ellard
VRPA Technologies, Inc.
4630 W. Jennifer, Ste. 105
Fresno, CA 93722

Office: 559 271-1200
Fax: 559 271-1269

Website: www.vrpatechnologies.com

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PHONE (559) 488-7396
FAX (559) 488-4088
TTY 711
www.dot.ca.gov

Serious drought.
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September 5, 2014

6-TUL-190-20.20 +/-
2135-IGR/CEQA
NOP FOR DEIR
PMR 14-002
DEER CREEK ROCK MINE EXPANSION
SCH # 2014081023

Mr. Hector Guerra
Chief Environmental Planner
Tulare County Resource Management Agency
5961 S. Mooney Blvd.
Visalia, CA 93277

Dear Mr. Guerra:

Thank you for the opportunity to review the Notice of Preparation (NOP) for the draft Environmental Impact Report (DEIR) for the Deer Creek Mine Expansion proposal. The project proposes to increase existing annual production from 500,000 tons per day to a maximum of 950,000 tons per day and increase truck hauling from 200 trips per day to a maximum of 350 trips per day. The 28 acre site is located southeast of Porterville, approximately 1/3 mile east of the Avenue 120 (aka: Deer Creek Drive) and Road 272 intersection, approximately 5 miles east of the State Route (SR) 65/Avenue 124 intersection and 3 miles south of the SR 190/Road 284 intersection. Caltrans has the following comments:

As indicated in the NOP on page 4, a Traffic Impact Study will be prepared as part of the DEIR. Caltrans suggest that a TIS scope be completed prior to start of the TIS. Caltrans is available to meet with the County and project consultant to review the scope if necessary. Please send the scope and the TIS to Caltrans for review.

If you have any other questions, please call me at (559) 488-7396.

Sincerely,

DAVID DEEL
Associate Transportation Planner
North Planning Branch

ATTACHMENT "C" -

San Joaquin Valley Unified Air Pollution Control District

RESOURCE MANAGEMENT AGENCY

5961 South Mooney Blvd
Visalia, CA 93277.
Phone (559) 624-7000
Fax (559) 730-2653

Michael Bond, Public Works (Interim)
Roger Hunt, Administration

JAKE RAPER JR., AICP, DIRECTOR

MICHAEL C. SPATA, ASSOCIATE DIRECTOR

February 17, 2015

Arnaud Marjollet, Director of Permit Services
San Joaquin Valley Unified Air Pollution Control District
1990 E. Gettysburg Avenue
Fresno, CA 93726-6061

Subject: Response to Comments, DEIR – Deer Creek Rock Project, SCH No. 2014081023; District CEQA Reference No. 20140966

Dear Mr. Marjollet,

Thank you for providing the San Joaquin Valley Unified Air Pollution Control District's (Air District) written comments (see Attached 1) regarding DEIR - Deer Creek Rock Project (Project), SCH No. 2014081023. The County of Tulare acknowledges and recognizes the Air District's authority and expertise regarding the air quality resource and matters. The Final EIR (Attachment 2) includes responses to Air District Comments 1-12 which were prepared by consultants First Carbon Solutions (see "Deer Creek Rock Company - Response to Comments Dated January 28, 2015 prepared by Mr. Dave Mitchell, Senior Air Quality Scientist") and Resource Management Agency (RMA) staff.

Comment Subject: Draft EIR for Deer Creek Rock SMARA Permit Amendment

Comment: *The District summarized the Project and its location.*

Response: No response is necessary as the District provided introductory remarks and a summary of the project to open the letter.

Comment: *"On Page ES-2, the Draft EIR states, "The applicant is proposing to increase production of the existing mining permit from 400,000 to 500,000 tons of aggregate annually to 950,000 tons of aggregate annually through lateral expansion of the excavating site within the existing approved site." However, on Page 2-3, the Draft EIR states, "The applicant is not proposing to increase production of the existing mining permit nor is any lateral or depth expansion proposed." These two statements are inconsistent. Therefore, the District recommends reviewing and revising these statements for accuracy."*

Response: A clarification will be included in the errata of the Draft EIR stating the applicant is proposing to increase production through the lateral expansion of the excavating site within the existing footprint of the approved site. No changes to the analysis or in the environmental findings in the Draft EIR would result from this correction.

Comment: *"On Page ES-2 and 2-3, the Draft EIR estimates the number of increased truck hauling trips to 376 round trips per day. However, throughout the document, 375 round trips per day are listed. The District recommends reviewing and revising the document for consistency"*

Response: The correct number is 375 roundtrips, which was used in the analysis of project impacts. The correction will be noted in the errata of the Final EIR. No changes to the analysis or in the environmental findings in the Draft EIR would result from this correction.

Comment: *"On Page ES-2 and 2-3, the Draft EIR states that the heavy duty truck trips are expected to increase from 22,500 to 42,300 annual round trips. However, in Appendix B, Page 2, the Air Quality and Greenhouse Gas Analysis Report states that currently there are approximately 20,000 (40,000 round trips) heavy duty diesel trucks accessing the site during the operating year. This is inconsistent with the information presented in the Draft EIR. Therefore, the District recommends clarification of this apparent discrepancy and revisions to the Draft EIR and/or appendices as necessary."*

Response: Appendix B-Air Quality and Greenhouse Gas Analysis Report reported the existing number of haul truck trips based on the current permitted amount of 500,000 tons and the 25-ton capacity haul trucks reported by the applicant. Corrections to the Draft EIR will be noted in the errata of the Final EIR. Regardless, the air quality analysis was based on the correct number of proposed new trips, therefore the discrepancy in the existing trips in the Draft EIR does not have any bearing on the findings of the report.

Comment: *"The Draft EIR states that the operating hours are from 7:00 am to 6:00 pm Monday through Friday in addition to work on the weekends to meet demands. Based on this information, the number of days of operation per year is 260 days or more. However, the number of days per year used in the operational emissions analysis is 225 days. The District recommends clarification of this apparent discrepancy in the number of operational days and revisions to the Draft EIR as necessary."*

Response: The air quality analysis was based on the applicant provided operating schedule of 45 weeks out of the year. While some work may occur during weekends, the total number of days of operation would not exceed 225 days. During the year production is expected to increase during the spring/summer months (e.g. work on weekends to meet demand) and curtail in winter months (less demand) resulting in fewer days worked per week during slower periods.

Comment: *"Table 3.3-4 and Table 3.3-6 incorrectly list a threshold of 500 tons for SOx. The District would like to clarify that the threshold for SOx is 27 tons per year. Therefore, the District recommends revising the tables to reflect the correct threshold for SOx. Although the threshold is incorrect, it does not appear that there would be a significant impact for SOx."*

Response: Tables 3.3-4 and 3.3-6, of Chapter 3.3 Air Quality, will be revised in the errata of the Final EIR to reflect the correct SOx threshold. Importantly, no changes to the analysis or in the environmental findings contained in the Draft EIR would result from this inadvertency.

Comment: *Table 3.3-4 through Table 3.3-11, incorrectly list either a threshold of 15 tons or 500 tons for CO. The District would like to clarify that the threshold for CO is 100 tons per year. Therefore, the District recommends revising the tables to reflect the correct threshold for CO. Although the threshold is incorrect, it does not appear that there would be a significant impact for CO.*

Response: Tables 3.3-4 and 3.3-6, of Chapter 3.3 Air Quality, will be revised in the errata of the Final EIR to reflect the correct CO threshold. Importantly, no changes to the analysis or in the environmental findings contained in the Draft EIR would result from this inadvertency.

Comment: *"In Appendix B, Page 7, the Air Quality and Greenhouse Gas Analysis Report states that "The project would not conflict with or obstruct implementation of the applicable air quality plan." However, on Page 76, the Air Quality and Greenhouse Gas Analysis Report states that, "The project would conflict with or obstruct implementation of the applicable air quality plan." These two statements are inconsistent. Therefore, the District recommends reviewing and revising these statements for accuracy."*

Response: The word "not" was omitted on Page 76 in the statement "The project would conflict with or obstruct implementation of the applicable air quality plan." The sentence will be revised in the errata of the Final EIR as follows:

"The project would not conflict with or obstruct implementation of the applicable air quality plan."

Comment: **"***In Appendix B, Page 72, the Air Quality and Greenhouse Gas Analysis Report states that emissions for employee trips are modeled in CalEEMod in the construction phases under worker trips. However, the emissions for worker trips are not presented in the emissions Table 3.3-4 through Table 3.3-11. Therefore, the District recommends including emissions from employees in Table 3.3-4 through Table 3.3-11."*

Response: As noted in Appendix B – Air Quality and Greenhouse Gas Analysis Report, the emissions are included in the On-Site Mobile emissions under non-Permitted, the Tables 16-23 of the Appendix B state that emissions estimate shown include the offsite worker vehicle trips. Although Tables 3.3-4 through Table 3.3-11 did not include this notation, the worker emissions are accounted for. The tables will be revised to correct the source description in the errata of the Final EIR.

Comment: **"***The District does not require chronic and acute risks from truck travel and idling emissions to be estimated. The cancer risks from DPM emissions are going to be much more significant than any chronic or acute risks."*

Response: Although a quantitative non-cancer chronic and acute risk analysis for truck travel and idling is not requested or required per SJVAPCD guidance, it has been included in the EIR in order to provide additional disclosure of potential health risks associated with implementation of the proposed project and a more conservative assessment of the project impacts. No change

in environmental significance findings or mitigation measures results from including these additional sources in the analysis.

Comment: *"A Mitigation Measure to limit truck idling time to 5 minutes per truck is included, but it exempts trucks in an active queue. Allowing trucks to idle while in an active queue defeats the purpose of the Mitigation Measure."*

Response: Mitigation Measure 3-2 that limits truck idling to 5 minutes per truck was provided in the DEIR as a best practice measure for criteria pollutants and to enhance compliance with State idling regulations and no emission reductions were claimed for this measure for criteria pollutants or for toxic air contaminant (TAC) emissions. The mitigation measure was not referenced in the HRA. The calculations provided in the HRA were based on the idling limits provided in the California Code of Regulations and did not utilize or rely on Mitigation Measure 3-2. No change to the HRA is required or to the significance findings of the DEIR is required.

Comment: *"There is no detailed explanation of the emission estimates. Tables should be provided to clarify all emission calculations. (There is a copy of the CALEEMOD run where emissions from off-road diesel equipment were calculated.)"*

Response: The HRA provided detail regarding the modeling in the HRA Section 4.0 Modeling Parameters and Assumptions and the modeling appendix accompanying the HRA; however, additional details are provided below per the SJVAPCD's request. In addition, all modeling files used in preparation of the HRA were provided to the SJVAPCD for its review of the DEIR and HRA. The HRA analyzed one area source, two line volume sources, and three point sources in the AERMOD model. The area source modelled the emissions created from the off-road equipment and the area source parameters have been detailed on pages 9 and 10 of the HRA. The two line sources modeled the onsite truck travel, with one line source representing the portion of the haul truck trips that would occur on the project site and the other representing the maintenance truck trips on the project site. The two line volume source parameters have been detailed on page 10 of the HRA. The three point sources modeled the three most likely places on the project site where idling may occur, with two of the locations representing idling from the haul trucks at the scale and aggregate loading area and the third representing idling from the maintenance trucks. In order to provide additional information about how the emission rate from each source was calculated, printouts of the spreadsheets used for the emission calculations have been provided as Attachment A [of the HRA].

Comment: *"Based upon modeling results provided, the maximum cancer risk for a residential receptor is 9.9 in a million. This estimated risk is below the District's threshold. The results provided differ from those included in the report. The results provided were verified by the District by rerunning the model."*

Response: The modeling results presented in the DEIR were not updated to reflect revised modeling from the final version of the HRA. The results in the DEIR did not account for Mitigation Measure 3-3 and 3-4 that require the off-road equipment to meet the year 2019 NOx emissions standards by 2018 and to meet the year 2020 NOx emissions standards by 2019 as well as some other minor modifications to the AERMOD modeling. The HRA provided in the DEIR Appendix provided the correct results. The corrected HRA portion of the Draft EIR will be provided in the errata to the Final EIR as shown below:

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 3.3-14, the proposed Project would create the highest concentration of DPM at Sensitive Receptor 3, which is at the home located northwest of the Project site and would experience an annual concentration of 0.0148 µg per m3. Sensitive Receptor 3 was found to result in a cancer risk increase of 6.1 per million people. All diesel emissions concentrations at the nearby sensitive receptors were found to be below the 10.0 in a million cancer risk threshold established by the District. Therefore, no significant long-term health impacts would occur from the operation of diesel trucks and equipment on the Project site.

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[1]. As noted in Table 3.3-14, the maximum cancer risk at any sensitive receptor was estimated to be 6.1 in 1,000,000 people. A cancer risk of 6.1 in a million is the likelihood that up to 6.1 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.

In addition to the cancer risk from exposure to DPM, there is also the potential DPM exposure may result in adverse health impacts from acute and chronic illnesses, which are detailed below.

Chronic Health Impacts

Chronic health effects are characterized by prolonged or repeated exposure to a TAC over many days, months, or years. Symptoms from chronic health impacts may not be immediately apparent and are often irreversible. The chronic hazard index is based on the

[1] San Joaquin Valley Air Pollution Control District. 2014. Draft Guidance for Assessing and Mitigating Air Quality Impacts. http://www.valleyair.org/transportation/GAMAQI-2014/DRAFT_GAMAQI_2014_July_7.pdf. Accessed July, 2014.

most impacted sensitive receptor from the proposed Project and is calculated from the annual average concentrations of PM_{10}.

The AERMOD model found that the annual concentration at the nearest sensitive receptor is 0.0148 µg/m3 for DPM equivalent chronic non-cancer risk emissions. The resulting Hazard Index is 0.00296, which is significantly less than the threshold of 1.0 or greater. Therefore, the ongoing operations of the proposed Project would result in a less than significant impact due to the non-cancer chronic health risk from TAC emissions created by the proposed Project.

Acute Health Impacts

Acute health effects are characterized by sudden and severe exposure and rapid absorption of a TAC. Normally, a single large exposure is involved. Acute health effects are often treatable and reversible. The acute hazard index is calculated from the maximum hourly concentrations of $PM_{2.5}$ and total organic gases (TOG) at the point of maximum impact (PMI), which has been calculated with the AERMOD model.

The AERMOD model found that the proposed Project would create maximum hourly concentrations of 0.305 µg/m3 of PM10 and 0.788 µg/m3 of TOG at the PMI. Table 3.3-13 provides a list of TAC pollutants from diesel emissions that have the potential to cause acute health risks, the associated pollutant analyzed in the AERMOD model, the ratio of the pollutant to total diesel emissions, the AREL for each pollutant, and the calculated Acute Hazard Index for each pollutant.

Table 3.3-13 shows that the total acute hazard index from the proposed Project would be 0.0024. The criterion for significance is an Acute Hazard Index increase of 1.0 or greater, as established by the District. Therefore, the on-going operations of the proposed project would result in a ***Less Than Significant Impact*** due to the non-cancer acute health risk from TAC emissions created by the proposed Project.

Comment: *"Given the above comments [that is, District comments 9a -9d], risks to which sensitive receptors would be exposed are less than significant if the emission calculations are correct."*

Response: The District's comments are noted and a table provided as Attachment A details the calculations used to generate the emissions estimate. We are pleased that the District re-ran the modeling and concluded that impacts would be less than significant. Validating the HRA outputs that thresholds would not be exceeded as a result of this Project satisfies CEQA requirements pertinent to this resource.

Comment: *"The proposed project may require District permits. Prior to the start of construction the project proponent should contact the District's Small Business Assistance Office at (559) 230-5888 to determine if an Authority to Construct (ATC) is required."*

Response: We concur. The applicant has been provided with a copy of the District's letter and has been made aware of this recommendation.

Comment: *"The proposed project may be subject to the following District rules: Regulation VIII (Fugitive PM10 Prohibitions), Rule 4102 (Nuisance), Rule 4601 (Architectural Coatings), and Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations). In the event an existing building will be renovated, partially demolished or removed, the project may be subject to District Rule 4002 (National Emission Standards for Hazardous Air Pollutants). The above list of rules is neither exhaustive nor exclusive. To identify other District rules or regulations that apply to this project or to obtain information about District permit requirements, the applicant is strongly encouraged to contact the District's Small Business Assistance Office at (559) 230-5888. Current District rules can be found online at: www.valleyair.org/rules/1ruleslist.htm."*

Response: The applicant has been provided with a copy of the District's letter and has been made aware of available assistance. The Draft EIR and the Air Quality and Greenhouse Gas Analysis Report (Appendix B) acknowledged the potential rules that the project may be subject to on page 3.3-13 of the Draft EIR and page 9 of Appendix B.

Comment: *"The District recommends that a copy of the District's comments be provided to the project proponent."*

Response: Comment noted, the County has provided the applicant with a copy of the Air District's comments.

In closing, we sincerely appreciate the Air District's comments and commend your staff for their professionalism and expertise regarding the air resource in particular and as applied to this Project. Your comments have been very insightful and useful toward ensuring that the proposed Project complies with Air District rules/regulations and with the California Environmental Quality Act.

If you have any questions regarding the above, please contact me at (559) 624-7121.

Best Regards,

Hector Guerra, Chief
Environmental Planning Division

Attachment (1) Air District comment letter dated January 20, 2015; District CEQA Reference No. 20140966
(2) Final EIR (includes Response to Air District comments)

cc: file

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Memo

Date: January 28, 2015

To: Hector Guerra, Chief Environmental Planner

From: Dave Mitchell, Senior Air Quality Scientist

Subject: Deer Creek Rock Company – Response to Comments

FirstCarbon Solutions has reviewed the San Joaquin Valley Air Pollution Control District's written comments on the Draft Environmental Impact Report for Deer Creek Rock SMARA Permit Amendment (District CEQA Reference No. 20140966) and has prepared the attached response to comments and Attachment A for incorporation into the County's Final EIR.

Each comment has been assigned a code. Individual comments within each communication have been numbered so comments can be crossed-referenced with responses.

Author	Author Code
Local Agency	
San Joaquin Valley Air Pollution Control District	SJVAPCD

Local Agencies

San Joaquin Valley Air Pollution Control District (SJVAPCD)

Response to SJVAPCD-1
The District provided introductory remarks and a summary of the project to open the letter. No response is necessary.

Response to SJVAPCD-2
The District noted an inconsistency in the project description in the Draft EIR on page ES-2 and Page 2-3. The Draft EIR has been revised to clearly state the applicant is proposing to increase production through the lateral expansion of the excavating site within the existing footprint of the approved site. No changes to the analysis or in the environmental findings in the Draft EIR would result from this correction.

Response to SJVAPCD-3
The District noted a discrepancy in the reported number of truck hauling trips in the Draft EIR on page ES-2 and 2-3 that state the number of trips as 376 round trips per day and elsewhere in the EIR that report the number of roundtrips as 375. The correct number is 375 roundtrips, which was used in the analysis of project impacts. The correction will be noted in the errata of the Final EIR. No changes to the analysis or in the environmental findings in the Draft EIR would result from this correction.

Response to SJVAPCD-4
The District stated that the number of existing annual haul truck trips was inconsistent on page ES-2 and 2-3 of the Draft EIR with the number reported in Appendix B. Appendix B-Air Quality and Greenhouse Gas Analysis Report reported the existing number of haul truck trips based on the current permitted amount of 500,000 tons and the 25-ton capacity haul trucks reported by the applicant. Corrections to the Draft EIR will be noted in the errata of the Final EIR. Regardless, the air quality analysis was based on the correct number of proposed new trips, therefore the discrepancy in the existing trips in the Draft EIR does not have any bearing on the findings of the report.

Response to SJVAPCD-5
The agency restated the proposed operating hours of the project and stated that the number of operational days should be 260 days or more and not the 225 operational days used in the analysis. The air quality analysis was based on the applicant provided operating schedule of 45 weeks out of the year. While some work may occur during weekends, the total number of days of operation would not exceed 225 days. During the year production is expected to increase during the spring/summer months (e.g. work on weekends to meet demand) and curtail in winter months (less demand) resulting in fewer days worked per week during slower periods.

Response to SJVAPCD-6
The District noted that Table 3.3-4 and 3.3-6 of the Draft EIR incorrectly listed a threshold of 500 tons for SOx instead of correct threshold of 27 tons and recommended revising the tables. The District noted that the project did not exceed the correct threshold. Both Tables 3.3-4 and 3.3-6 will be revised in the errata of the Final EIR as shown below. No changes to the analysis or in the environmental findings in the Draft EIR would result from this correction.

Response to SJVAPCD-7
The District noted that Table 3.3-4 and 3.3-11 of the Draft EIR incorrectly listed a threshold of 500 tons for CO instead of correct threshold of 100 tons and recommended revising the tables. The District noted that the project did not exceed the correct threshold. No changes to the analysis or in the environmental findings in the Draft EIR would result from this correction.

Table 3.3-4

Year 1: 2015 (increase of 100,000 tons processed, unmitigated)

Type	Source	ROG (tons)	NOx (tons)	PM_{10} (tons)	$PM_{2.5}$ (tons)	CO (tons)	SOx (tons)
Permitted	Dust from Material Processing	0.00	0.00	0.50	0.09	0.00	0.00
Non-Permitted	Drilling and Blasting	0.00	0.43	0.05	0.01	1.68	0.05
	Off-Road Equipment Exhaust	0.19	1.32	0.08	0.08	0.94	0.02
	Off-Road Equipment Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
	On-site and Off-site On-Road Mobile (LDT2, MHDT, HHDT) (exhaust)[1]	0.06	0.35	0.01	0.01	0.67	0.00
	On-site and Off-site On-Road Mobile (LDT2, MHDT, HHDT) (fugitive dust)[1]	0.00	0.00	0.10	0.03	0.00	0.00
	Off-site Haul Trucks (exhaust)	0.14	1.89	0.03	0.03	1.37	0.00
	Off-site Haul Trucks (fugitive dust)	0.00	0.00	0.11	0.03	0.00	0.00
	Fugitive Dust (truck loading, wind erosion, storage piles, unpaved road dust)	0.00	0.00	2.61	0.42	0.00	0.00
	Subtotal Non-Permitted	**0.39**	**3.99**	**~~3.48~~ 2.98**	**~~0.69~~ 0.60**	**4.66**	**~~0.08~~**
Total		**~~1.34~~ 0.39**	**~~10~~ 3.99**	**~~10~~ 3.48**	**~~15~~ 0.69**	**~~15~~ 4.66**	**~~500~~ 0.08**
Significance Threshold		10	**~~No~~** 10	**~~No~~** 15	**~~No~~** 15	**~~No~~** 100	**~~No~~** 27
Exceed Significance Threshold?		No	**~~0.39~~** No	**~~3.99~~** No	**~~3.48~~** No	**~~0.69~~** No	**~~4.66~~** No

Notes:
ROG = reactive organic gases NOx = nitrogen oxides PM10 and PM2.5 = particulate matter
SO_x = oxides of sulfur CO = carbon monoxide
1. Includes off-site worker trips
Source of blasting: Spreadsheets prepared by FCS (Appendix B)
Source of off road equipment (exhaust): ARB emission factors for NOx and PM10 based on Tier level, CalEEMod OFFROAD equipment emission factors
Assumes 225 days per year based on applicant provided operating schedule
Source of equipment: Deer Creek Rock Company, 2014

Table 3.3-5

Year 2: 2016 (increase of 200,000 tons processed, unmitigated)							
Type	**Source**	**ROG (tons)**	**NOx (tons)**	**PM_{10} (tons)**	**$PM_{2.5}$ (tons)**	**CO (tons)**	**SOx (tons)**
Permitted	Dust from Material Processing	0.00	0.00	1.00	0.19	0.00	0.00
Non-Permitted	Drilling and Blasting	0.00	0.85	0.22	0.04	3.35	0.10
	Off-Road Equipment Exhaust	0.39	2.64	0.15	0.16	1.88	0.04
	Off-Road Equipment Fugitive Dust	0.00	0.00	0.01	0.00	0.00	0.00
	On-site and Off-site On-Road Mobile (LDT2, MHDT, HHDT) (exhaust)[1]	0.02	0.12	0.00	0.00	0.22	0.00
	On-site and Off-site On-Road Mobile (LDT2, MHDT, HHDT) (fugitive dust)[1]	0.00	0.00	0.03	0.01	0.00	0.00
	Off-site Haul Trucks (exhaust)	0.26	3.21	0.05	0.05	2.55	0.01
	Off-site Haul Trucks (fugitive dust)	0.00	0.00	0.21	0.06	0.00	0.00
	Fugitive Dust (truck loading, wind erosion, storage piles, unpaved road dust)	0.00	0.00	4.77	0.64	0.00	0.00
	Subtotal Non-Permitted	0.67	6.82	5.45	0.96	8.01	0.15
Total		**0.67**	**6.82**	**6.45**	**1.15**	**8.01**	**0.15**
Significance Threshold		10	10	15	15	~~500~~100	27
Exceed Significance Threshold?		No	No	No	No	No	No

Notes:
ROG = reactive organic gases NOx = nitrogen oxides PM10 and PM2.5 = particulate matter
SO_x = oxides of sulfur CO = carbon monoxide
1. Includes off-site worker trips
Source of blasting: Spreadsheets prepared by FCS (Appendix B)
Source of off road equipment (exhaust): ARB emission factors for NOx and PM10 based on Tier level, CalEEMod OFFROAD equipment emission factors
Assumes 225 days per year based on applicant provided operating schedule
Source of equipment: Deer Creek Rock Company, 2014

Table 3.3-6

Year 3: 2017 (increase of 300,000 tons processed, unmitigated)

Type	Source	ROG (tons)	NOx (tons)	PM_{10} (tons)	$PM_{2.5}$ (tons)	CO (tons)	SOx (tons)
Permitted	Dust from Material Processing	0.00	0.00	1.50	0.28	0.00	0.00
Non-Permitted	Drilling and Blasting	0.00	1.28	0.38	0.09	5.03	0.15
	Off-Road Equipment Exhaust	0.58	3.96	0.23	0.24	2.82	0.07
	Off-Road Equipment Fugitive Dust	0.00	0.00	0.01	0.00	0.00	0.00
	On-site and Off-Site On-Road Mobile (LDT2, MHDT, HHDT) (exhaust)	0.05	0.42	0.01	0.01	0.58	0.05
	On-site and Off-Site On-Road Mobile (LDT2, MHDT, HHDT) (fugitive dust)	0.00	0.00	0.11	0.03	0.00	0.00
	Off-site Haul Trucks (exhaust)	0.32	4.21	0.07	0.06	3.39	0.01
	Off-site Haul Trucks (fugitive dust)	0.00	0.00	0.32	0.09	0.00	0.00
	Fugitive Dust (truck loading, wind erosion, storage piles, unpaved road dust)	0.00	0.00	6.93	0.86	0.00	0.00
	Subtotal Non-Permitted	0.95	9.87	8.05	1.35	11.83	0.24
Total		**0.67**	**0.95**	**9.87**	**9.55**	**1.63**	**11.83**
Significance Threshold		10	10	10	15	~~15~~100	~~500~~27
Exceed Significance Threshold?		No	No	No	No	No	No

Notes:
ROG = reactive organic gases NOx = nitrogen oxides PM10 and PM2.5 = particulate matter
SO_x = oxides of sulfur CO = carbon monoxide
1. Includes off-site worker trips
Source of blasting: Spreadsheets prepared by FCS (Appendix B)
Source of off road equipment (exhaust): ARB emission factors for NOx and PM10 based on Tier level, CalEEMod OFFROAD equipment emission factors
Assumes 225 days per year based on applicant provided operating schedule
Source of equipment: Deer Creek Rock Company, 2014

Table 3.3-7

Year 4: 2018 (increase of 400,000 tons processed, unmitigated)

Type	Source	ROG (tons)	NOx (tons)	PM_{10} (tons)	$PM_{2.5}$ (tons)	CO (tons)	SOx (tons)
Permitted	Dust from Material Processing	0.00	0.00	2.00	0.37	0.00	0.00
Non-Permitted	Drilling and Blasting	0.00	1.70	0.54	0.10	6.70	0.20
	Off-Road Equipment Exhaust	0.77	5.28	0.30	0.32	3.76	0.09
	Off-Road Equipment Fugitive Dust	0.00	0.00	0.02	0.00	0.00	0.00
	On-site and Off-Site On-Road Mobile (LDT2, MHDT, HHDT) (exhaust)[1]	0.05	0.47	0.01	0.01	0.55	0.05
	On-site and Off-Site On-Road Mobile (LDT2, MHDT, HHDT) (fugitive dust)[1]	0.00	0.00	0.12	0.03	0.00	0.00
	Off-site Haul Trucks (exhaust)	0.39	5.01	0.09	0.08	4.26	0.02
	Off-site Haul Trucks (fugitive dust)	0.00	0.00	0.42	0.12	0.00	0.00
	Fugitive Dust (truck loading, wind erosion, storage piles, unpaved road dust)	0.00	0.00	9.09	1.07	0.00	0.00
	Subtotal Non-Permitted	1.21	12.47	10.58	1.73	15.27	0.31
Total		**1.21**	**12.47**	**12.58**	**2.10**	**15.27**	**0.31**
Significance Threshold		10	10	15	15	~~500~~100	27
Exceed Significance Threshold?		No	Yes	No	No	No	No

Notes:
ROG = reactive organic gases NOx = nitrogen oxides PM10 and PM2.5 = particulate matter
SO_x = oxides of sulfur CO = carbon monoxide
1. Includes off-site worker trips
Source of blasting: Spreadsheets prepared by FCS (Appendix B)
Source of off road equipment (exhaust): ARB emission factors for NOx and PM10 based on Tier level, CalEEMod OFFROAD equipment emission factors
Assumes 225 days per year based on applicant provided operating schedule
Source of equipment: Deer Creek Rock Company, 2014

Table 3.3-8

Year 5: 2019 (increase of 450,000 tons processed, unmitigated)

Type	Source	ROG (tons)	NOx (tons)	PM_{10} (tons)	$PM_{2.5}$ (tons)	CO (tons)	SOx (tons)
Permitted	Dust from Material Processing	0.00	0.00	2.25	0.42	0.00	0.00
Non-Permitted	Drilling and Blasting	0.00	1.91	0.73	0.11	7.54	0.23
	Off-Road Equipment Exhaust	0.87	5.92	0.34	0.36	4.22	0.10
	Off-Road Equipment Fugitive Dust	0.00	0.00	0.02	0.00	0.00	0.00
	On-site and Off-Site On-Road Mobile (LDT2, MHDT, HHDT) (exhaust)[1]	0.04	0.40	0.01	0.01	0.44	0.00
	On-site and Off-Site On-Road Mobile (LDT2, MHDT, HHDT) (fugitive dust)[1]	0.00	0.00	0.12	0.03	0.00	0.00
	Off-site Haul Trucks (exhaust)	0.42	5.26	0.10	0.09	4.73	0.02
	Off-site Haul Trucks (fugitive dust)	0.00	0.00	0.48	0.13	0.00	0.00
	Fugitive Dust (truck loading, wind erosion, storage piles, unpaved road dust)	0.00	0.00	10.17	1.18	0.00	0.00
	Subtotal Non-Permitted	1.34	13.49	11.97	1.92	16.92	0.35
Total		**1.34**	**13.49**	**14.22**	**2.34**	**16.92**	**0.35**
Significance Threshold		10	10	15	15	~~500~~100	27
Exceed Significance Threshold?		No	Yes	No	No	No	No

Notes:
ROG = reactive organic gases NOx = nitrogen oxides PM10 and PM2.5 = particulate matter
SO_x = oxides of sulfur CO = carbon monoxide
1. Includes off-site worker trips
Source of blasting: Spreadsheets prepared by FCS (Appendix B)
Source of off road equipment (exhaust): ARB emission factors for NOx and PM10 based on Tier level, CalEEMod OFFROAD equipment emission factors
Assumes 225 days per year based on applicant provided operating schedule
Source of equipment: Deer Creek Rock Company, 2014

Table 3.3-9

Year 3: 2017 (increase of 300,000 tons processed, Compliance with Regulation)

Type	Source	ROG (tons)	NOx (tons)	PM_{10} (tons)	$PM_{2.5}$ (tons)	CO (tons)	SOx (tons)
Permitted	Dust from Material Processing	0.00	0.00	1.50	0.28	0.00	0.00
Non-Permitted	Drilling and Blasting	0.00	1.28	0.38	0.07	5.03	0.15
	Off-Road Equipment Exhaust	0.58	2.53	0.23	0.24	2.82	0.07
	Off-Road Equipment Fugitive Dust	0.00	0.00	0.01	0.00	0.00	0.00
	On-site and Off-Site On-Road Mobile (LDT2, MHDT, HHDT) (exhaust)[1]	0.05	0.42	0.01	0.01	0.58	0.00
	On-site and Off-Site On-Road Mobile (LDT2, MHDT, HHDT) (fugitive dust)[1]	0.00	0.00	0.11	0.03	0.00	0.00
	Off-site Haul Trucks (exhaust)	0.32	4.21	0.07	0.06	3.39	0.01
	Off-site Haul Trucks (fugitive dust)	0.00	0.00	0.32	0.09	0.00	0.00
	Fugitive Dust (truck loading, wind erosion, storage piles, unpaved road dust)	0.00	0.00	6.93	0.86	0.00	0.00
	Subtotal Non-Permitted	0.95	8.44	8.05	1.35	11.83	0.24
Total		**0.95**	**8.44**	**9.55**	**1.63**	**11.83**	**0.24**
Significance Threshold		10	10	15	15	~~500~~100	27
Exceed Significance Threshold?		No	No	No	No	No	No

Notes:
ROG = reactive organic gases NOx = nitrogen oxides PM10 and PM2.5 = particulate matter
SO_x = oxides of sulfur CO = carbon monoxide
1. Includes off-site worker trips
Source of blasting: Spreadsheets prepared by FCS (Appendix B)
Source of off road equipment (exhaust): ARB emission factors for NOx and PM10 based on Tier level, CalEEMod OFFROAD equipment emission factors
Assumes 225 days per year based on applicant provided operating schedule
Source of equipment: Deer Creek Rock Company, 2014

Table 3.3-10

Year 4: 2018 (increase of 400,000 tons processed, Mitigated)

Type	Source	ROG (tons)	NOx (tons)	PM_{10} (tons)	$PM_{2.5}$ (tons)	CO (tons)	SOx (tons)
Permitted	Dust from Material Processing	0.00	0.00	~~1.50~~ 2.0	~~0.28~~ 0.37	0.00	0.00
Non-Permitted	Drilling and Blasting	0.00	~~1.28~~ 1.70	~~0.38~~ 0.65	~~0.07~~ 0.12	~~5.03~~ 6.70	~~0.15~~ 0.20
	Off-Road Equipment Exhaust	~~0.58~~ 0.77	~~2.53~~ 1.69	~~0.23~~ 0.30	~~0.24~~ 0.32	~~2.82~~ 3.76	~~0.07~~ 0.09
	Off-Road Equipment Fugitive Dust	0.00	0.00	~~0.01~~ 0.02	0.00	0.00	0.00
	On-site and Off-site On-Road Mobile (LDT2, MHDT, HHDT) (exhaust)[1]	0.05	~~0.42~~ 0.47	0.01	0.01	~~0.58~~ 0.55	0.00
	On-site and Off-Site On-Road Mobile (LDT2, MHDT, HHDT) (fugitive dust)[1]	0.00	0.00	~~0.11~~ 0.12	0.03	0.00	0.00
	Off-site Haul Trucks (exhaust)	~~0.32~~ 0.39	~~4.21~~ 5.01	~~0.07~~ 0.09	~~0.06~~ 0.08	~~3.39~~ 4.26	~~0.01~~ 0.02
	Off-site Haul Trucks (fugitive dust)	0.00	0.00	~~0.32~~ 0.42	~~0.09~~ 0.12	0.00	0.00
	Fugitive Dust (truck loading, wind erosion, storage piles, unpaved road dust)	0.00	0.00	~~6.93~~ 9.09	~~0.86~~ 1.07	0.00	0.00
	Subtotal Non-Permitted	~~0.95~~ 1.21	~~8.44~~ 9.75	~~8.05~~ 10.58	~~1.35~~ 1.73	~~11.83~~ 15.27	~~0.24~~ 0.31
Total		**~~0.95~~ 1.21**	**~~8.44~~ 9.75**	**~~9.55~~ 12.58**	**~~1.63~~ 2.10**	**~~11.83~~ 15.27**	**~~0.24~~ 0.31**
Significance Threshold		10	10	15	15	~~500~~100	27
Exceed Significance Threshold?		No	No	No	No	No	No

Notes:
ROG = reactive organic gases NOx = nitrogen oxides PM10 and PM2.5 = particulate matter
SO_x = oxides of sulfur CO = carbon monoxide
1. Includes off-site worker trips
Source of blasting: Spreadsheets prepared by FCS (Appendix B)
Source of off road equipment (exhaust): ARB emission factors for NOx and PM10 based on Tier level, CalEEMod OFFROAD equipment emission factors
Assumes 225 days per year based on applicant provided operating schedule
Source of equipment: Deer Creek Rock Company, 2014

Table 3.3-11

Year 5: 2019 (increase of 450,000 tons processed, Mitigated)

Type	Source	ROG (tons)	NOx (tons)	PM_{10} (tons)	$PM_{2.5}$ (tons)	CO (tons)	SOx (tons)
Permitted	Dust from Material Processing	0.00	0.00	2.25	0.42	0.00	0.00
Non-Permitted	Drilling and Blasting	0.00	1.91	0.73	0.11	7.54	0.23
	Off-Road Equipment Exhaust	0.87	1.89	0.34	0.36	4.22	0.10
	Off-Road Equipment Fugitive Dust	0.00	0.00	0.02	0.00	0.00	0.00
	On-site and Off-Site On-Road Mobile (LDT2, MHDT, HHDT) (exhaust)[1]	0.04	0.40	0.01	0.01	0.44	0.00
	On-site and Off-Site On-Road Mobile (LDT2, MHDT, HHDT) (fugitive dust)[1]	0.00	0.00	0.12	0.03	0.00	0.00
	Off-site Haul Trucks (exhaust)	0.42	5.26	0.10	0.09	4.73	0.02
	Off-site Haul Trucks (fugitive dust)	0.00	0.00	0.48	0.13	0.00	0.00
	Fugitive Dust (truck loading, wind erosion, storage piles, unpaved road dust)	0.00	0.00	10.17	1.18	0.00	0.00
	Subtotal Non-Permitted	1.34	9.46	11.97	1.92	16.92	0.35
Total		**1.34**	**9.46**	**14.22**	**2.34**	**16.92**	**0.35**
Significance Threshold		10	10	15	15	~~500~~100	27
Exceed Significance Threshold?		No	No	No	No	No	No

Notes:
ROG = reactive organic gases NOx = nitrogen oxides PM10 and PM2.5 = particulate matter
SO_x = oxides of sulfur CO = carbon monoxide
1. Includes off-site worker trips
Source of blasting: Spreadsheets prepared by FCS (Appendix B)
Source of off road equipment (exhaust): ARB emission factors for NOx and PM10 based on Tier level, CalEEMod OFFROAD equipment emission factors
Assumes 225 days per year based on applicant provided operating schedule
Source of equipment: Deer Creek Rock Company, 2014

Response to SJVAPCD-8

The District noted a typographical error in Appendix B – Air Quality and Greenhouse Gas Analysis Report between the statement on Page 7 and Page 76. The word "not" was omitted on Page 76 in the statement "The project

would conflict with or obstruct implementation of the applicable air quality plan." The revision to the sentence will be noted in the errata of the Final EIR as shown below.

The project would not conflict with or obstruct implementation of the applicable air quality plan.

Response to SJVAPCD-9
The District stated that emissions for worker trips were not presented in the emissions Table 3.3-4 through Table 3.3-11 and recommended including the emissions from employees in Table 3.3-4 through Table 3.3-11. As noted in Appendix B – Air Quality and Greenhouse Gas Analysis Report, the emissions are included in the On-Site Mobile emissions under non-Permitted, the Tables 16-23 of the Appendix B state that emissions estimate shown include the offsite worker vehicle trips. Although Tables 3.3-4 through Table 3.3-11 did not include this notation, the worker emissions are accounted for. The tables will be revised to correct the source description in the errata to the Final EIR.

Response to SJVAPCD-10
The District noted that the comments were regarding the health risk assessment (HRA). This is an introductory comment. No response is needed.

Response to SJVAPCD-10a
The District stated they do not require chronic and acute risks from truck travel and idling emissions to be estimated because the cancer risks from DPM emissions are going to be much more significant than any chronic or acute risks.

Although a quantitative non-cancer chronic and acute risk analysis for truck travel and idling is not requested or required per SJVAPCD guidance, it has been included in the EIR in order to provide additional disclosure of potential health risks associated with implementation of the proposed project and a more conservative assessment of the project impacts. No change in environmental significance findings or mitigation measures results from including these additional sources in the analysis.

Response to SJVAPCD-10b
The District noted a mitigation measure to limit truck idling to 5 minutes per truck is included, but that it exempts trucks in an active queue. The District commented that allowing trucks to idle while in an active queue defeats the purpose of the Mitigation Measure.

Mitigation Measure 3-2 that limits truck idling to 5 minutes per truck was provided in the DEIR as a best practice measure for criteria pollutants and to enhance compliance with State idling regulations and no emission reductions were claimed for this measure for criteria pollutants or for toxic air contaminant (TAC) emissions. The mitigation measure was not referenced in the HRA. The calculations provided in the HRA were based on the idling limits provided in the California Code of Regulations and did not utilize or rely on Mitigation Measure 3-2. No change to the HRA is required or to the significance findings of the DEIR is required.

Response to SJVAPCD-10c
The District commented that there was no detailed explanation of the emission estimates. The District requested that tables be provided to clarify all emissions calculations. The District noted that there was a copy of the CALEEMOD run where emissions from off-road diesel equipment were calculated.)

The HRA provided detail regarding the modeling in the HRA Section 4.0 Modeling Parameters and Assumptions and the modeling appendix accompanying the HRA; however, additional details are provided below per the SJVAPCD's request. In addition, all modeling files used in preparation of the HRA were provided to the SJVAPCD for its review

of the DEIR and HRA. The HRA analyzed one area source, two line volume sources, and three point sources in the AERMOD model. The area source modelled the emissions created from the off-road equipment and the area source parameters have been detailed on pages 9 and 10 of the HRA. The two line sources modeled the onsite truck travel, with one line source representing the portion of the haul truck trips that would occur on the project site and the other representing the maintenance truck trips on the project site. The two line volume source parameters have been detailed on page 10 of the HRA. The three point sources modeled the three most likely places on the project site where idling may occur, with two of the locations representing idling from the haul trucks at the scale and aggregate loading area and the third representing idling from the maintenance trucks. In order to provide additional information about how the emission rate from each source was calculated, printouts of the spreadsheets used for the emission calculations have been provided as Attachment A.

Response to SJVAPCD-10d
The District stated that based upon modeling results provided, the maximum cancer risk for a residential receptor is 9.9 in a million. The District confirmed that this estimated risk is below the District's threshold. The District noted that results in the Draft EIR differ from those included in the report. The District noted the results provided were verified by the District by rerunning the model.

The modeling results presented in the DEIR were not updated to reflect revised modeling from the final version of the HRA. The results in the DEIR did not account for Mitigation Measure 3-3 and 3-4 that require the off-road equipment to meet the year 2019 NOx emissions standards by 2018 and to meet the year 2020 NOx emissions standards by 2019 as well as some other minor modifications to the AERMOD modeling. The HRA provided in the DEIR Appendix provided the correct results. The corrected HRA portion of the Draft EIR will be provided in the errata to the Final EIR as shown below:

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-~~12~~14, the proposed Project would create the highest concentration of DPM at Sensitive Receptor 3, which is at the home located northwest of the Project site and would experience an annual concentration of ~~0.0236~~ 0.0148 µg per m3. Sensitive Receptor 3 was found to result in a cancer risk increase of ~~9.8~~ 6.1 per million people. All diesel emissions concentrations at the nearby sensitive receptors were found to be below the 10.0 in a million cancer risk threshold established by the District. Therefore, no significant long-term health impacts would occur from the operation of diesel trucks and equipment on the Project site.

Table 3.3-14

Cancer Risk from Project Operations[1]

Sensitive Receptor	Receptor Description	Annual $PM_{2.5}$ Concentration ($\mu g/m^3$)	Cancer Risk Per Million People[1]	Threshold of Significance	*Exceed Threshold of Significance*
1	SFR – Southeast of Project Site	~~0.0055~~ 0.0034	~~2.3~~ 1.4	10	*No*

[1] Air Quality and Greenhouse Gas Analysis Report Deer Creek Rock Company, Inc. Quarry Expansion, page 94, prepared by First Carbon Solutions (and included as Appendix "B" of this DEIR)

2	SFR – Southwest of Project Site	~~0.0017~~ 0.0014	~~0.7~~ 0.6	10	*No*
3	SFR – Northwest of Project Site	0.0236 0.0148	~~9.8~~ 6.1	10	*No*
4	SFR – West of Project Site	~~0.0204~~ 0.0120	~~8.4~~ 5.0	10	*No*

Note:
[1] *Cancer risk based on a residential receptor cancer risk = 4.1453E-04 x C_{air}.*
Source: Vista Environmental, Deer Creek Rock Company Hard Rock Mine Expansion Project, Health Risk Assessment; Tulare County, 2014; Calculated from ISC-AERMOD View Version 8.7.0.

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[2]. As noted in Table 3.3-~~13~~14, the maximum cancer risk at any sensitive receptor was estimated to be ~~9.8~~ 6.1 in 1,000,000 people. A cancer risk of ~~9.8~~ 6.1 in a million is the likelihood that up to ~~9.8~~ 6.1 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.

In addition to the cancer risk from exposure to DPM, there is also the potential DPM exposure may result in adverse health impacts from acute and chronic illnesses, which are detailed below.

Chronic Health Impacts

Chronic health effects are characterized by prolonged or repeated exposure to a TAC over many days, months, or years. Symptoms from chronic health impacts may not be immediately apparent and are often irreversible. The chronic hazard index is based on the most impacted sensitive receptor from the proposed Project and is calculated from the annual average concentrations of $PM_{2.5}$~~10~~.

The AERMOD model found that the annual concentration at the nearest sensitive receptor is ~~0.0236~~ 0.0148 µg/m3 for DPM equivalent chronic non-cancer risk emissions. The resulting Hazard Index is ~~0.0047~~ 0.00296, which is significantly less than the threshold of 1.0 or greater. Therefore, the ongoing operations of the proposed Project would result in a less than significant impact due to the non-cancer chronic health risk from TAC emissions created by the proposed Project.

Acute Health Impacts

Acute health effects are characterized by sudden and severe exposure and rapid absorption of a TAC. Normally, a single large exposure is involved. Acute health effects are often treatable and reversible. The acute hazard index is calculated from the maximum hourly concentrations of $PM_{2.5}$ and total organic gases (TOG) at the point of maximum impact (PMI), which has been calculated with the AERMOD model.

[2] San Joaquin Valley Air Pollution Control District. 2014. Draft Guidance for Assessing and Mitigating Air Quality Impacts. http://www.valleyair.org/transportation/GAMAQI-2014/DRAFT_GAMAQI_2014_July_7.pdf . Accessed July, 2014.

The AERMOD model found that the proposed Project would create maximum hourly concentrations of ~~1.998~~ 0.305 µg/m3 of PM~~2.5~~10 and 0.788 ~~5.194~~ µg/m3 of TOG at the PMI. Table 3.3-13 provides a list of TAC pollutants from diesel emissions that have the potential to cause acute health risks, the associated pollutant analyzed in the AERMOD model, the ratio of the pollutant to total diesel emissions, the AREL for each pollutant, and the calculated Acute Hazard Index for each pollutant.

Table 3.3-15

Acute Non Cancer Assessment

TAC from Diesel Emissions	Pollutant	Diesel Weight Ratio1	Acute Reference Exposure Level (AREL)[2] µg/m[3]	*Acute Hazard Index (AHI)*
Acetaldehyde	TOG	0.0735	470	~~*8.12E-04*~~ *1.23E-04*
Acrolein	TOG	0.003	25	~~*6.23E-04*~~ *9.46E-05*
Arsenic	PM	0.000002	0.2	~~*2.00E-05*~~ *3.05E-06*
Benzene	TOG	0.02	1,300	~~*7.99E-05*~~ *1.21E-05*
Chlorine	PM	0.00003	210	~~*2.85E-07*~~ *4.36E-08*
Copper	PM	0.00006	100	~~*1.20E-06*~~ *1.83E-07*
Formaldehyde	TOG	0.1471	55	~~*1.39E-02*~~ *2.11E-03*
Mercury	PM	0.000006	0.6	~~*2.00E-05*~~ *3.05E-06*
Methanol	TOG	0.0408	28,000	~~*7.57E-06*~~ *1.15E-06*
Methyl Ethyl Ketone	TOG	0.0148	13,000	~~*5.91E-06*~~ *8.97E-07*
Nickel	PM	0.000008	6	~~*2.66E-06*~~ *4.07E-07*
Styrene	TOG	0.0006	21,000	~~*1.48E-07*~~ *2.25E-08*
Toluene	TOG	0.0147	37,000	~~*2.06E-06*~~ *3.13E-07*
Vanadium	PM	0.001	30	~~*6.66E-05*~~ *1.02E-05*
Xylene	TOG	0.0104	22,000	~~*2.46E-06*~~ *3.73E-07*
			Total	~~***1.55E-02***~~ ***2.36E-03*** ~~***(0.0155)***~~ ***(0.0024)***

Notes:
[1] *Diesel related TAC composition is based on the ARB speciation profile 6099 for PM and 818 for VOC.*
[2] *Acute REL is from http://oehha.ca.gov/air/allrels.html.*
Source: Vista Environmental, Deer Creek Rock Company Hard Rock Mine Expansion Project, Health Risk Assessment; Tulare County, 2014.

Table 3.3-13 shows that the total acute hazard index from the proposed Project would be ~~0.0155~~ 0.0024. The criterion for significance is an Acute Hazard Index increase of 1.0 or greater, as established by the District. Therefore, the on-going operations of the proposed project would result in a ***Less Than Significant Impact*** due to the non-cancer acute health risk from TAC emissions created by the proposed Project.

Response to SJVAPCD-10e
The District noted that given the previous comments, risks to sensitive receptors would be less than significant assuming the emissions calculations are correct. The District re-ran the modeling and concluded that impacts would be less than significant. The District's comments are noted and a table provided as Attachment A details the calculations used to generate the emissions estimate.

Response to SJVAPCD-11
The District noted the project may be subject to District permits. The District recommended that the project applicant contact the District's Small Business Assistance Office prior to construction to determine if an Authority to Construct is required. The applicant has been provided with a copy of the District's letter and has been made aware of this recommendation.

Response to SJVAPCD-12
The District provided a list of District rules the project may be subject to and encouraged the project applicant to contact the District's Small Business Assistance Office to determine additional rules and permit requirements. The applicant has been provided with a copy of the District's letter and has been made aware of available assistance. The Draft EIR and the Air Quality and Greenhouse Gas Analysis Report (Appendix B) acknowledged the potential rules that the project may be subject to on page 3.3-13 of the Draft EIR and page 9 of Appendix B.

Response to SJVAPCD-13
The District recommended that a copy of the District's comments be provided to the project applicant. The County has provided a copy of the letter to the project proponent.

Response to SJVAPCD-14
The District provided closing remarks to conclude the letter. No response is necessary.

AREA SOURCES

1 pound = 453.59237 grams

Off-Road Equipment

Source ID	Description	Emission rate(g/s)	Base Elev. (m)	Release Height(m)	Initial vert. Dim. Of the Plume	Area in acres	Area in Square Feet	Area in Square meters	Pounds per Day	Hours per day Analyzed	Grams per Day	Based on hours per day (grams/hr)	EF (grams/min)	EF (grams/sec)	Operating Emissions (grams/s-m^2)
EQUIP	PM10 Emissions	8.708E-09	0.00	3.96	3.96	97.96	4267238	396,439	0.66	24	298	12	0.2071198	0.003452	8.70751E-09
EQUIP	VOC Emissions	2.249E-08	0.00	3.96	3.96	97.96	4267238	396,439	1.70	24	770	32	0.53505949	0.0089177	2.24944E-08
				12.00		97.96	4267238								

PM10

0.12 tons per year
365 days per year
0.0003288 tons per day
0.6575342 pounds per day

VOC

0.31 tons per year
365 days per year
0.0008493 tons per day
1.6986301 pounds per day

miles per hou	meters/hour	meters/sec
25	40232.5	11.175694

meters/sec	meters/hour	miles per hour
10.8	38880	24.159572

AERMOD Model Emission Source Statistics for PM10 Emissions

1 m= 0.000621 miles
1 foot = 0.3048 meters

Source ID	Description	Daily Truck Operations[1]	Emission Rate[2] (grams/second)
IDLESCALE	Haul Trucks Idling at Scale	87	9.046E-06
IDLEAGG	Haul Trucks Idling at Aggregate Loading	87	9.046E-06
IDLEMAIN	Maintenance Trucks Idling	17	1.768E-06
RDHAUL	Onsite Haul Trucks	87	3.634E-07
RDONSITE	Onsite Maintenance Trucks	17	7.100E-08
RDOFF	Total offfsite truck emissions		0.000E+00

Point Sources

Source ID	Description	Base Elev. (m)	Release Height(m)	Gas Exit Temp (K)	Stack Inside Dia (m)	Exit Velocity (m/s)	Operating Hours	(minutes)	grams/hour Emission Factor 2019	Total Emissions (grams/min)	grams/sec	(grams)	Time (day)
IDLESCALE	Haul Trucks Idling at Scale	0.00	3.84	366	0.10	51.710	24	5.0	0.1078	0.001796667	2.99E-05	46.893	0.302083
IDLEAGG	Haul Trucks Idling at Aggregate Loading	0.00	3.84	366	0.10	51.710	24	5.0	0.1078	0.001796667	2.99E-05	46.893	0.302083
IDLEMAIN	Maintenance Trucks Idling	0.00	3.84	366	0.10	51.710	24	5.0	0.1078	0.001796667	2.99E-05	9.163	0.059028

Line Volume Sources

Source ID	Description	Length of Side (m)	Vertical Dimen(m)	Trips per day	No of Days per week	Operating Hours	2019 (grams per Mile)	Speed (mph)	1 Truck grams per sec	mph to meters per sec	Time of Travel (sec)	% Running Time (day)	% Running Time (week)
RDHAUL	Onsite Haul Trucks	3.6576	0.85	87	7	24	0.079	15	0.000330779	6.71	1.09	0.001098483	0.001098
RDONSITE	Onsite Maintenance Trucks	3.6576	0.85	17	7	24	0.079	15	0.000330779	6.71	1.09	0.000214646	0.000215

Time of travel is length of side times 2 to account for separated configur

Maintenace Vehilces

9	950,000
4.74	500,000
4.26	
4.26	0.526315789
17.04	

AERMOD Model Emission Source Statistics for TOG Emissions

1 m= 0.000621 miles
1 foot = 0.3048 meters

Source ID	Description	Daily Truck Operations[1]	Emission Rate[2] (grams/second)
IDLESCALE	Haul Trucks Idling at Scale	87	7.065E-04
IDLEAGG	Haul Trucks Idling at Aggregate Loading	87	7.065E-04
IDLEMAIN	Maintenance Trucks Idling	17	1.381E-04
RDHAUL	Onsite Haul Trucks	87	4.215E-06
RDONSITE	Onsite Maintenance Trucks	17	8.236E-07
RDOFF	Total offfsite truck emissions		0.000E+00

Point Sources

grams/hour
Emission Factor

Total Emissions

Source ID	Description	Base Elev. (m)	Release Height(m)	Gas Exit Temp (K)	Stack Inside Dia (m)	Exit Velocity (m/s)	Operating Hours	(minutes)	2019 (grams/min)	grams/sec	(grams)	Time (day)
IDLESCALE	Haul Trucks Idling at Scale	0.00	3.84	366	0.10	51.710	24	5.0	8.4196	0.140326667	0.002339	3662.526	0.302083
IDLEAGG	Haul Trucks Idling at Aggregate Loading	0.00	3.84	366	0.10	51.710	24	5.0	8.4196	0.140326667	0.002339	3662.526	0.302083
IDLEMAIN	Maintenance Trucks Idling	0.00	3.84	366	0.10	51.710	24	5.0	8.4196	0.140326667	0.002339	715.666	0.059028

Line Volume Sources

Source ID	Description	Length of Side (m)	Vertical Dimen(m)	Trips per day	No of Days per week	Operating Hours	2019 (grams per Mile)	Speed (mph)	1 Truck grams per sec	mph to meters per sec	Time of Travel (sec)	% Running Time (day)	% Running Time (week)
RDHAUL	Onsite Haul Trucks	3.6576	0.85	87	7	24	0.921	15	0.003836954	6.71	1.09	0.001098483	0.001098
RDONSITE	Onsite Maintenance Trucks	3.6576	0.85	17	7	24	0.921	15	0.003836954	6.71	1.09	0.000214646	0.000215

Time of travel is length of side times 2 to account for separated configur

Maintenace Vehilces

9	950,000
4.74	500,000
4.26	
4.26	0.526315789
17.04	

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

January 20, 2015

Hector Guerra
County of Tulare
Resource Management Agency
5961 South Mooney Boulevard
Visalia, CA 93277

Project: Draft Environmental Impact Report for Deer Creek Rock SMARA Permit Amendment

District CEQA Reference No: 20140966

Dear Mr. Guerra:

The San Joaquin Valley Unified Air Pollution Control District (District) has reviewed the Draft Environmental Impact Report for the Deer Creek Rock SMARA Permit Amendment proposing to increase the annual production from 500,000 tons per year to 950,000 tons per year, affirm the operating hours from 7:00 am to 6:00 pm Monday through Friday with allowance to work on weekends to meet demands, and increase the truck hauling from 200 round trips per day to 376 round trips per day. The project is located at 27671 Avenue 120/Road 27 (APN# 305-190-018, -020), in Porterville, CA. The District offers the following comments:

1) On Page ES-2, the Draft EIR states, *"The applicant is proposing to increase production of the existing mining permit from 400,000 to 500,000 tons of aggregate annually to 950,000 tons of aggregate annually through lateral expansion of the excavating site within the existing approved site."* However, on Page 2-3, the Draft EIR states, *"The applicant is not proposing to increase production of the existing mining permit nor is any lateral or depth expansion proposed."* These two statements are inconsistent. Therefore, the District recommends reviewing and revising these statements for accuracy.

2) On Page ES-2 and 2-3, the Draft EIR estimates the number of increased truck hauling trips to 376 round trips per day. However, throughout the document, 375 round trips per day are listed. The District recommends reviewing and revising the document for consistency.

Seyed Sadredin
Executive Director/Air Pollution Control Officer

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3) On Page ES-2 and 2-3, the Draft EIR states that the heavy duty truck trips are expected to increase from 22,500 to 42,300 annual round trips. However, in Appendix B, Page 2, the *Air Quality and Greenhouse Gas Analysis Report* states that currently there are approximately 20,000 (40,000 round trips) heavy duty diesel trucks accessing the site during the operating year. This is inconsistent with the information presented in the Draft EIR. Therefore, the District recommends clarification of this apparent discrepancy and revisions to the Draft EIR and/or appendices as necessary.

4) The Draft EIR states that the operating hours are from 7:00 am to 6:00 pm Monday through Friday in addition to work on the weekends to meet demands. Based on this information, the number of days of operation per year is 260 days or more. However, the number of days per year used in the operational emissions analysis is 225 days. The District recommends clarification of this apparent discrepancy in the number of operational days and revisions to the Draft EIR as necessary.

5) Table 3.3-4 and Table 3.3-6 incorrectly list a threshold of 500 tons for SOx. The District would like to clarify that the threshold for SOx is 27 tons per year. Therefore, the District recommends revising the tables to reflect the correct threshold for SOx. Although the threshold is incorrect, it does not appear that there would be a significant impact for SOx.

6) Table 3.3-4 through Table 3.3-11, incorrectly list either a threshold of 15 tons or 500 tons for CO. The District would like to clarify that the threshold for CO is 100 tons per year. Therefore, the District recommends revising the tables to reflect the correct threshold for CO. Although the threshold is incorrect, it does not appear that there would be a significant impact for CO.

7) In Appendix B, Page 7, the *Air Quality and Greenhouse Gas Analysis Report* states that *"The project would not conflict with or obstruct implementation of the applicable air quality plan."* However, on Page 76, the *Air Quality and Greenhouse Gas Analysis Report* states that, *"The project would conflict with or obstruct implementation of the applicable air quality plan."* These two statements are inconsistent. Therefore, the District recommends reviewing and revising these statements for accuracy.

8) In Appendix B, Page 72, the *Air Quality and Greenhouse Gas Analysis Report* states that emissions for employee trips are modeled in CalEEMod in the construction phases under worker trips. However, the emissions for worker trips are not presented in the emissions Table 3.3-4 through Table 3.3-11. Therefore, the District recommends including emissions from employees in Table 3.3-4 through Table 3.3-11.

9) The following comments are regarding the health risk assessment (HRA):

9a) The District does not require chronic and acute risks from truck travel and idling emissions to be estimated. The cancer risks from DPM emissions are going to be much more significant than any chronic or acute risks.

9b) A Mitigation Measure to limit truck idling time to 5 minutes per truck is included, but it exempts trucks in an active queue. Allowing trucks to idle while in an active queue defeats the purpose of the Mitigation Measure.

9c) There is no detailed explanation of the emission estimates. Tables should be provided to clarify all emission calculations. (There is a copy of the CALEEMOD run where emissions from off-road diesel equipment were calculated.)

9d) Based upon modeling results provided, the maximum cancer risk for a residential receptor is 9.9 in a million. This estimated risk is below the District's threshold. The results provided differ from those included in the report. The results provided were verified by the District by rerunning the model.

Given the above comments, risks to which sensitive receptors would be exposed are less than significant if the emission calculations are correct.

10) The proposed project may require District permits. Prior to the start of construction the project proponent should contact the District's Small Business Assistance Office at (559) 230-5888 to determine if an Authority to Construct (ATC) is required.

11) The proposed project may be subject to the following District rules: Regulation VIII (Fugitive PM10 Prohibitions), Rule 4102 (Nuisance), Rule 4601 (Architectural Coatings), and Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations). In the event an existing building will be renovated, partially demolished or removed, the project may be subject to District Rule 4002 (National Emission Standards for Hazardous Air Pollutants). The above list of rules is neither exhaustive nor exclusive. To identify other District rules or regulations that apply to this project or to obtain information about District permit requirements, the applicant is strongly encouraged to contact the District's Small Business Assistance Office at (559) 230-5888. Current District rules can be found online at: www.valleyair.org/rules/1ruleslist.htm.

12) The District recommends that a copy of the District's comments be provided to the project proponent.

District staff is available to meet with you and/or the applicant to further discuss the regulatory requirements that are associated with this project. If you have any questions or require further information, please call Sharla Yang at (559) 230-5934.

Sincerely,

Arnaud Marjollet
Director of Permit Services

Sharla Yang

For Chay Thao
Program Manager

AM: sy

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Monitoring Reporting Program Chapter 8

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 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			
Air Quality							
3-1	**The following air pollution control measures shall be implemented to reduce emissions from off-road equipment:** • **Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485 of the California Code of Regulations). Clear signage shall be provided for construction workers at all access points.** • **All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. Maintain maintenance records onsite and all equipment shall be checked by a certified visible emissions evaluator.**	Approval of permit amendment					
3-2	**The following air pollution control measures shall be implemented to reduce emissions from trucks**	Approval of permit amendment	Verification by County of incorporation	County of Tulare Planning			

	operating on the Project site: • **Minimize truck idling time to 5 minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485 of the California Code of Regulations). Post signs in areas where trucks will park instructing drivers to shut off engines unless in an active queue.**		of project design features	Department			
3-3	**By the year 2018 or prior to increasing production by 400,000 tons of additional material, the applicant shall ensure that the fleet average NO_x emissions meet the 2019 standard of 3.5 grams of NO_x per brake-horsepower hour.**	Approval of permit amendment	Verification by County of incorporation of project design features	County of Tulare Planning Department			
3-4	**By the year 2019 or prior to increasing production by 450,000 tons of additional material, the applicant shall ensure that the fleet average NOx emissions meet the 2020 standard of 2.3 grams of NOx per brake-horsepower hour.**	Approval of permit amendment	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 immediately 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**	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			

	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.**	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			
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**	Ongoing monitoring during	Retention of professional paleontologist/	County of Tulare Planning			

	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**	subsurface excavation	ongoing monitoring/ submittal of Report of Findings, if applicable	and Public Works Department			

	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.**						
Hazards & Hazardous Material							
8-1	**No truck maintenance or washing shall occur at the site. Heavy equipment maintenance (such as a loader) will occur on a concrete surface or at an offsite location. If such a surface is unavailable or impractical, 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 immediately cleaned up.**	Ongoing	During SMARA Permit inspection	County of Tulare Planning Departm ent			
Noise							
12-1	**Provide all hearing protection measures outlined in MSHA's Noise Standard Actions required by Mine Operators.**	Ongoing monitoring		County of Tulare Planning Department			

Mandatory Findings of Significance (See Mitigation Measures already proposed above for Cultural, and Cumulatively Significant Impacts

STATEMENT OF OVERRIDING CONSIDERATIONS

As the Project will have no significant and unavoidable effects; a Statement of Overriding Considerations is not necessary or required as part of this Final EIR.

ERRATA

AND

EFFECTED AND CORRECTED PAGES OF THE EIR

Errata

Executive Summary

Page ES-2; Original:

- "Increase truck hauling by 176 round trips per day (from a maximum of 200 round trips per day to a maximum of 376 round trips per day)."

Page ES-2; Revised:

- Increase truck hauling by 176 round trips per day (from a maximum of 200 round trips per day to a maximum of ~~376~~ 375 round trips per day).

Page ES-2; Original:

- Result in no change to the estimated total rock production of 15,000,000 tons of rock material during the estimated 50 years of operation.

Page ES-2; Revised:

- Result in no change to the estimated total rock production of ~~15,000,000~~ 40,000,000 tons of rock material during the estimated 50 years of operation.

Chapter 2

Page 2-1; Original:

"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. 14-002 (Deer Creek Rock) to allow for expanded operations at this site. The proposed modifications include increasing annual production and increasing annual truck trips to accommodate the increase in production. No increase in maximum excavation depth is proposed."

Clarification:

"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. 14-002 (Deer Creek Rock) to allow for expanded operations at this site. Usage of the word "expansion" throughout the document, and

technical studies, applies to expanded excavation which will be limited to and confined within the existing, approved excavation area. The existing, approved areas of excavation will not be modified. The footprint of the entire approved excavation areas will not change and the depth will not change. The proposed modifications include increasing annual production and increasing annual truck trips to accommodate the increase in production."

Corrections to Table 3.3.4

Table 3.3-4
Year 1: 2015 (increase of 100,000 tons processed, unmitigated)

Type	Source	ROG (tons)	NOx (tons)	PM_{10} (tons)	$PM_{2.5}$ (tons)	CO (tons)	SOx (tons)
Permitted	Dust from Material Processing	0.00	0.00	0.50	0.09	0.00	0.00
Non-Permitted	Drilling and Blasting	0.00	0.43	0.05	0.01	1.68	0.05
	Off-Road Equipment Exhaust	0.19	1.32	0.08	0.08	0.94	0.02
	Off-Road Equipment Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
	On-site and Off-site On-Road Mobile (LDT2, MHDT, HHDT) (exhaust)[1]	0.06	0.35	0.01	0.01	0.67	0.00
	On-site and Off-site On-Road Mobile (LDT2, MHDT, HHDT) (fugitive dust)[1]	0.00	0.00	0.10	0.03	0.00	0.00
	Off-site Haul Trucks (exhaust)	0.14	1.89	0.03	0.03	1.37	0.00
	Off-site Haul Trucks (fugitive dust)	0.00	0.00	0.11	0.03	0.00	0.00
	Fugitive Dust (truck loading, wind erosion, storage piles, unpaved road dust)	0.00	0.00	2.61	0.42	0.00	0.00
	Subtotal Non-Permitted	**0.39**	**3.99**	**~~3.48~~ 2.98**	**~~0.69~~ 0.60**	**4.66**	**0.08**
Total		**~~1.34~~ 0.39**	**~~10~~ 3.99**	**~~10~~ 3.48**	**~~15~~ 0.69**	**~~15~~ 4.66**	**~~500~~ 0.08**
Significance Threshold		10	**~~No~~** 10	**~~No~~** 15	**~~No~~** 15	**~~No~~** 100	**~~No~~** 27
Exceed Significance Threshold?		No	**~~0.39~~** No	**~~3.99~~** No	**~~3.48~~** No	**~~0.69~~** No	**~~4.66~~** No

Notes:
ROG = reactive organic gases NOx = nitrogen oxides PM10 and PM2.5 = particulate matter
SO_x = oxides of sulfur CO = carbon monoxide
1. Includes off-site worker trips

Table 3.3-4 Year 1: 2015 (increase of 100,000 tons processed, unmitigated)							
Type	**Source**	**ROG (tons)**	**NOx (tons)**	**PM_{10} (tons)**	**$PM_{2.5}$ (tons)**	**CO (tons)**	**SOx (tons)**
Source of blasting: Spreadsheets prepared by FCS (Appendix B) Source of off road equipment (exhaust): ARB emission factors for NOx and PM10 based on Tier level, CalEEMod OFFROAD equipment emission factors Assumes 225 days per year based on applicant provided operating schedule Source of equipment: Deer Creek Rock Company, 2014							

Correction to Table 3.3-5, at **CO (tons)** column, **Significance Threshold** row: delete ~~500~~ and insert 100.

Correction to Table 3.3-6, at **CO (tons)** column, **Significance Threshold** row: delete ~~15~~ and insert 100; and at **SOx (tons)** column, **Significance Threshold** row: delete ~~500~~ and insert 27

Correction to Table 3.3-7, at **CO (tons)** column, **Significance Threshold** row: delete ~~500~~ and insert 100.

Correction to Table 3.3-8, at **CO (tons)** column, **Significance Threshold** row: delete ~~500~~ and insert 100.

Correction to Table 3.3-9, at **CO (tons)** column, **Significance Threshold** row: delete ~~500~~ and insert 100.

Correction to Table 3.3-11, at **CO (tons)** column, **Significance Threshold** row: delete ~~500~~ and insert 100.

Corrections to Table 3.3.10

Table 3.3-10

Year 4: 2018 (increase of 400,000 tons processed, Mitigated)

Type	Source	ROG (tons)	NOx (tons)	PM_{10} (tons)	$PM_{2.5}$ (tons)	CO (tons)	SOx (tons)
Permitted	Dust from Material Processing	0.00	0.00	~~1.50~~ 2.0	~~0.28~~ 0.37	0.00	0.00
Non-Permitted	Drilling and Blasting	0.00	~~1.28~~ 1.70	~~0.38~~ 0.65	~~0.07~~ 0.12	~~5.03~~ 6.70	~~0.15~~ 0.20
	Off-Road Equipment Exhaust	~~0.58~~ 0.77	~~2.53~~ 1.69	~~0.23~~ 0.30	~~0.24~~ 0.32	~~2.82~~ 3.76	~~0.07~~ 0.09
	Off-Road Equipment Fugitive Dust	0.00	0.00	~~0.01~~ 0.02	0.00	0.00	0.00
	On-site and Off-site On-Road Mobile (LDT2, MHDT, HHDT) (exhaust)[1]	0.05	~~0.42~~ 0.47	0.01	0.01	~~0.58~~ 0.55	0.00
	On-site and Off-Site On-Road Mobile (LDT2, MHDT, HHDT) (fugitive dust)[1]	0.00	0.00	~~0.11~~ 0.12	0.03	0.00	0.00
	Off-site Haul Trucks (exhaust)	~~0.32~~ 0.39	~~4.21~~ 5.01	~~0.07~~ 0.09	~~0.06~~ 0.08	~~3.39~~ 4.26	~~0.01~~ 0.02
	Off-site Haul Trucks (fugitive dust)	0.00	0.00	~~0.32~~ 0.42	~~0.09~~ 0.12	0.00	0.00
	Fugitive Dust (truck loading, wind erosion, storage piles, unpaved road dust)	0.00	0.00	~~6.93~~ 9.09	~~0.86~~ 1.07	0.00	0.00
	Subtotal Non-Permitted	~~0.95~~ 1.21	~~8.44~~ 9.75	~~8.05~~ 10.58	~~1.35~~ 1.73	~~11.83~~ 15.27	~~0.24~~ 0.31
Total		**~~0.95~~ 1.21**	**~~8.44~~ 9.75**	**~~9.55~~ 12.58**	**~~1.63~~ 2.10**	**~~11.83~~ 15.27**	**~~0.24~~ 0.31**
Significance Threshold		10	10	15	15	~~500~~100	27
Exceed Significance Threshold?		No	No	No	No	No	No

Notes:
ROG = reactive organic gases NOx = nitrogen oxides PM10 and PM2.5 = particulate matter
SO_x = oxides of sulfur CO = carbon monoxide
1. Includes off-site worker trips
Source of blasting: Spreadsheets prepared by FCS (Appendix B)
Source of off road equipment (exhaust): ARB emission factors for NOx and PM10 based on Tier level, CalEEMod OFFROAD equipment emission factors
Assumes 225 days per year based on applicant provided operating schedule
Source of equipment: Deer Creek Rock Company, 2014

As shown in Table 3.3-12, the proposed Project would create the highest concentration of DPM at Sensitive Receptor 3, which is at the home located northwest of the Project site and would experience an annual concentration of 0.0236 µg per m3. Sensitive Receptor 3 was found to result in a cancer risk increase of 9.8 per million people. All diesel emissions concentrations at the nearby sensitive receptors were found to be below the 10.0 in a million cancer risk threshold established by the District. Therefore, no significant long-term health impacts would occur from the operation of diesel trucks and equipment on the Project site.

Chapter 3.3

Beginning at Page 3.3-35 to 3.3-37; Original:

"As shown in Table 3.3-12, the proposed Project would create the highest concentration of DPM at Sensitive Receptor 3, which is at the home located northwest of the Project site and would experience an annual concentration of 0.0236 µg per m3. Sensitive Receptor 3 was found to result in a cancer risk increase of 9.8 per million people. All diesel emissions concentrations at the nearby sensitive receptors were found to be below the 10.0 in a million cancer risk threshold established by the District. Therefore, no significant long-term health impacts would occur from the operation of diesel trucks and equipment on the Project site.

Table 3.3-14
Cancer Risk from Project Operations[1]

Sensitive Receptor	Receptor Description	Annual $PM_{2.5}$ Concentration ($\mu g/m^3$)	Cancer Risk Per Million People[1]	Threshold of Significance	*Exceed Threshold of Significance*
1	SFR – Southeast of Project Site	0.0055	2.3	10	*No*
2	SFR – Southwest of Project Site	0.0017	0.7	10	*No*
3	SFR – Northwest of Project Site	0.0236	9.8	10	*No*
4	SFR – West of Project Site	0.0204	8.4	10	*No*

Note:
[1] Cancer risk based on a residential receptor cancer risk = 4.1453E-04 x C_{air}.
Source: Vista Environmental, Deer Creek Rock Company Hard Rock Mine Expansion Project, Health Risk Assessment; Tulare County, 2014; Calculated from ISC-AERMOD View Version 8.7.0.

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] [footnote 24 in the DEIR]Air Quality and Greenhouse Gas Analysis Report Deer Creek Rock Company, Inc. Quarry Expansion, page 94, prepared by First Carbon Solutions (and included as Appendix "B" of this DEIR)

1 in 100 people will get into a car accident[2]. As noted in Table 3.3-13, the maximum cancer risk at any sensitive receptor was estimated to be 9.8 in 1,000,000 people. A cancer risk of 9.8 in a million is the likelihood that up to 9.8 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.

In addition to the cancer risk from exposure to DPM, there is also the potential DPM exposure may result in adverse health impacts from acute and chronic illnesses, which are detailed below.

Chronic Health Impacts

Chronic health effects are characterized by prolonged or repeated exposure to a TAC over many days, months, or years. Symptoms from chronic health impacts may not be immediately apparent and are often irreversible. The chronic hazard index is based on the most impacted sensitive receptor from the proposed Project and is calculated from the annual average concentrations of $PM_{2.5}$.

The AERMOD model found that the annual concentration at the nearest sensitive receptor is 0.0236 µg/m3 for DPM equivalent chronic non-cancer risk emissions. The resulting Hazard Index is 0.0047, which is significantly less than the threshold of 1.0 or greater. Therefore, the ongoing operations of the proposed Project would result in a less than significant impact due to the non-cancer chronic health risk from TAC emissions created by the proposed Project.

Acute Health Impacts

Acute health effects are characterized by sudden and severe exposure and rapid absorption of a TAC. Normally, a single large exposure is involved. Acute health effects are often treatable and reversible. The acute hazard index is calculated from the maximum hourly concentrations of $PM_{2.5}$ and total organic gases (TOG) at the point of maximum impact (PMI), which has been calculated with the AERMOD model.

The AERMOD model found that the proposed Project would create maximum hourly concentrations of 1.998 µg/m3 of PM2.5 and 5.194 µg/m3 of TOG at the PMI. Table 3.3-13 provides a list of TAC pollutants from diesel emissions that have the potential to cause acute health risks, the associated pollutant analyzed in the AERMOD model,

[2] [footnote 25 in the DEIR] San Joaquin Valley Air Pollution Control District. 2014. Draft Guidance for Assessing and Mitigating Air Quality Impacts. http://www.valleyair.org/transportation/GAMAQI-2014/DRAFT_GAMAQI_2014_July_7.pdf . Accessed July, 2014.

the ratio of the pollutant to total diesel emissions, the AREL for each pollutant, and the calculated Acute Hazard Index for each pollutant.

Table 3.3-15
Acute Non Cancer Assessment

TAC from Diesel Emissions	Pollutant	Diesel Weight Ratio1	Acute Reference Exposure Level (AREL)[2] µg/m^3	*Acute Hazard Index (AHI)*
Acetaldehyde	TOG	0.0735	470	*8.12E-04*
Acrolein	TOG	0.003	25	*6.23E-04*
Arsenic	PM	0.000002	0.2	*2.00E-05*
Benzene	TOG	0.02	1,300	*7.99E-05*
Chlorine	PM	0.00003	210	*2.85E-07*
Copper	PM	0.00006	100	*1.20E-06*
Formaldehyde	TOG	0.1471	55	*1.39E-02*
Mercury	PM	0.000006	0.6	*2.00E-05*
Methanol	TOG	0.0408	28,000	*7.57E-06*
Methyl Ethyl Ketone	TOG	0.0148	13,000	*5.91E-06*
Nickel	PM	0.000008	6	*2.66E-06*
Styrene	TOG	0.0006	21,000	*1.48E-07*
Toluene	TOG	0.0147	37,000	*2.06E-06*
Vanadium	PM	0.001	30	*6.66E-05*
Xylene	TOG	0.0104	22,000	*2.46E-06*
			Total	***1.55E-02 (0.0155)***

Notes:
[1] *Diesel related TAC composition is based on the ARB speciation profile 6099 for PM and 818 for VOC.*
[2] *Acute REL is from http://oehha.ca.gov/air/allrels.html.*
Source: Vista Environmental, Deer Creek Rock Company Hard Rock Mine Expansion Project, Health Risk Assessment; Tulare County, 2014.

Table 3.3-15 shows that the total acute hazard index from the proposed Project would be 0.0155."

Correction:

"As shown in Table 3.3-~~12~~14, the proposed Project would create the highest concentration of DPM at Sensitive Receptor 3, which is at the home located northwest of the Project site and would experience an annual concentration of ~~0.0236~~ 0.0148 µg per m3. Sensitive Receptor 3 was found to result in a cancer risk increase of ~~9.8~~ 6.1 per million people. All diesel emissions concentrations at the nearby sensitive receptors were found to be below the 10.0 in a million cancer risk threshold established by the District. Therefore, no significant long-term health impacts would occur from the operation of diesel trucks and equipment on the Project site.

Table 3.3-14 Cancer Risk from Project Operations[3]					
Sensitive Receptor	**Receptor Description**	**Annual $PM_{2.5}$~~10~~ Concentration ($\mu g/m^3$)**	**Cancer Risk Per Million People[1]**	**Threshold of Significance**	***Exceed Threshold of Significance***
1	SFR – Southeast of Project Site	~~0.0055~~ 0.0034	~~2.3~~ 1.4	10	*No*
2	SFR – Southwest of Project Site	~~0.0017~~ 0.0014	~~0.7~~ 0.6	10	*No*
3	SFR – Northwest of Project Site	0.0236 0.0148	~~9.8~~ 6.1	10	*No*
4	SFR – West of Project Site	~~0.0204~~ 0.0120	~~8.4~~ 5.0	10	*No*

Note:
[1] *Cancer risk based on a residential receptor cancer risk = 4.1453E-04 x C_{air}.*
Source: Vista Environmental, Deer Creek Rock Company Hard Rock Mine Expansion Project, Health Risk Assessment; Tulare County, 2014; Calculated from ISC-AERMOD View Version 8.7.0.

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[4]. As noted in Table 3.3-~~13~~14, the maximum cancer risk at any sensitive receptor was estimated to be ~~9.8~~ 6.1 in 1,000,000 people. A cancer risk of ~~9.8~~ 6.1 in a million is the likelihood that up to ~~9.8~~ 6.1 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.

In addition to the cancer risk from exposure to DPM, there is also the potential DPM exposure may result in adverse health impacts from acute and chronic illnesses, which are detailed below.

Chronic Health Impacts

Chronic health effects are characterized by prolonged or repeated exposure to a TAC over many days, months, or years. Symptoms from chronic health impacts may not be immediately apparent and are often irreversible. The chronic hazard index is based on the most impacted sensitive receptor from the proposed Project and is calculated from the annual average concentrations of $PM_{2.5}$~~10~~.

[3] [footnote 24 in the DEIR] Air Quality and Greenhouse Gas Analysis Report Deer Creek Rock Company, Inc. Quarry Expansion, page 94, prepared by First Carbon Solutions (and included as Appendix "B" of this DEIR)
[4] [footnote 25 in the DEIR] San Joaquin Valley Air Pollution Control District. 2014. Draft Guidance for Assessing and Mitigating Air Quality Impacts. http://www.valleyair.org/transportation/GAMAQI-2014/DRAFT_GAMAQI_2014_July_7.pdf . Accessed July, 2014.

The AERMOD model found that the annual concentration at the nearest sensitive receptor is ~~0.0236~~ 0.0148 µg/m3 for DPM equivalent chronic non-cancer risk emissions. The resulting Hazard Index is ~~0.0047~~ 0.00296, which is significantly less than the threshold of 1.0 or greater. Therefore, the ongoing operations of the proposed Project would result in a less than significant impact due to the non-cancer chronic health risk from TAC emissions created by the proposed Project.

Acute Health Impacts

Acute health effects are characterized by sudden and severe exposure and rapid absorption of a TAC. Normally, a single large exposure is involved. Acute health effects are often treatable and reversible. The acute hazard index is calculated from the maximum hourly concentrations of $PM_{2.5}$ and total organic gases (TOG) at the point of maximum impact (PMI), which has been calculated with the AERMOD model.

The AERMOD model found that the proposed Project would create maximum hourly concentrations of ~~1.998~~ 0.305 µg/m3 of PM~~2.5~~10 and 0.788 ~~5.194~~ µg/m3 of TOG at the PMI. Table 3.3-13 provides a list of TAC pollutants from diesel emissions that have the potential to cause acute health risks, the associated pollutant analyzed in the AERMOD model, the ratio of the pollutant to total diesel emissions, the AREL for each pollutant, and the calculated Acute Hazard Index for each pollutant.

Table 3.3-15
Acute Non Cancer Assessment

TAC from Diesel Emissions	Pollutant	Diesel Weight Ratio1	Acute Reference Exposure Level (AREL)[2] µg/m^3	*Acute Hazard Index (AHI)*
Acetaldehyde	TOG	0.0735	470	~~*8.12E-04*~~ *1.23E-04*
Acrolein	TOG	0.003	25	~~*6.23E-04*~~ *9.46E-05*
Arsenic	PM	0.000002	0.2	~~*2.00E-05*~~ *3.05E-06*
Benzene	TOG	0.02	1,300	~~*7.99E-05*~~ *1.21E-05*
Chlorine	PM	0.00003	210	~~*2.85E-07*~~ *4.36E-08*
Copper	PM	0.00006	100	~~*1.20E-06*~~ *1.83E-07*
Formaldehyde	TOG	0.1471	55	~~*1.39E-02*~~ *2.11E-03*
Mercury	PM	0.000006	0.6	~~*2.00E-05*~~ *3.05E-06*
Methanol	TOG	0.0408	28,000	~~*7.57E-06*~~ *1.15E-06*
Methyl Ethyl Ketone	TOG	0.0148	13,000	~~*5.91E-06*~~ *8.97E-07*

Table 3.3-15 Acute Non Cancer Assessment				
Nickel	PM	0.000008	6	~~2.66E-06~~ 4.07E-07
Styrene	TOG	0.0006	21,000	~~1.48E-07~~ 2.25E-08
Toluene	TOG	0.0147	37,000	~~2.06E-06~~ 3.13E-07
Vanadium	PM	0.001	30	~~6.66E-05~~ 1.02E-05
Xylene	TOG	0.0104	22,000	~~2.46E-06~~ 3.73E-07
			Total	~~**1.55E-02**~~ **2.36E-03** ~~**(0.0155)**~~ **(0.0024)**

Notes:
[1] *Diesel related TAC composition is based on the ARB speciation profile 6099 for PM and 818 for VOC.*
[2] *Acute REL is from http://oehha.ca.gov/air/allrels.html.*
Source: Vista Environmental, Deer Creek Rock Company Hard Rock Mine Expansion Project, Health Risk Assessment; Tulare County, 2014.

Table 3.3-13 shows that the total acute hazard index from the proposed Project would be ~~0.0155~~ 0.0024."

Appendix B – Air Quality and Greenhouse Gas Analysis Report

Page 76, Original:

"The project would conflict with or obstruct implementation of the applicable air quality plan."

Correction:

"The project not would conflict with or obstruct implementation of the applicable air quality plan."

Page TOC-5; Original:

Correction:

PROJECT DESCRIPTION

The Applicant, Deer Creek Rock Co., Inc., currently operates a rock and gravel surface mining operation on 98 acres, as permitted by PMR 01-001, PMR 09-002, and PSP 01-055 (ZA). The permit amendments requested by PMR 14-002 will:

- Increase annual production by 450,000 tons per year (from a maximum of 500,000 tons per year to a maximum of 950,000 tons per year).
- Increase truck hauling by 176 round trips per day (from a maximum of 200 round trips per day to a maximum of 375 round trips per day).
- Result in no increase in the maximum depth of the mine, as expansion will occur laterally within the existing mining footprint.
- Allow consistency between PMR 01-001, PMR 09-002, and PSP 01-055(ZA).
- Result in no change to the estimated total rock production of 40,000,000 tons of rock material during the estimated 50 years of operation.
- Result in no change to the approved reclamation plan.

PROJECT LOCATION

The existing 98 acre proposed Project site is part of a 118 acre property at 27671 Avenue 120/Road 27, Porterville, CA 93257. The site is located south of Deer Creek Drive, approximately 1/3 mile east of Avenue 120 and Road 272, and includes Assessor Parcel Numbers 305-190-018 and 305-190-020. The site is in Section 21, Township 22 South, Range 28 East, MDB&M, and can be found within the Success Dam United States Geological Survey 7.5 minute topographic quadrangle. The site is in the low foothills of the Central Sierra Nevada on the eastern edge of the Tulare basin, where elevations range from 560-885 feet National Geodetic Vertical Datum. The coordinates of the proposed Project site are:

Latitude: N 36° 00' 19"
Longitude: W 118° 57'12"

PROJECT ELEMENTS

As noted earlier, the current operation is excavating and transporting between 400,000 to 500,000 tons of aggregate annually, and the Applicant is requesting to increase its excavating and transporting operations to 950,000 tons of aggregate annually. The proposed Project will result in an increase of heavy-duty truck trips from the operation to a maximum of 42,300 trips per year (from the currently permitted 22,500 trips per year). Daily trips are anticipated to increase from 200 to 375 round-trips which is an increase from 22,500 to 42,300 annual round-trips. This will require approximately seven additional employees. The customer base from the proposed Project is anticipated to remain mostly from within Tulare County.

The Applicant is proposing to increase production of the existing mining permit from 400,000 to 500,000 tons of aggregate annually to 950,000 tons of aggregate annually through lateral expansion of the excavating site within the existing, approved site.. All proposed mining

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. 14-002 (Deer Creek Rock) to allow for expanded operations at this site. Usage of the word "expansion" throughout the document, and technical studies, applies to expanded excavation which will be limited to and confined within the existing, approved excavation area. The existing, approved areas of excavation will not be modified. The footprint of the entire approved excavation areas will not change and the depth will not change. The proposed modifications include increasing annual production and increasing annual truck trips to accommodate the increase in production. No increase in maximum excavation depth is proposed.

PROJECT LOCATION

The existing 98 acre proposed Project site is part of a 118 acre property at 27671 Avenue 120/Road 27, Porterville, CA 93257. The site is located south of Deer Creek Drive, approximately 1/3 mile east of Avenue 120 and Road 272 (see Figure 2-1), and includes Assessor Parcel Numbers 305-190-018 and 305-190-020. The site is in Section 21, Township 22 South, Range 28 East, MDB&M, and can be found within the Success Dam United States Geological Survey 7.5 minute topographic quadrangle. The site is in the low foothills of the Central Sierra Nevada on the eastern edge of the Tulare basin, where elevations range from 560-885 feet National Geodetic Vertical Datum. The coordinates of the proposed Project site are:

Latitude: N 36° 00' 19"
Longitude: W 118° 57'12"

CURRENT OPERATIONS

The current operation includes a surface mining operation on 98 acres of a 118 acre site (See Figure 2-2). Aggregate materials are currently excavated and processed on-site by the Deer Creek Rock Company. Currently, maximum annual extraction does not exceed 500,000 tons and the site is allowed to be excavated to 360 feet Mean Sea Level. Common equipment used for daily operations include, but is not limited to: Excavator, Haul Truck, Rock Drill D-8 Caterpillar, Bobcat, Rock Breaker, Pick-up Trucks, 25 and 40 ton Cranes, Welders, Generators and Hand Tools.

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 First Carbon Solutions is included as Appendix "B" of this document which is used as the basis for determining this Project will result in less than significant impacts. A detailed review of potential impacts is provided in the following analysis.

INTRODUCTION

California Environmental Quality Act (CEQA) Requirements

This section of the Draft Environmental Impact Report (DEIR) 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]

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

[1] CEQA Guidelines, Section 15126.2 (a)

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 PM_{10} emission standards for many years."[2]

Local Air Quality

The existing local air quality can be characterized by reviewing relevant air pollution concentration data near the project area for comparison to the NAAQS and CAAQS. Air samples are collected continuously for some pollutants and periodically for other pollutants depending on the type of monitoring equipment installed. Monitoring sites are usually chosen to be representative of emission in a community. PM_{10}, $PM_{2.5}$, and nitrogen dioxide (NO2) is monitored at the Visalia-N. Church Street station, which is the closest station to the project site and is located approximately 29 miles northwest of the project site. Ozone is monitored from the Porterville-1839 Newcomb Street station, located approximately 6 miles northwest of the project site. Carbon monoxide emissions are monitored from Fresno-1st Station, which is 70 miles northwest of the proposed Project site. The measurements made at these stations may not be representative of the Project area, but they are assumed to provide a conservative estimate for a smaller rural setting, such as the project site. Table 3.3-1 summarizes 2011 through 2013 published air monitoring data, which is the most recent 3-year period available. The amount over the standards and the number of days each year that standards were exceeded provide a good indicator of severity of the air quality problems in the local area. The data shows that during the past few years, the proposed Project area has exceeded the ozone, PM_{10}, and $PM_{2.5}$ standards.

Table 3.3-1
Air Quality Monitoring Summary

Air Pollutant, Location	Averaging Time	Item	2011	2012	*2013*
Ozone	1 Hour	Max 1 Hour (ppm)	0.104	0.102	*0.112*
		Days > State Standard (0.09 ppm)	15	10	*5*
	8 Hour	Max 8 Hour (ppm)	0.095	0.092	*0.096*
		Days > State Standard (0.07 ppm)	82	80	*52*
		Days > National Standard (0.075 ppm)	47	44	*23*
Carbon Monoxide	8 Hour	Max 8 Hour (ppm)	2.29	2.22	*ID*
		Days > State Standard (9.0 ppm)	0	0	*ID*
		Days > National Standard (9 ppm)	0	0	*ID*
Nitrogen Dioxide	Annual	Annual Average (ppm)	0.012	0.012	*0.012*
	1 Hour	Max 1 Hour (ppm)	0.058	0.061	*0.062*
		Days > State Standard (0.18 ppm)	0	0	*0*
Inhalable	Annual	Annual Average ($\mu g/m^3$)	34	38.1	*44.5*

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

Table 3.3-1
Air Quality Monitoring Summary

Air Pollutant, Location	Averaging Time	Item	2011	2012	*2013*
coarse particles (PM_{10})	24 Hour	24 Hour ($\mu g/m^3$)	78.1	75.7	*155.0*
		Days > State Standard (50 $\mu g/m^3$)	11	15	*16*
		Days > National Standard (150 $\mu g/m^3$)	0	0	*1*
Fine particulate matter ($PM_{2.5}$)	Annual	Annual Average ($\mu g/m^3$)	16.1	14.8	*18.7*
	24 Hour	24 Hour ($\mu g/m^3$)	73.2	76.2	*124.2*
		Days > National Standard (35 $\mu g/m^3$)	9	7	*14*

Notes and Abbreviations:
> = exceed *ppm = parts per million* *$\mu g/m^3$ = micrograms per cubic meter*
max = maximum
State Standard = California Ambient Air Quality Standard
National Standard = National Ambient Air Quality Standard
Ozone data from Porterville Station.
Nitrogen dioxide, PM_{10} and $PM_{2.5}$ data from Visalia-N. Church Street Station.
Carbon monoxide data from Fresno-1st Station.
Sources: California Air Resources Board 2014.

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 3.3-2."[3]

[3] Air Quality and Greenhouse Gas Analysis Report, Deer Creek Rock Company, Inc. Quarry Expansion, page 17, prepared by First Carbon Solutions (and included as Appendix "B" of this DEIR)

Table 3.3-2 San Joaquin Valley Air Basin Attainment Status		
Pollutant	***Designation***	
	Federal[4]	***State***[5]
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	Attainment	*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*

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,

[4] Ibid.
[5] California Air Resources Board. Ambient Air Quality Standards. Updated 6/7/12. www.arb.ca.gov/research/aaqs/aaqs2.pdf . Accessed August, 2014.

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[7] 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] Air Quality and Greenhouse Gas Analysis Report, Deer Creek Rock Company, Inc. Quarry Expansion, page 24, prepared by First Carbon Solutions (and included as Appendix "B" of this DEIR)
[7] California Air Resources Board. 1998. The Toxic Air Contaminant Identification Process: Toxic Air Contaminant Emissions from Diesel-fueled Engines. www.arb.ca.gov/toxics /dieseltac/factsht1.pdf . Accessed July 2014.

emissions inventory's PM_{10} database, ambient PM_{10} 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."[8]

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."[9]

[8] Air Quality and Greenhouse Gas Analysis Report, Deer Creek Rock Company, Inc. Quarry Expansion, page 25, prepared by First Carbon Solutions (and included as Appendix "B" of this DEIR)
[9] Tulare County 2030 General Plan 2030 Update RDEIR, pages 3.3-1 to 3.3-2

Table 3.3-3
State & National Criteria Air Pollutant Standards, Effects, and Sources[10]

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		

[10] California Air Resources Board. 2013. Air Quality Standards. Updated 6/7/12. Website: www.arb.ca.gov/research/aaqs/aaqs2.pdf. Accessed August, 2014.

Table 3.3-3
State & National Criteria Air Pollutant Standards, Effects, and Sources[10]

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	Manure, storage tanks, ponds, anaerobic lagoons, and land application sites are the primary sources of hydrogen sulfide. Anthropogenic sources include the

Table 3.3-3
State & National Criteria Air Pollutant Standards, Effects, and Sources[10]

Pollutant	Averaging Time	State Standard	National Standard	Pollutant Health and Atmospheric Effects	Major Pollutant Sources
				can cause pulmonary edema.	combustion of sulfur containing fuels (oil and coal).
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.

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."[11]

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.

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

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 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."[12]

Local Policy & Regulations

San Joaquin Valley Air Pollution Control District

"The San Joaquin Valley Air Pollution Control District (Air District [or 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 PM_{10} Maintenance Plan. The PM_{10} Maintenance Plan emphasizes reducing fugitive dust as a means of achieving attainment of the federal standards for PM_{10}. 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 PM_{10} reductions of 45 percent. Rule 9510 requires a 33 percent reduction in operational NOx emissions and a 50 percent reduction in PM_{10}. The reductions are calculated by comparing the unmitigated baseline emissions and mitigated emissions from the first year of project

[12] Ibid. 3.3-6 to 3.3-7

operation. The Air District recommends using the [CalEEMOD] model to quantify 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 [or Guide]), 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, which provides guidance to local officials and staff on developing and implementing local policies and programs to be included in local jurisdictions' general plans."[13]

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

[13] Op. Cit. 3.3-7 to 3.3-8

Rule 4702 – Internal Combustion Engines – Phase 2
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 proposed Project because it is a project on a facility whose primary functions are subject to Rule 2201 or Rule 2010. "[14]

"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).

[14] Air Quality and Greenhouse Gas Analysis Report, Deer Creek Rock Company, Inc. Quarry Expansion, page 9, prepared by First Carbon Solutions (and included as Appendix "B" of this DEIR)

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."[15]

Ozone Plans

The Air Basin is designated nonattainment of state and federal health-based air quality standards for ozone. To meet Clean Air Act requirements for the one-hour ozone standard, the District adopted an Extreme Ozone Attainment Demonstration Plan in 2004, with an attainment date of 2010. Although EPA revoked the federal 1-hour ozone standard effective June 15, 2005 and replaced it with an 8-hour standard, the requirement to submit a plan for that standard remained in effect for the San Joaquin Valley.

The planning requirements for the 1-hour plan remain in effect until replaced by a federal 8-hour ozone attainment plan. The EPA approved the 2004 Extreme Ozone Attainment Demonstration Plan, including revisions to the plan, on March 8, 2010, effective April 7, 2010. However, the Air Basin failed to attain the standard in 2010 and was subject to a $29-million Clean Air Act penalty. The penalty is being collected through an additional $12 motor vehicle registration surcharge for each passenger vehicle registered in the Air Basin that will be applied to pollution

[15] Ibid. 9-11

reduction programs in the region. The District also instituted a more robust ozone episodic program to reduce emissions on days with the potential to exceed the ozone standards.

EPA originally classified the Air Basin as serious nonattainment for the 1997 federal 8-hour ozone standard with an attainment date of 2013. On April 30, 2007, the District's Governing Board adopted the 2007 Ozone Plan, which contained analysis showing a 2013 attainment target to be infeasible. The 2007 Ozone Plan details the plan for achieving attainment on schedule with an "extreme nonattainment" deadline of 2024. At its adoption of the 2007 Ozone Plan, the District also requested a reclassification to extreme nonattainment. ARB approved the plan in June 2007, and EPA approved the request for reclassification to extreme nonattainment on April 15, 2010."[16]

Particulate Matter Plans

The Air Basin was designated nonattainment of state and federal health-based air quality standards for PM_{10}. The Air Basin is also designated nonattainment of state and federal standards for $PM_{2.5}$.

To meet Clean Air Act requirements for the PM_{10} standard, the District adopted a PM_{10} Attainment Demonstration Plan (Amended 2003 PM_{10} Plan and 2006 PM_{10} Plan), which had an attainment date of 2010. The District achieved the standard early and adopted the 2007 PM_{10} Maintenance Plan in September 2007 to assure the San Joaquin Valley's continued attainment of the EPA's PM_{10} standard. The EPA designated the valley as an attainment/maintenance area for PM_{10} on September 25, 2008. Although the San Joaquin Valley has exceeded the standard since then, those days were considered exceptional events that are not considered a violation of the standard for attainment purposes.

The 2008 $PM_{2.5}$ Plan builds upon the comprehensive strategy adopted in the 2007 Ozone Plan to bring the Basin into attainment of the 1997 national standards for $PM_{2.5}$. The EPA has identified NOx and sulfur dioxide as precursors that must be addressed in air quality plans for the 1997 $PM_{2.5}$ standards. The 2008 $PM_{2.5}$ Plan is a continuation of the District's strategy to improve the air quality in the Basin. The EPA issued final approval of the 2008 $PM_{2.5}$ Plan on November 9, 2011 effective January 9, 2012. EPA approved the emissions inventory, the reasonably available control measures/reasonably available control technology demonstration, reasonable further progress demonstration, attainment demonstration and associated air quality modeling, and the transportation conformity motor vehicle emissions budgets. EPA also granted California's request to extend the attainment deadline for the San Joaquin Valley to April 5, 2015 and approved commitments to measures and reductions by the District and the ARB. Finally, it disapproved the SIP's contingency provisions and issued a protective finding for transportation conformity determinations.

In December 2012, the District adopted the 2012 $PM_{2.5}$ Plan to bring the San Joaquin Valley into attainment of the EPA's 2006 24-hour $PM_{2.5}$ standard of 35 $\mu g/m^3$. The California Air Resources Board (ARB) approved the District's 2012 PM2.5 Plan for the 2006 standard at a public hearing

[16] Op. Cit. 32-33

on January 24, 2013. This plan seeks to bring the Valley into attainment with the standard by 2019, with the expectation that most areas will achieve attainment before that time.[17]

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.

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-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:

[17] Op. Cit. 34

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-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-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-4.5 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.

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."[18]

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, $PM_{2.5}$, and PM_{10}, if project-generated emissions of either of the ozone precursor pollutants (ROG and NOx), PM_{10}, or $PM_{2.5}$ would exceed the District's significance thresholds, then the project would be considered to conflict with the attainment plans.

As discussed in Response to 3.3 b) and 3.3 d), proposed Project emissions would not exceed the District's significance thresholds with mitigation incorporation. Therefore, the Project would not conflict with or obstruct implementation of the regional air quality plan.

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

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

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

[18] Op. Cit. 76

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.[19]

Carbon Monoxide

The District's 2014 Draft Guide includes an operational threshold for CO of 100 tons per year. As shown in Table 3.3-8, the Project would increase CO emissions by 16.92 tons per year in year five as the project increases the production to the full 450,000 tons of material. This is far under the District's draft threshold of 100 tons per year. Emissions are ***Less Than Significant.***

Lead

Lead along with several other metals would be produced principally from fugitive dust generated by the various aggregated production activities. The potential health impacts from lead are discussed in Impact d) 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 the response for Impact c, below) 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

[19] Op. Cit. 77

The project will emit a small amount of sulfur dioxide during operation. The District's 2014 Draft Guide includes an operational threshold for SOx of 27 tons per year. As shown in Table 3.3-8, the Project would increase SOx emissions by 0.31 ton in the year five as production reaches the full 450,000 tons of material processed. This would be far less than the District's draft threshold of 27 tons per year. Additionally, the Air Basin is in attainment for sulfur dioxide. Therefore, Project emissions of sulfur dioxide are ***Less Than Significant.***

Ozone, PM10, PM2.5, Nitrogen Dioxide, NOx

As discussed in Response c) below, the ROG, PM_{10}, and $PM_{2.5}$ are less than the District's significance thresholds for all years as the Project reaches the full 450,000 tons of material processed. There would be localized on-site 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.***

The Project would not exceed the District's NOx threshold of significance in years one (2015), two (2016), and three (2017), but would exceed the threshold in years four and five without mitigation. Compliance with ARB's In-Use Off-Road Diesel Vehicle Regulation would further reduce the fleet average NOx emissions by 36 percent in year three (2017) to meet the average NOx emission rate of 4.6 grams per brake-horsepower hour. In years four and five, the Applicant would need to accelerate compliance with regulatory reduction NOx emission rate targets. Mitigation Measure AIR-3 requires the Applicant to ensure that the Project's fleet average NOx emissions meet the 2019 regulatory NOx emission factor target of 3.5 grams per brake-horsepower hour by the year 2018 or when the Project reaches 400,000 tons of material produced. Mitigation Measure AIR-4 requires the applicant to ensure that the Project meets the 2020 regulatory NOx emission factor target of 2.3 grams per brake-horsepower hour by the year 2019 or when the Project reaches 450,000 tons of material produced. Compliance with regulations and implementation of mitigation measures would reduce the Project's emissions to less than the District's NOx threshold of significance. Therefore, the impact is ***Less Than Significant.***

Cumulative Impact Analysis: ***Less Than Significant Impact***

The geographic area of this cumulative analysis is San Joaquin Valley 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)?

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 July 2014 Draft Guide contains a threshold for PM_{10} and $PM_{2.5}$ of 15 tons per year each, 27 tons per year for SOx, and 100 tons per year for CO which are to be used in this impact analysis.

The 2014 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 PM_{10}
- 15 tons per year $PM_{2.5}$
- 27 tons per year SOx
- 100 tons per year CO

Operational Emissions

Operational emissions occur over the lifetime of the Project. The unmitigated emissions for the processing of material for years one through five are shown in Table 3.3-4

Year 1: 2015 (increase of 100,000 tons processed, unmitigated) through **Error! Reference source not found.**. As shown in the tables, the emissions do not exceed the District's thresholds of significance for ROG, PM_{10}, $PM_{2.5}$, CO, and SOx for all years until an additional 400,000 tons of material are being produced in year four (2018) and the full 450,000 tons of additional material are being produced in year five (2019). In years four and five, the NOx emissions do exceed the District's thresholds of significance for NOx and are potentially significant.

Table 3.3-4
Year 1: 2015 (increase of 100,000 tons processed, unmitigated)

Type	Source	ROG (tons)	NOx (tons)	PM_{10} (tons)	$PM_{2.5}$ (tons)	CO (tons)	SOx (tons)
Permitted	Dust from Material Processing	0.00	0.00	0.50	0.09	0.00	0.00
Non-Permitted	Drilling and Blasting	0.00	0.43	0.05	0.01	1.68	0.05
	Off-Road Equipment Exhaust	0.19	1.32	0.08	0.08	0.94	0.02
	Off-Road Equipment Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
	On-site and Off-Site On-Road Mobile (LDT2, MHDT, HHDT) (exhaust) [1]	0.06	0.35	0.01	0.01	0.67	0.00
	On-site and Off-Site On-Road Mobile (LDT2, MHDT, HHDT) (fugitive dust) [1]	0.00	0.00	0.10	0.03	0.00	0.00
	Off-site Haul Trucks (exhaust)	0.14	1.89	0.03	0.03	1.37	0.00
	Off-site Haul Trucks (fugitive dust)	0.00	0.00	0.11	0.03	0.00	0.00
	Fugitive Dust (truck loading, wind erosion, storage piles, unpaved road dust)	0.00	0.00	2.61	0.42	0.00	0.00
	Subtotal Non-Permitted	**0.39**	**3.99**	**2.98**	**0.60**	**4.66**	**0.08**
Total		**0.39**	3.99	3.48	0.69	4.66	0.08
Significance Threshold		10	10	15	15	100	27
Exceed Significance Threshold?		No	**No**	**No**	**No**	**No**	**No**

Notes:
ROG = reactive organic gases NOx = nitrogen oxides PM10 and PM2.5 = particulate matter
SO_x = oxides of sulfur CO = carbon monoxide
1. Includes off-site worker trips
Source of blasting: Spreadsheets prepared by FCS (Appendix B)
Source of off road equipment (exhaust): ARB emission factors for NOx and PM10 based on Tier level, CalEEMod OFFROAD equipment emission factors
Assumes 225 days per year based on applicant provided operating schedule
Source of equipment: Deer Creek Rock Company, 2014

Table 3.3-5
Year 2: 2016 (increase of 200,000 tons processed, unmitigated)

Type	Source	ROG (tons)	NOx (tons)	PM_{10} (tons)	$PM_{2.5}$ (tons)	CO (tons)	SOx (tons)
Permitted	Dust from Material Processing	0.00	0.00	1.00	0.19	0.00	0.00
Non-Permitted	Drilling and Blasting	0.00	0.85	0.22	0.04	3.35	0.10
	Off-Road Equipment Exhaust	0.39	2.64	0.15	0.16	1.88	0.04
	Off-Road Equipment Fugitive Dust	0.00	0.00	0.01	0.00	0.00	0.00
	On-site and Off-site On-Road Mobile (LDT2, MHDT, HHDT) (exhaust)[1]	0.02	0.12	0.00	0.00	0.22	0.00
	On-site and Off-site On-Road Mobile (LDT2, MHDT, HHDT) (fugitive dust)[1]	0.00	0.00	0.03	0.01	0.00	0.00
	Off-site Haul Trucks (exhaust)	0.26	3.21	0.05	0.05	2.55	0.01
	Off-site Haul Trucks (fugitive dust)	0.00	0.00	0.21	0.06	0.00	0.00
	Fugitive Dust (truck loading, wind erosion, storage piles, unpaved road dust)	0.00	0.00	4.77	0.64	0.00	0.00
	Subtotal Non-Permitted	0.67	6.82	5.45	0.96	8.01	0.15
Total		**0.67**	**6.82**	**6.45**	**1.15**	**8.01**	**0.15**
Significance Threshold		10	10	15	15	100	27
Exceed Significance Threshold?		No	No	No	No	No	No

Notes:
ROG = reactive organic gases NOx = nitrogen oxides PM10 and PM2.5 = particulate matter
SO_x = oxides of sulfur CO = carbon monoxide
1. Includes off-site worker trips
Source of blasting: Spreadsheets prepared by FCS (Appendix B)
Source of off road equipment (exhaust): ARB emission factors for NOx and PM10 based on Tier level, CalEEMod OFFROAD equipment emission factors
Assumes 225 days per year based on applicant provided operating schedule
Source of equipment: Deer Creek Rock Company, 2014

Table 3.3-6
Year 3: 2017 (increase of 300,000 tons processed, unmitigated)

Type	Source	ROG (tons)	NOx (tons)	PM_{10} (tons)	$PM_{2.5}$ (tons)	CO (tons)	SOx (tons)
Permitted	Dust from Material Processing	0.00	0.00	1.50	0.28	0.00	0.00
Non-Permitted	Drilling and Blasting	0.00	1.28	0.38	0.09	5.03	0.15
	Off-Road Equipment Exhaust	0.58	3.96	0.23	0.24	2.82	0.07
	Off-Road Equipment Fugitive Dust	0.00	0.00	0.01	0.00	0.00	0.00
	On-site and Off-site On-Road Mobile (LDT2, MHDT, HHDT) (exhaust)[1]	0.05	0.42	0.01	0.01	0.58	0.05
	On-site and Off-site On-Road Mobile (LDT2, MHDT, HHDT) (fugitive dust)[1]	0.00	0.00	0.11	0.03	0.00	0.00
	Off-site Haul Trucks (exhaust)	0.32	4.21	0.07	0.06	3.39	0.01
	Off-site Haul Trucks (fugitive dust)	0.00	0.00	0.32	0.09	0.00	0.00
	Fugitive Dust (truck loading, wind erosion, storage piles, unpaved road dust)	0.00	0.00	6.93	0.86	0.00	0.00
	Subtotal Non-Permitted	0.95	9.87	8.05	1.35	11.83	0.24
Total		**0.67**	**0.95**	**9.87**	**9.55**	**1.63**	**11.83**
Significance Threshold		10	10	10	15	100	27
Exceed Significance Threshold?		No	No	No	No	No	No

Notes:
ROG = reactive organic gases NOx = nitrogen oxides PM10 and PM2.5 = particulate matter
SO_x = oxides of sulfur CO = carbon monoxide
1. Includes off-site worker trips
Source of blasting: Spreadsheets prepared by FCS (Appendix B)
Source of off road equipment (exhaust): ARB emission factors for NOx and PM10 based on Tier level, CalEEMod OFFROAD equipment emission factors
Assumes 225 days per year based on applicant provided operating schedule
Source of equipment: Deer Creek Rock Company, 2014

Table 3.3-7
Year 4: 2018 (increase of 400,000 tons processed, unmitigated)

Type	Source	ROG (tons)	NOx (tons)	PM_{10} (tons)	$PM_{2.5}$ (tons)	CO (tons)	SOx (tons)
Permitted	Dust from Material Processing	0.00	0.00	2.00	0.37	0.00	0.00
Non-Permitted	Drilling and Blasting	0.00	1.70	0.54	0.10	6.70	0.20
	Off-Road Equipment Exhaust	0.77	5.28	0.30	0.32	3.76	0.09
	Off-Road Equipment Fugitive Dust	0.00	0.00	0.02	0.00	0.00	0.00
	On-site and Off-site On-Road Mobile (LDT2, MHDT, HHDT) (exhaust)[1]	0.05	0.47	0.01	0.01	0.55	0.05
	On-site and Off-site On-Road Mobile (LDT2, MHDT, HHDT) (fugitive dust)[1]	0.00	0.00	0.12	0.03	0.00	0.00
	Off-site Haul Trucks (exhaust)	0.39	5.01	0.09	0.08	4.26	0.02
	Off-site Haul Trucks (fugitive dust)	0.00	0.00	0.42	0.12	0.00	0.00
	Fugitive Dust (truck loading, wind erosion, storage piles, unpaved road dust)	0.00	0.00	9.09	1.07	0.00	0.00
	Subtotal Non-Permitted	1.21	12.47	10.58	1.73	15.27	0.31
Total		**1.21**	**12.47**	**12.58**	**2.10**	**15.27**	**0.31**
Significance Threshold		10	10	15	15	100	27
Exceed Significance Threshold?		No	Yes	No	No	No	No

Notes:
ROG = reactive organic gases NOx = nitrogen oxides PM10 and PM2.5 = particulate matter
SO_x = oxides of sulfur CO = carbon monoxide
1. Includes off-site worker trips
Source of blasting: Spreadsheets prepared by FCS (Appendix B)
Source of off road equipment (exhaust): ARB emission factors for NOx and PM10 based on Tier level, CalEEMod OFFROAD equipment emission factors
Assumes 225 days per year based on applicant provided operating schedule
Source of equipment: Deer Creek Rock Company, 2014

Table 3.3-8
Year 5: 2019 (increase of 450,000 tons processed, unmitigated)

Type	Source	ROG (tons)	NOx (tons)	PM_{10} (tons)	$PM_{2.5}$ (tons)	CO (tons)	SOx (tons)
Permitted	Dust from Material Processing	0.00	0.00	2.25	0.42	0.00	0.00
Non-Permitted	Drilling and Blasting	0.00	1.91	0.73	0.11	7.54	0.23
	Off-Road Equipment Exhaust	0.87	5.92	0.34	0.36	4.22	0.10
	Off-Road Equipment Fugitive Dust	0.00	0.00	0.02	0.00	0.00	0.00
	On-site and Off-site On-Road Mobile (LDT2, MHDT, HHDT) (exhaust)[1]	0.04	0.40	0.01	0.01	0.44	0.00
	On-site and Off-site On-Road Mobile (LDT2, MHDT, HHDT) (fugitive dust)[1]	0.00	0.00	0.12	0.03	0.00	0.00
	Off-site Haul Trucks (exhaust)	0.42	5.26	0.10	0.09	4.73	0.02
	Off-site Haul Trucks (fugitive dust)	0.00	0.00	0.48	0.13	0.00	0.00
	Fugitive Dust (truck loading, wind erosion, storage piles, unpaved road dust)	0.00	0.00	10.17	1.18	0.00	0.00
	Subtotal Non-Permitted	1.34	13.49	11.97	1.92	16.92	0.35
Total		**1.34**	**13.49**	**14.22**	**2.34**	**16.92**	**0.35**
Significance Threshold		10	10	15	15	100	27
Exceed Significance Threshold?		No	Yes	No	No	No	No

Notes:
ROG = reactive organic gases NOx = nitrogen oxides PM10 and PM2.5 = particulate matter
SO_x = oxides of sulfur CO = carbon monoxide
1. Includes off-site worker trips
Source of blasting: Spreadsheets prepared by FCS (Appendix B)
Source of off road equipment (exhaust): ARB emission factors for NOx and PM10 based on Tier level, CalEEMod OFFROAD equipment emission factors
Assumes 225 days per year based on applicant provided operating schedule
Source of equipment: Deer Creek Rock Company, 2014

The second largest source of NOx is from the on-road diesel haul trucks. The applicant does not have control over those sources; therefore, mitigation in the form of cleaner trucks is not feasible. The off-road equipment is under the applicant's control and is subject to ARB's In-Use Off-Road Diesel-Fueled Fleets Rule. The regulation requires fleets to apply exhaust retrofits that capture pollutants before they are emitted to the air, and to accelerate turnover of fleets to newer, cleaner engines. The regulation establishes fleet average emission rates for PM and NOx that decline over time. Each year, the regulation requires each fleet to meet

the fleet average emission rate targets for PM or apply the highest level verified diesel emission control system to 20 percent of its horsepower. In addition, large and medium fleets are required each year to meet the fleet average emission rate targets for NOx or to turn over a certain percent of their horsepower (8 percent in early years, and 10 percent in later years). "Turn over" means repowering with a cleaner engine, rebuilding the engine to a more stringent emissions configuration, retiring a vehicle, replacing a vehicle with a new or used piece, or designating a dirty vehicle as a low-use vehicle. If retrofits that reduce NOx emissions become available, they may be used in lieu of turnover as long as they achieve the same emission benefits. The ARB estimates that the total cumulative cost of the regulation between 2009 and 2030 is expected to be between $3.0 and $3.4 billion (2006 dollars), with the majority of these costs occurring between 2010 and 2021.

Based on the total horsepower for the proposed Project, the off-road fleet would be considered a medium-sized fleet. The current emissions rate for NOx for the fleet is 7.2 gram per brake-horsepower-hour (g/bhp). The fleet would need to meet a target of 4.6 g/bhp by 2017. This is a 36 percent reduction in emissions.

The Project's emissions for the third year of production after compliance with ARB's In-Use Off-Road Diesel Regulation in 2017 are shown in **Error! Reference source not found.**. As shown in Table 3.3-9, the Project's compliance with regulation would further reduce NOx emissions.

Table 3.3-9
Year 3: 2017 (increase of 300,000 tons processed, Compliance with Regulation)

Type	Source	ROG (tons)	NOx (tons)	PM_{10} (tons)	$PM_{2.5}$ (tons)	CO (tons)	SOx (tons)
Permitted	Dust from Material Processing	0.00	0.00	1.50	0.28	0.00	0.00
Non-Permitted	Drilling and Blasting	0.00	1.28	0.38	0.07	5.03	0.15
	Off-Road Equipment Exhaust	0.58	2.53	0.23	0.24	2.82	0.07
	Off-Road Equipment Fugitive Dust	0.00	0.00	0.01	0.00	0.00	0.00
	On-site and Off-site On-Road Mobile (LDT2, MHDT, HHDT) (exhaust)[1]	0.05	0.42	0.01	0.01	0.58	0.00
	On-site and Off-site On-Road Mobile (LDT2, MHDT, HHDT) (fugitive dust)[1]	0.00	0.00	0.11	0.03	0.00	0.00
	Off-site Haul Trucks (exhaust)	0.32	4.21	0.07	0.06	3.39	0.01
	Off-site Haul Trucks (fugitive dust)	0.00	0.00	0.32	0.09	0.00	0.00
	Fugitive Dust (truck loading, wind erosion,	0.00	0.00	6.93	0.86	0.00	0.00

Table 3.3-9 Year 3: 2017 (increase of 300,000 tons processed, Compliance with Regulation)							
Type	**Source**	**ROG (tons)**	**NOx (tons)**	**PM_{10} (tons)**	**$PM_{2.5}$ (tons)**	**CO (tons)**	**SOx (tons)**
	storage piles, unpaved road dust)						
	Subtotal Non-Permitted	0.95	8.44	8.05	1.35	11.83	0.24
Total		**0.95**	**8.44**	**9.55**	**1.63**	**11.83**	**0.24**
Significance Threshold		10	10	15	15	100	27
Exceed Significance Threshold?		No	No	No	No	No	No

Notes:
ROG = reactive organic gases NOx = nitrogen oxides PM10 and PM2.5 = particulate matter
SO_x = oxides of sulfur CO = carbon monoxide
1. Includes off-site worker trips
Source of blasting: Spreadsheets prepared by FCS (Appendix B)
Source of off road equipment (exhaust): ARB emission factors for NOx and PM10 based on Tier level, CalEEMod OFFROAD equipment emission factors
Assumes 225 days per year based on applicant provided operating schedule
Source of equipment: Deer Creek Rock Company, 2014

In year four, compliance with regulation would not produce enough reduction in emissions to result in a less than significant level of NO_x emissions; therefore, the applicant will implement Mitigation Measure AIR-3, which would accelerate compliance with ARB's In-Use OFFROAD regulatory measure. The Applicant would commit to achieving the 2019 average NO_x emission rate target for the fleet in 2018 or when production meets 400,000 tons of material produced. **Error! Reference source not found.** shows the Project NOx emissions in 2018 after implementation of mitigation are ***Less Than Significant.***

Table 3.3-10 Year 4: 2018 (increase of 400,000 tons processed, Mitigated)							
Type	**Source**	**ROG (tons)**	**NOx (tons)**	**PM_{10} (tons)**	**$PM_{2.5}$ (tons)**	**CO (tons)**	**SOx (tons)**
Permitted	Dust from Material Processing	0.00	0.00	2.0	0.37	0.00	0.00
Non-Permitted	Drilling and Blasting	0.00	1.70	0.65	0.12	6.70	0.20
	Off-Road Equipment Exhaust	0.77	1.69	0.30	0.32	3.76	0.09
	Off-Road Equipment Fugitive Dust	0.00	0.00	0.02	0.00	0.00	0.00
	On-site and Off-site On-Road Mobile (LDT2, MHDT, HHDT) (exhaust)[1]	0.05	0.47	0.01	0.01	0.55	0.00
	On-site and Off-Site On-Road Mobile (LDT2, MHDT, HHDT) (fugitive dust)[1]	0.00	0.00	0.12	0.03	0.00	0.00
	Off-site Haul Trucks (exhaust)	0.39	5.01	0.09	0.08	4.26	0.02

Table 3.3-10 Year 4: 2018 (increase of 400,000 tons processed, Mitigated)							
Type	**Source**	**ROG (tons)**	**NOx (tons)**	**PM_{10} (tons)**	**$PM_{2.5}$ (tons)**	**CO (tons)**	**SOx (tons)**
	Off-site Haul Trucks (fugitive dust)	0.00	0.00	0.42	0.12	0.00	0.00
	Fugitive Dust (truck loading, wind erosion, storage piles, unpaved road dust)	0.00	0.00	9.09	1.07	0.00	0.00
	Subtotal Non-Permitted	1.21	9.75	10.58	1.73	15.27	0.31
Total		**1.21**	**9.75**	**12.58**	**2.10**	**15.27**	**0.31**
Significance Threshold		10	10	15	15	100	27
Exceed Significance Threshold?		No	No	No	No	No	No

Notes:
ROG = reactive organic gases NOx = nitrogen oxides PM10 and PM2.5 = particulate matter
SO_x = oxides of sulfur CO = carbon monoxide
1. Includes off-site worker trips
Source of blasting: Spreadsheets prepared by FCS (Appendix B)
Source of off road equipment (exhaust): ARB emission factors for NOx and PM10 based on Tier level, CalEEMod OFFROAD equipment emission factors
Assumes 225 days per year based on applicant provided operating schedule
Source of equipment: Deer Creek Rock Company, 2014

In year five, compliance with regulation would not produce enough reduction in emissions to result in a less than significant level of NOx emissions; therefore, the Applicant will implement Mitigation Measure AIR-4, which would accelerate compliance with ARB's In-Use OFFROAD regulatory measure. The Applicant would commit to achieving the 2020 average NOx emission rate target for the fleet in 2019 or when production meets 450,000 tons of material produced. **Error! Reference source not found.** shows the Project emissions in 2019 after implementation of mitigation; the resulting NOx emissions are ***Less Than Significant***.

Table 3.3-11 Year 5: 2019 (increase of 450,000 tons processed, Mitigated)							
Type	**Source**	**ROG (tons)**	**NOx (tons)**	**PM_{10} (tons)**	**$PM_{2.5}$ (tons)**	**CO (tons)**	**SOx (tons)**
Permitted	Dust from Material Processing	0.00	0.00	2.25	0.42	0.00	0.00
Non-Permitted	Drilling and Blasting	0.00	1.91	0.73	0.11	7.54	0.23
	Off-Road Equipment Exhaust	0.87	1.89	0.34	0.36	4.22	0.10
	Off-Road Equipment Fugitive Dust	0.00	0.00	0.02	0.00	0.00	0.00
	On-site and Off-site On-Road Mobile (LDT2, MHDT, HHDT) (exhaust)	0.04	0.40	0.01	0.01	0.44	0.00

Table 3.3-11
Year 5: 2019 (increase of 450,000 tons processed, Mitigated)

Type	Source	ROG (tons)	NOx (tons)	PM_{10} (tons)	$PM_{2.5}$ (tons)	CO (tons)	SOx (tons)
	On-site and Off-site On-Road Mobile (LDT2, MHDT, HHDT) (fugitive dust)	0.00	0.00	0.12	0.03	0.00	0.00
	Off-site Haul Trucks (exhaust)	0.42	5.26	0.10	0.09	4.73	0.02
	Off-site Haul Trucks (fugitive dust)	0.00	0.00	0.48	0.13	0.00	0.00
	Fugitive Dust (truck loading, wind erosion, storage piles, unpaved road dust)	0.00	0.00	10.17	1.18	0.00	0.00
	Subtotal Non-Permitted	1.34	9.46	11.97	1.92	16.92	0.35
Total		**1.34**	**9.46**	**14.22**	**2.34**	**16.92**	**0.35**
Significance Threshold		10	10	15	15	100	27
Exceed Significance Threshold?		No	No	No	No	No	No

Notes:
ROG = reactive organic gases NOx = nitrogen oxides PM10 and PM2.5 = particulate matter
SO_x = oxides of sulfur CO = carbon monoxide
1. Includes off-site worker trips
Source of blasting: Spreadsheets prepared by FCS (Appendix B)
Source of off road equipment (exhaust): ARB emission factors for NOx and PM10 based on Tier level, CalEEMod OFFROAD equipment emission factors
Assumes 225 days per year based on applicant provided operating schedule
Source of equipment: Deer Creek Rock Company, 2014

The reductions proposed by existing regulations are stringent and will require significant investment in capital. As shown above, the applicant's commitment to accelerate compliance with regulation will result in NOx emissions that are less than the District's thresholds of significance. Accordingly, the proposed Project would not exceed the District's thresholds of emissions for NOx, ROG, PM_{10}, $PM_{2.5}$, CO, and SOx; emissions would be ***Less Than Significant.***

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 With Mitigation***

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, PM_{10}, and $PM_{2.5}$, 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 that were described in **Error! Reference source not found.** 3.3-3. 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 increase in emissions would not exceed the District's regional significance threshold for ROG or NOx. The proposed Project would not result in cumulative health impacts.

The health impacts of ozone and particulate matter can be presented in a number of ways. A comparison of ambient concentrations of the pollutants to the state and federal ambient air quality standards is most clear. If concentrations are below the standard, it is safe to say that no health impact would occur to anyone. When concentrations exceed the standard, impacts will vary based on how much the standard is exceeded. The EPA developed the Air Quality Index (AQI) as an easy to understand measure of health impact. The AQI and related health effects for ozone is provide in Table 3.3-12.

Table 3.3-12
Air Quality Index and Health Effects[20]

Air Quality Index/ 8-hour Ozone Concentration	***Health Effects Description***
AQI – 100 - Moderate	***Sensitive Groups**: Children and people with asthma are the groups most at risk.*
Concentration 75 ppb	***Health Effects Statements**: Unusually sensitive individuals may experience respiratory symptoms.*
	***Cautionary Statements**: Unusually sensitive people should consider limiting prolonged outdoor exertion.*
AQI – 150 – Unhealthy for Sensitive Groups	***Sensitive Groups**: Children and people with asthma are the groups most at risk.*
Concentration 95 ppb	***Health Effects Statements**: Increasing likelihood of respiratory symptoms and breathing discomfort in active children, adults,*

[20] U.S. Environmental Protection Agency. 2014. Clean Air Act Requirements and History. http://www.epa.gov/air/caa/requirements.html Accessed July, 2014.

Table 3.3-12 Air Quality Index and Health Effects[20]	
	and people with respiratory disease, such as asthma.
	***Cautionary Statements**: Active children and adults, and people with respiratory disease, such as asthma, should limit prolonged outdoor exertion.*
AQI – 200 – Unhealthy	***Sensitive Groups**: Children and people with asthma are the groups most at risk*
Concentration 115 ppb	***Health Effects Statements**: Greater likelihood of respiratory symptoms and breathing difficulty in active children and adults and people with respiratory disease, such as asthma; possible respiratory effects in general population*
	***Cautionary Statements**: Active children and adults, and people with respiratory disease, such as asthma, should avoid prolonged outdoor exertion; everyone else, especially children, should limit prolonged outdoor exertion*
AQI – 210 – Very Unhealthy	***Sensitive Groups**: Children and people with asthma are the groups most at risk*
Concentration 139 ppb	***Health Effects Statements**: Increasingly severe symptoms and impaired breathing likely in active children and adults and people with respiratory disease, such as asthma; increasing likelihood of respiratory effects in general population*
	***Cautionary Statements**: Active children and adults, and people with respiratory disease, such as asthma, should avoid all outdoor exertion; everyone else, especially children, should limit outdoor exertion.*

Based on the AQI scale, the nearest monitoring station to the project experienced no days in the last three years that would be categorized as unhealthful, and as many as 47 days that were unhealthful for sensitive groups or moderate. The highest ozone reading was 96 ppb compared to the AQI of 150 (unhealthful for sensitive groups) which is based on an 8-hour ozone concentration of 95 ppb. See 3.3-3 for more details regarding health effects of the various pollutants. See Table 3.3-1 for detailed monitoring data for the last three years.

Although the proposed Project by itself would not increase the health impacts, the cumulative impacts of existing sources of emissions, other proposed projects, and the Project's slow progress toward attainment should be mitigated to the extent feasible."[21]

Mitigation Measure(s):

One of the major sources of NOx emissions from the Project are attributable to the on-road diesel trucks. Feasible mitigation measures that are within the control of the Applicant and Tulare County for these on-road mobile sources are limited. The next major source of NOx emissions are from the off-road equipment. The Applicant is subject to existing regulation that requires the turnover of existing off-road equipment. The regulation would require a 36 percent significant reduction in NOx emissions by

[21] Air Quality and Greenhouse Gas Analysis Report, Deer Creek Rock Company, Inc. Quarry Expansion, pages 90-92, prepared by First Carbon Solutions (and included as Appendix "B" of this DEIR)

the year 2017, a 51 percent reduction in 2019, and a 68 percent reduction in NOx emissions by the year 2020. The required reductions for off-road equipment are stringent and will require significant investment to achieve. The applicant has committed to accelerating compliance with regulations in order to ensure that the Project's emissions are less than significant. The following mitigation measures are required to reduce the NOx emissions to a less than significant level.

3-1 The following air pollution control measures shall be implemented to reduce emissions from off-road equipment:

- **Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485 of the California Code of Regulations). Clear signage shall be provided for construction workers at all access points.**
- **All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. Maintain maintenance records onsite and all equipment shall be checked by a certified visible emissions evaluator.**

3-2 The following air pollution control measures shall be implemented to reduce emissions from trucks operating on the Project site:

- **Minimize truck idling time to 5 minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485 of the California Code of Regulations). Post signs in areas where trucks will park instructing drivers to shut off engines unless in an active queue.**

3-3 By the year 2018 or prior to increasing production by 400,000 tons of additional material, the applicant shall ensure that the fleet average NO_x emissions meet the 2019 standard of 3.5 grams of NO_x per brake-horsepower hour.

3-4 By the year 2019 or prior to increasing production by 450,000 tons of additional material, the applicant shall ensure that the fleet average NOx emissions meet the 2020 standard of 2.3 grams of NOx per brake-horsepower hour.

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."[22]

Sensitive receptors are presented in Table 3.3-13. The nearest school is Alta Vista Elementary School in Porterville, approximately 3.6 miles north of the proposed Project site.

Table 3.3-13
Sensitive Receptors [23]

Sensitive Receptor	*Distance & Direction to Nearest Project Boundary (feet)*
On-site Residence	0
House east of Road 272	1,031 feet of southern boundary
House on Deer Creek Drive	1,667 feet east of southern boundary
Houses at intersection of Deer Creek Drive Avenue 120) and Road 272	2,605 feet east of northern boundary

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 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 3.3-14, the proposed Project would create the highest concentration of DPM at Sensitive Receptor 3, which is at the home located northwest of the Project site and

[22] Ibid. 93.
[23] Estimated using aerial photography (Google Earth), 2014

would experience an annual concentration of 0.0148 µg per m3. Sensitive Receptor 3 was found to result in a cancer risk increase of 6.1 per million people. All diesel emissions concentrations at the nearby sensitive receptors were found to be below the 10.0 in a million cancer risk threshold established by the District. Therefore, no significant long-term health impacts would occur from the operation of diesel trucks and equipment on the Project site.

Table 3.3-14
Cancer Risk from Project Operations[24]

Sensitive Receptor	Receptor Description	Annual PM_{10} Concentration ($\mu g/m^3$)	Cancer Risk Per Million People[1]	Threshold of Significance	*Exceed Threshold of Significance*
1	SFR – Southeast of Project Site	0.0034	1.4	10	*No*
2	SFR – Southwest of Project Site	0.0014	0.6	10	*No*
3	SFR – Northwest of Project Site	0.0148	6.1	10	*No*
4	SFR – West of Project Site	0.0120	5.0	10	*No*

Note:
[1] *Cancer risk based on a residential receptor cancer risk = 4.1453E-04 x C_{air}.*
Source: Vista Environmental, Deer Creek Rock Company Hard Rock Mine Expansion Project, Health Risk Assessment; Tulare County, 2014; Calculated from ISC-AERMOD View Version 8.7.0.

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[25]. As noted in Table 3.3-14, the maximum cancer risk at any sensitive receptor was estimated to be 6.1 in 1,000,000 people. A cancer risk of 6.1 in a million is the likelihood that up to 6.1 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.

In addition to the cancer risk from exposure to DPM, there is also the potential DPM exposure may result in adverse health impacts from acute and chronic illnesses, which are detailed below.

Chronic Health Impacts

Chronic health effects are characterized by prolonged or repeated exposure to a TAC over many days, months, or years. Symptoms from chronic health impacts may not be

[24] Air Quality and Greenhouse Gas Analysis Report Deer Creek Rock Company, Inc. Quarry Expansion, page 94, prepared by First Carbon Solutions (and included as Appendix "B" of this DEIR)
[25] San Joaquin Valley Air Pollution Control District. 2014. Draft Guidance for Assessing and Mitigating Air Quality Impacts. http://www.valleyair.org/transportation/GAMAQI-2014/DRAFT_GAMAQI_2014_July_7.pdf . Accessed July, 2014.

immediately apparent and are often irreversible. The chronic hazard index is based on the most impacted sensitive receptor from the proposed Project and is calculated from the annual average concentrations of $PM_{2.5}$10.

The AERMOD model found that the annual concentration at the nearest sensitive receptor is 0.0148 µg/m3 for DPM equivalent chronic non-cancer risk emissions. The resulting Hazard Index is 0.00296, which is significantly less than the threshold of 1.0 or greater. Therefore, the ongoing operations of the proposed Project would result in a less than significant impact due to the non-cancer chronic health risk from TAC emissions created by the proposed Project.

Acute Health Impacts

Acute health effects are characterized by sudden and severe exposure and rapid absorption of a TAC. Normally, a single large exposure is involved. Acute health effects are often treatable and reversible. The acute hazard index is calculated from the maximum hourly concentrations of $PM_{2.5}$ and total organic gases (TOG) at the point of maximum impact (PMI), which has been calculated with the AERMOD model.

The AERMOD model found that the proposed Project would create maximum hourly concentrations of 0.305 µg/m3 of PM10 and 0.788 µg/m3 of TOG at the PMI. Table 3.3-13 provides a list of TAC pollutants from diesel emissions that have the potential to cause acute health risks, the associated pollutant analyzed in the AERMOD model, the ratio of the pollutant to total diesel emissions, the AREL for each pollutant, and the calculated Acute Hazard Index for each pollutant.

Table 3.3-15
Acute Non Cancer Assessment

TAC from Diesel Emissions	Pollutant	Diesel Weight Ratio1	Acute Reference Exposure Level (AREL)[2] µg/m[3]	*Acute Hazard Index (AHI)*
Acetaldehyde	TOG	0.0735	470	*1.23E-04*
Acrolein	TOG	0.003	25	*9.46E-05*
Arsenic	PM	0.000002	0.2	*3.05E-06*
Benzene	TOG	0.02	1,300	*1.21E-05*
Chlorine	PM	0.00003	210	*4.36E-08*
Copper	PM	0.00006	100	*1.83E-07*
Formaldehyde	TOG	0.1471	55	*2.11E-03*
Mercury	PM	0.000006	0.6	*3.05E-06*
Methanol	TOG	0.0408	28,000	*1.15E-06*
Methyl Ethyl Ketone	TOG	0.0148	13,000	*8.97E-07*
Nickel	PM	0.000008	6	*4.07E-07*
Styrene	TOG	0.0006	21,000	*2.25E-08*
Toluene	TOG	0.0147	37,000	*3.13E-07*
Vanadium	PM	0.001	30	*1.02E-05*
Xylene	TOG	0.0104	22,000	*3.73E-07*
			Total	***2.36E-03 (0.0024)***

Notes:
[1] *Diesel related TAC composition is based on the ARB speciation profile 6099 for PM and 818 for VOC.*
[2] *Acute REL is from http://oehha.ca.gov/air/allrels.html.*
Source: Vista Environmental, Deer Creek Rock Company Hard Rock Mine Expansion Project, Health Risk Assessment; Tulare County, 2014.

Table 3.3-15 shows that the total acute hazard index from the proposed Project would be 0.0024. The criterion for significance is an Acute Hazard Index increase of 1.0 or greater, as established by the District. Therefore, the on-going operations of the proposed project would result in a ***Less Than Significant Impact*** due to the non-cancer acute health risk from TAC emissions created by the proposed Project.

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[26].

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.***

Naturally Occurring Asbestos

According to the geologic survey prepared by CGI Technical Services, Inc. in 2010, there is no NOA present within rock materials in the quarry site. Therefore, development of the Project is not anticipated to expose receptors to naturally occurring asbestos. Impacts would be ***Less Than Significant.***

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.

[26] Centers for Disease Control and Prevention (CDC). 2009. MMWR Weekly. Increase in Coccidioidomycosis —California, 2000–2007. www.cdc.gov/mmwr/preview /mmwrhtml/mm5805a1.htm . Accessed August, 2014.

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 3.3-14."

Table 3.3-16
Screening Levels for Potential Odor Sources[27]

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

[27] San Joaquin Valley Air Pollution Control District, Guide for Assessing and Mitigating Air Quality Impacts, 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 proposed Project were to result in sensitive receptors being located closer to an odor generator in the list in Table 3.3-14 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.[28]

"During operation, onsite diesel powered equipment and vehicles will emit diesel PM, which is odorous. The District was contacted on July 23, 2014 to determine if any odor complaints had been reported from 2011 to the present (July, 2014). The District provided an email response on July 24, 2014 indicating that no complaints had been registered.

Given that the sources of odors for the proposed Project will dissipate with distance and should not reach an objectionable level at nearby residences and that no complaints have been registered, this impact is considered ***Less Than Significant***[29].

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 this Checklist Item will occur.

Mitigation Measure(s):

None Required.

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

[28] Ibid.
[29] Air Quality and Greenhouse Gas Analysis Report Deer Creek Rock Company, Inc. Quarry Expansion, page 99, prepared by First Carbon Solutions (and included as Appendix "B" of this DEIR)

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

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Tables

FINDINGS OF FACT

EXHIBIT B

FINDINGS OF FACT
Deer Creek Rock Project
Tulare County, California
State Clearinghouse Number 2014081023
March 11, 2015

CEQA FINDINGS

CERTIFICATION OF FINAL ENVIRONMENTAL IMPACT REPORT FOR THE DEER CREEK ROCK PROJECT AS BEING IN COMPLIANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT; ADOPTING PROJECT FINDINGS; ADOPTING A MITIGATION MONITORING PLAN; AND APPROVING THE FINAL ENVIRONMENTAL IMPACT REPORT FOR THIS PROJECT

I

INTRODUCTION

The Commission ("Commission") of the County of Tulare ("County") intends to approve this Project identified as the Deer Creek Rock Project ("Project"). The proposed Project includes an Amendment Surface Mining and Reclamation Plan (PMR) 11-003 to increase production of the existing annual maximum of 500,000 tons of rock allowed by 450,000 tons of rock per year. The maximum annual production of aggregate will be 950,000 annual tons over the course of the existing 50 year period of the existing permit, which ends in 2062. This will also include excavating to 560' Mean Sea Level (MSL) currently allowed under the existing permit. The Project Site (Assessor Parcel Number 305-190-018 and 305-190-020) is located ½ mile east of the intersection of Avenue 120 and Road 272, south of Deer Creek Road, approximately 2.5 miles southeast of the City of Porterville, in Section 21, Township 22 South, Range 28 East, MDB&M, and can be found within the Success Dam United States Geological Survey 7.5 minute topographic quadrangle.

To approve this Project, the Commission must consider and take action on the Project application for a PMR 14-002. The Commission is deemed the final decision-making body with respect to the Special Use Permit for the Project, unless duly appealed to the Tulare County Board of Supervisors. In the context of the California Environmental Quality Act ("CEQA"), the County is the "lead agency" and the Regional Board is a "responsible agency" in consideration and approval of this Project.

II

CERTIFICATION OF FINAL ENVIRONMENTAL IMPACT REPORT FOR THE DEER CREEK ROCK PROJECT

The Commission hereby certifies and finds that it has considered the information presented in the Final EIR and other relevant evidence to determine compliance with CEQA, and the State CEQA Guidelines. The Commission further certifies and finds that prior to taking action on the Project;

the Commission independently reviewed and considered the information contained in the Final EIR and other relevant evidence presented thereto. Accordingly, based on the Commission's exercise of its independent judgment when reviewing and considering the Final EIR, and other relevant evidence presented thereto, the Commission further certifies and finds that the Final EIR required for the Project is adequate, and has been prepared and completed in compliance with CEQA and the State CEQA Guidelines.

III

FINDINGS REQUIRED CONCERNING ENVIRONMENTAL IMPACTS UNDER CEQA

The recitals contained in the accompanying Resolution have been independently reviewed and considered by the Commission, are found to be true, and are hereby adopted in support of approval of the Project.

CEQA requires that certain findings be made with respect to significant environmental impacts, Mitigation Measures, and alternatives. To satisfy this requirement, the Commission hereby adopts and incorporates by reference the Deer Creek Rock Project Environmental Impact Report (EIR), which includes the Final EIR, the Draft EIR, and the Technical Appendices thereto, the Comments to the Draft EIR, and the Responses to Comments and related appendices thereto.

In approving these findings, the Commission has independently reviewed, considered, and relied on (1) the information contained in the EIR and appendices thereto; (2) the various reports (both oral and written) provided by County Staff to the Commission; (3) the information submitted during the public comment period; and (4) other evidence contained in the public record. In doing so, the Commission finds and declares that the factual discussion and analysis contained in the EIR, the staff reports, and other evidence in the Public Record of Proceedings provide a sufficient basis for approval of the Project pursuant to CEQA.

A. Environmental Impacts and Mitigation Measures

As to the potentially significant environmental impact identified in the EIR, the Commission finds either that: (1) changes or alterations have been required in, or incorporated into the Project that mitigate, avoid, or substantially lessen the significant environmental impacts identified in the EIR; (2) such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding, and such changes or alterations have been or can be and should be adopted by such agencies; and (3) that no impacts requires specific economic, legal, social, technological, or other considerations make any of the Mitigation Measures or Project alternatives identified in the EIR infeasible.

1. Project Impacts.

Consistent with Public Resource Code section 21081 and Guidelines sections 15091 through 15093 (including Public Resources Code section 21061.1 and Guidelines section 15364 relating to the definition of "feasibility"), the Commission hereby makes various findings relating to the significant effects identified in the Final EIR for the Project.

a. Impact 3.1 a) – c) (Scenic Vista)

Pursuant to the discussion in Sections 3.1 a) – c) of the Final EIR, there will be a less than significant impact to the visual character of the scenic vistas, scenic roadways, or degrade the visual quality within the Project's vicinity. The Commission concurs with this analysis. Mitigation Measure 3.1-1 for the maintenance of the existing visual berm is sufficient to reduce impacts to a level considered less than significant. Accordingly, based on substantial evidence in the Draft EIR, Technical Appendices, Response to Comments, Final EIR, and other evidence in the public record of proceedings, the Commission finds and declares that the proposed Project will not impact identified scenic vistas, not impact eligible state scenic highways or scenic county roads, not significantly impact the visual quality of the area. There is no relevant evidence to the contrary in the Public Record of Proceedings.

b. Impact 3.1 d) (Light and Glare)

Pursuant to the discussion in Section 3.1 d) of the Final EIR, there will be a less than significant impact to the surrounding environment resulting from the Project's lighting. The Commission concurs in this analysis.

Accordingly, based on substantial evidence in the Final EIR and the Public Record of Proceedings, the Commission finds and declares that Mitigation Measures are not required to mitigate or substantially lessen any impacts from the lighting installed within the Project site to a less than significant level.

In support of this finding, evidence is contained in the Final EIR and in the Public Record of Proceedings that the Project would not result in generation of additional light or glare on the neighboring properties. The evidence indicates that no Mitigation Measures are required to mitigate any potential Project related light and glare impacts to a less than significant level. There is no substantial evidence to the contrary in the public Record of proceedings.

c. Impact 3.2 a) – e) (Agricultural Land and Forestry Resources)

Pursuant to the discussion in Section 3.2 of the Final EIR, there will not be a potentially significant impact to the surrounding environment involving the loss of farmland. The Commission concurs in this analysis.

Accordingly, based on substantial evidence in the Final EIR and the Public Record of Proceedings, the Commission finds and declares that the Project will not cause a significant impact to the environment involving the loss of farmland because the Project site is not under a Williamson Act contract. As such, the project will remain conflict with the surrounding farmland uses and will not cause any loss thereof, and thus, no mitigation is necessary or required.

All of the Project acreage is subject to The Department of Conservation Reclamation Plan requirements for CA Mine I.D. No. 91-54-0035 which includes reclaiming the mine to grazing land. The Project does not conflict with existing AE-10 and AE 40 Zoning, or other surrounding Williamson Act contracts, or cause any other land that would convert farmland or the conversion of forestlands. There is no relevant evidence to the contrary in the Public Record of Proceedings.

d. Impact 3.3 a) – c) (Air Quality PM 10 and PM 2.5)

Pursuant to the discussion in Section 3.3 of the Final EIR, there will be a less than significant impact to the environment from 3.3 (c) (exceedance of thresholds for ozone precursors) during construction and operations. These will be reduced to less than significant with application of Mitigation Measures 3.3-1, 3.3-2, 3.3-3, and 3.3-4 to ensure the equipment is as clean as assumptions indicate. The Commission concurs with this analysis.

Accordingly, based on substantial evidence in the Public Record of Proceedings, the Commission finds and declares that changes or alterations have been required in, or incorporated into the Project which will avoid, mitigate, or substantially lessen any impact from the source emissions from construction and operational equipment which requires permits to operate from the San Joaquin Valley Unified Air Pollution Control District ("SJVUAPCD or Air District"). The Air District regulates and quantifies the emissions from these sources, and they are assumed to be mitigated to the greatest feasible extent. Since the emissions are controlled by the SJVAPCD and accounted for in the State Implementation plan they are considered less than significant (with the added mitigation of attaining all the required Air District permits) and any existing or added dust Mitigation Measures required under the conditions of approval.

Mitigation for this impact is set forth in Mitigation Measures 3.3-1, 3.3-2, 3.3-3, and 3.3-4. These Mitigation Measures shall be implemented by the applicant and shall be a condition of the Reclamation Plan (PMR 14-002) and shall be the responsibility of the RMA. In support of this finding, the evidence indicates that Project construction and operation will result in numerous activities that generate Nitrogen Oxides (NOx). Mitigation Measure 3.3-1, 3.3-2, 3.3-3, and 3.3-4 are 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.

The Commission concurs with this analysis. Mitigation Measures 3.3-1, 3.3-2, 3.3-3, and 3.3-4 are sufficient to reduce impacts to a level considered less than significant. Accordingly, based on substantial evidence in the Draft EIR, Technical Appendices, Response to Comments, Final EIR, and other evidence in the public record of proceedings, the Commission finds and declares that the proposed Project will not significantly impact air quality. There is no relevant evidence to the contrary in the Public Record of Proceedings.

e. Impact 3.3 (d) (Expose sensitive receptors to substantial pollutant concentrations).

Pursuant to the discussion in Section 3.3 of the Final EIR, the Project will not cause a potentially significant impact to the environment and no sensitive receptors were identified within 1/8 mile east of the vicinity of the Project property line. The Commission concurs with this analysis.

In support of this finding, evidence is contained in the Final EIR and the Public Record of Proceedings that emissions are less than significant. No Mitigation Measures exist or are required, and there is no evidence to the contrary in the Public Record of Proceedings.

f. Impact 3.3 (e) (Objectionable Odors)

Pursuant to the discussion in Section 3.3 of the Final EIR, 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. Therefore the Project will not cause a potentially significant impact to the environment. The Commission concurs with this analysis.

In support of this finding, evidence is contained in the Final EIR and the Public Record of Proceedings that emissions are less than significant. No Mitigation Measures exist or are required, and there is no evidence to the contrary in the Public Record of Proceedings.

g. Impact 3.4 a) – f) (Biological Resources)

Pursuant to the discussion in Section 3.4 a) – f) of the Final EIR, the proposed Project will not cause a potentially significant impact to biological resources. The Project site is an existing gravel mining pit, stockpiling, and operational area surrounded by agricultural uses that will not contribute to the loss of habitat, or impact natural communities, or wetlands, and will not impact any state or federal plans or policies analyzed in Section 3.4 a) – f). The Commission concurs with this analysis.

Accordingly, based on substantial evidence in the Final EIR and the Public Record of Proceedings, the Commission finds and declares that the Project will not cause a significant impact to riparian habitat/sensitive natural community impacts. Therefore, there will not be any riparian habitat/sensitive natural community impacts. There is no evidence to the contrary in the Public Record of Proceedings.

h. Impact 3.5 a) – d) (Cultural Resources)

Pursuant to the discussion in Section 3.5 a) – d) of the Final EIR, the proposed Project has the potential to result in a less than significant impact to the environment from disturbance of cultural or historic resources, and skeletal remains. However, any potentially significant impact can be reduced to a level of insignificance with mitigation. The Commission concurs with this analysis.

Accordingly, based on substantial evidence in the Final EIR and the Public Record of Proceedings, the Commission finds and declares that changes or alterations have been required in, or incorporated into, the Project which will avoid, mitigate or substantially lessen any impacts to the environment from disturbance of cultural or historic resources and skeletal remains.

Mitigation is set forth in Mitigation Measures 3.5-1, 3.5-2, and 3.5-3. Such mitigation is hereby adopted for this Project. All Mitigation Measures shall be implemented by the applicant, construction contractor, the County Environmental Assessment Officer, County Coroner, Native American Heritage Commission (NAHC), or local Native American organizations, and shall be a condition of the Special Use Permit. Monitoring shall be the responsibility of the RMA.

In support of this finding, evidence is contained in the Final EIR and the Public Record of Proceedings that there could be a disturbance or destruction of cultural or historical resources resulting from further construction activities associated with the Project. However, there is no recorded evidence of archeological sites at the Project site. The adopted Mitigation Measures will assure that any Native American burial sites or unidentified skeletal remains encountered are either avoided, treated in accordance with the recommendations of the most likely descendant, or relocated, and will assure that any historical or cultural resources are properly evaluated, thereby

reducing this impact to a less than significant level. There is no evidence to the contrary in the Public Record of Proceedings.

i. Impact 3.6 a) i) – iv) (Seismic Activity)

Pursuant to the discussion in Section 3.6 a) of the Final EIR, the proposed Project will not result in a significant impact to the environment involving seismic effects.

The Commission concurs with this analysis. Accordingly, based on substantial evidence in the Draft EIR, Technical Appendices, Response to Comments, Final EIR, and other evidence in the public record of proceedings, the Commission finds and declares that the proposed Project will not cause significant impacts related to exposure of people or structures to earthquake faults, seismic shaking, ground failure including liquefaction, and landslides. In addition, the proposed Project would not cause significant impacts related to the loss of topsoil, unstable soils, expansive soils, and soils incapable of supporting septic tanks. There is no relevant evidence to the contrary in the Public Record of Proceedings.

j. Impact 3.6 b) (Soil Erosion, Topsoil Loss)

Pursuant to the discussion in Section 3.6 b) of the Final EIR, there will be less than significant impacts to the environment involving soil erosion or topsoil loss during construction (earth-moving) and operations. The proposed Project is comprised of bedrock and although topsoil will be removed during the mining operation, the Project includes a Reclamation Plan that will allow for resumption of agricultural uses (i.e., open space/grazing).

Accordingly, based on substantial evidence in the Final EIR and the Public Record of Proceedings, the Commission finds and declares that the Project will not have significant impacts involving soil erosion or topsoil loss.

k. Impact 3.6 c) (Expansive Soils)

Pursuant to the discussion in Section 3.6 c) of the Final EIR, the Project site is located on solid rock formation and is not at risk from subsidence, liquefaction, or sliding. Therefore there will be less than significant impacts to the environment involving expansive soils. The Commission concurs with this analysis.

Accordingly, based on substantial evidence in the Final EIR and the Public Record of Proceedings, the Commission finds and declares that the Project will not have significant impacts involving soil instability.

l. Impact 3.6 d) (Expansive Soil Hazards)

Pursuant to the discussion in Section 3.6 d) of the Final EIR, the Project site is solid bedrock and is not considered expansive soil. Therefore, there will not be significant impacts involving expansive soil hazards. The Commission concurs with this analysis.

Accordingly, based on substantial evidence in the Final EIR, and the Public Record of Proceedings, the Commission finds and declares that the Project will have a less than significant impact involving expansive soil hazards.

In support of this finding, the proposed project would implement the reclamation plan to the specifications required in the proposed engineering plans. Therefore, the development of the project will not expose persons or structures to hazards associated with shrinking and swelling of expansive soils.

Thus, there are less than significant impacts. There is no evidence to the contrary in the Public Record of Proceedings.

m. Impact 3.6 e) (Unstable Soils and Domestic Disposal)

Pursuant to the discussion in Section 3.6 e) of the Final EIR, there will not be any significant impacts involving unsuitable soils for domestic waste disposal. The Commission concurs in this analysis.

Accordingly, based on substantial evidence in the Final EIR and the Public Record of Proceedings, the Commission finds and declares that the Project will not have any significant impacts involving suitable soils for domestic waste disposal. Therefore, no mitigation is necessary or required.

Adequate area for detention of drainage is available on site. Additionally, the Project will not contaminate underlying soils due to permitting requirements by the County's Environmental Health Division, and the Central Valley Regional Water Quality Control Board. There is no evidence to the contrary in the Public Record of Proceedings.

n. Impact 3.7 a) – b) Greenhouse Gas Emissions

Pursuant to the discussion in Section 3.7 of the Final EIR, the proposed Project would result in less than significant direct and indirect impacts to Greenhouse Gas (GHG) Emissions. Mitigation measures are not required to reduce these impacts to less than significant. The Commission concurs in this analysis.

Accordingly, based on substantial evidence in the Final EIR, and the Public Record of Proceedings, the Commission finds and declares that the Project will not have any significant impacts involving greenhouse gas either directly or indirectly with the use of electrical stationary equipment. Therefore, the impacts are less than significant without mitigation measures.

The Commission concurs with this analysis. There is no relevant evidence to the contrary in the Public Record of Proceedings.

o. Impact 3.8 a) Hazards and Hazardous Materials

Pursuant to the discussion in Section 3.8 a) of the Final EIR, the Project will cause a less than significant impact to the environment or the public through the routine transport, use, or disposal of hazardous materials. The Commission concurs with this analysis.

Accordingly, based on substantial evidence in the Final EIR, and the Public Record of Proceedings, the Commission finds and declares that no mitigations are required to substantially lessen any impacts to the environment from operational hazards.

In support of the evidence contained in the Final EIR and the Public Records of Proceedings, the proposed Project, combined with the existing operations, include the storage of 10,000 gallons of diesel fuel for mobile equipment typical of mining operations. The existing operations also have lubricating and equipment maintenance oils, which is typical of a mining/rock crushing operation. 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 proposed Project site. The equipment used in the proposed Project is found in Table 6 of the Air Quality, Greenhouse Gas, and Health Risk Assessment (Appendix "B" of this DEIR). The applicant is also required to obtain a Hazardous Materials Business Plan from the Tulare County Environmental Health Services. Therefore the potential impacts related to this checklist item will be considered less than significant.

The Commission concurs with this analysis. Accordingly, based on substantial evidence in the Draft EIR, Technical Appendices, Response to Comments, Final EIR, and other evidence in the public record of proceedings, the Commission finds and declares that the proposed Project will not result in a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. There is no relevant evidence to the contrary in the Public Record of Proceedings.

p. Impact 3.8 b) Hazard to the Public or the Environment

Pursuant to the discussion in Section 3.8 b) of the Final EIR, the Project result in a less than significant impact to the environment by creating 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. However, any potentially significant impact can be reduced to a level of insignificance with application of Mitigation Measures 3.8-1. The Commission concurs with this analysis.

Mitigation for this impact is set forth in Mitigation Measure 3.8-1. This Mitigation Measures shall be implemented by the applicant and shall be a condition of PMR 14-002- and shall be the responsibility of the RMA. In support of this finding, the evidence indicates that the existing operation includes fuel deliveries for the diesel fuel stored on the site. Should diesel fuel spill, potential significant impacts could occur. Mitigation Measure 3.8-1 is recommended to ensure that mo truck maintenance or washing shall occur at the site; heavy equipment maintenance will occur on a concrete surface or at an offsite location; a drop cloth or other impermeable surface shall be utilized to prevent surface waste discharge that would contribute to soil and groundwater contamination, and any spills will be immediately cleaned up.

The Commission concurs with this analysis. Mitigation Measures 3.8-1 is sufficient to reduce impacts to a less than significant level.

Accordingly, based on substantial evidence in the Final EIR, and the Public Record of Proceedings, the Commission finds and declares that the Project will not have any impacts to the environment from operational hazards.

The Commission concurs with this analysis. Accordingly, based on substantial evidence in the Draft EIR, Technical Appendices, Response to Comments, Final EIR, and other evidence in the public record of proceedings, the Commission finds and declares that the proposed Project will not result in 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. There is no relevant evidence to the contrary in the Public Record of Proceedings.

q. Impact 3.8 c) Emit hazardous waste within one-quarter mile of an existing or proposed school

Pursuant to the discussion in Section 3.8 c) of the Final EIR, there will be no significant impacts involving hazardous waste within 1/4 mile of an existing or proposed school. The Commission concurs in this analysis.

Accordingly, based on substantial evidence in the Final EIR and the Public Record of Proceedings, the Commission finds and declares that the Project will not have any significant impacts involving hazardous waste. Therefore, no mitigation is necessary or required.

In support of this finding, evidence is contained in the Final EIR that there are no schools within ¼ mile of the project site. There is no evidence to the contrary in the Public Record of Proceedings.

r. Impact 3.8 d) Located on the Cortese List Site under Section 65962.5

Pursuant to the discussion in Section 3.8 d) of the Final EIR, the Project will not cause potentially significant impacts to the environment involving the site proximity to Cortese Listed Sites. The Commission concurs in this analysis.

Accordingly, based on substantial evidence in the Final EIR, and the Public Record of Proceedings, the Commission finds and declares no mitigation measures are required to substantially reduce any impacts to the environment from operational hazards.

In support of this finding, evidence is contained in the Final EIR and the Public Record of Proceedings that the proposed Project, as of February 13, 2015, is not contained on a Cortese List site. As such, no Project specific impacts related to this checklist item will occur. The proposed Project will not include elements that would require listing on the Cortese List. There are no potential contaminants of concern.

s. Impact 3.8.e) and f) Airport Land Use Plan and Hazards and a Private Airstrip.

Pursuant to the discussion in Section 3.8 e) and f) of the Final EIR, there will not be any significant impacts involving airport land use plans or airport hazards; or a private airstrip. The Commission concurs in this analysis.

Accordingly, based on substantial evidence in the Final EIR and the Public Record of Proceedings, the Commission finds and declares that the Project will not have any significant impacts involving an airport land use plan or is within the vicinity to a private airstrip. Therefore, no mitigation is necessary or required.

In support of this finding, evidence is contained in the Final EIR that the nearest airport (Porterville Municipal Airport) is located more than 5 miles from the Project site. Accordingly, no impacts will occur. There is no evidence to the contrary in the Public Record of Proceedings.

t. Impact 3.8. g) and h) Emergency Response or Evacuation and Wildland Fires.

Pursuant to the discussion in Section 3.8 g) and h) of the Final EIR, there will not be any significant impacts involving emergency response or evacuation and wildland fires. The Commission concurs in this analysis.

Accordingly, based on substantial evidence in the Final EIR and the Public Record of Proceedings, the Commission finds and declares that the Project will not have any significant impacts involving emergency response or evacuation and wildland fires. Therefore, no mitigation is necessary or required.

In support of this finding, evidence is contained in the Final EIR and the Public Record of Proceedings that the Project site will be developed on a private existing open mine site and will not interfere with the County's Public Emergency Evacuation Plan. It is surrounded by irrigated farmland, and is not within a recognized wildland fire hazard area. Accordingly, no impacts will occur. There is no evidence to the contrary in the Public Record of Proceedings.

u. Impact 3.9 a) Water Quality Standards, Waste Discharge Requirements

Pursuant to the discussion in Section 3.9 a) of the Final EIR, there will be less than significant impacts to groundwater quality standards. The Commission concurs in this analysis.

Accordingly, based on substantial evidence in the Final EIR and the Public Record of Proceedings, the Commission finds and declares that the Project will not violate any water quality standards or waste discharge requirements. Therefore, no mitigation measures are necessary or required.

In support of this finding, evidence is contained in the Final EIR and the Public Record of Proceedings that the proposed Project contains a drainage basin that will capture all the waters from the Project area, and will not interfere with ground water quality. Further, the applicant will be required to comply with the all requirements of the Regional Water Quality Control Board. There is no evidence to the contrary in the Public Record of Proceedings.

v. Impact 3.9 b) Substantially Deplete Groundwater Supplies Or Interfere Substantially With Groundwater

Pursuant to the discussion in Section 3.9 b) of the Final EIR, there will be less than significant impacts to water groundwater supplies. The Commission concurs in this analysis.

Accordingly, based on substantial evidence in the Final EIR and the Public Record of Proceedings, the Commission finds and declares that the Project will not have any significant impacts involving water quantity. Therefore, no Mitigation Measures are necessary or required. In addition, cumulatively the Project will have less than significant water impacts as it is part of an overall reduction of water use versus agricultural activities, and therefore will reduce the demands on the existing aquifer.

w. Impact 3.9 c) – d) Alter The Existing Drainage Pattern

Pursuant to the discussion in Section 3.9 c) and d) of the Final EIR, there will not be any significant impacts involving existing drainage patterns. The Commission concurs in this analysis.

Accordingly, based on substantial evidence in the Final EIR and the Public Record of Proceedings, the Commission finds and declares that the proposed Project is adjacent to Deer Creek; however, the changes to the drainage pattern will not alter or interfere with the course of Deer Creek. The Project site has been designed to capture, store and dispose of surface runoff in a manner which will not result in flooding on or off site.

In support of this finding, evidence is contained in the Final EIR, and the Public Record of Proceedings that the proposed Project will not have any significant impacts involving existing drainage patterns. There is no evidence to the contrary in the Public Record of Proceedings.

x. Impact 3.9 e) – f) (Degrade water quality through runoff)

Pursuant to the discussion in Section 3.9 e) – f) of the Final EIR, there will be less than significant impacts involving runoff or overall water quality. The Commission concurs in this analysis.

Accordingly, based on substantial evidence in the Final EIR and the Public Record of Proceedings, the Commission finds and declares the existing use includes a stormwater detention basin and an existing SWPPP used for the original construction of the site. As noted in the SWPPP, storm water will be retained on site.

In support of this finding, evidence is contained in the Final EIR, and the Public Record of Proceedings that the proposed Project will have less than significant impacts involving water quality through runoff . There is no evidence to the contrary in the Public Record of Proceedings.

y. Impact 3.9 g) – j) Flooding

Pursuant to the discussion in Section 3.9 g) – j) of the Final EIR, there will not be any significant impacts involving flooding. The Commission concurs in this analysis.

Accordingly, based on substantial evidence in the Final EIR and the Public Record of Proceedings, the Commission finds and declares that the proposed Project does not involve significant water storage or changing the alignment of an established watercourse, and is not located in a flood zone. Therefore, no Mitigation Measures are necessary or required.

In support of this finding, evidence is contained in the Final EIR and the Public Record of Proceedings that the proposed Project will not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam. There is no relevant evidence to the contrary in the Public Record of Proceedings.

z. Impact 3.10 a) Divide Established Community

Pursuant to the discussion in Section 3.10 a) of the Final EIR, there will not be a significant impact involving the division of an established community. The Commission concurs with this analysis.

Accordingly, based on substantial evidence in the Final EIR and the Public Record of Proceedings, the Commission finds and declares that the Project will not cause a significant impact involving the division of an established community, and thus, no mitigation is necessary or required.

In support of this finding, the evidence indicates that the Project does not include the construction of a major highway or railroad track, and does not require any off-site construction. The area is characterized as rural agriculture. Accordingly, there is no impact. There is no evidence to the contrary in the Public Record of Proceedings.

aa. Impact 3.10 b) Conflict with Land Use Policy

Pursuant to the discussion in Section 3.10 b) of the Final EIR, there will not be significant impacts involving Zoning. The Commission concurs in this analysis.

Accordingly, based on substantial evidence in the Final EIR and the Public Record of Proceedings, the Commission finds and declares that the Project will not cause a significant impact involving the Reclamation Plan (PMR 14-002), and therefore no mitigation is required.

In support of this finding, evidence is contained in the Final EIR and the Public Record of Proceedings that the Project is located on land zoned AE -10 and AE-40 (Exclusive Agriculture), and land surrounding the Project site is used primarily for the growing of crops and is zoned AE-10 west of the subject site and AE-40 east of the subject site. Based on substantial evidence in the record by the Planning Department, granting Reclamation Plan (PMR 12-004) for this Project will not conflict with the existing zoning. There is no evidence to the contrary in the Public Record of Proceedings.

bb. Impact 3.10 c) Conflict with Habitat and Natural Conservation Plans

Pursuant to the discussion in Section 3.10 c) of the Final EIR, there will not be a significant impact involving Conservation Plans. The Commission concurs with this analysis.

Accordingly, based on substantial evidence in the Final EIR and the Public Record of Proceedings, the Commission finds and declares that the Project will not cause a significant impact involving the applicable habitat conservation plans or natural community conservation plans, and thus, no mitigation is necessary or required.

In support of this finding, the evidence indicates that the Project site is not within the Kern Water Habitat Conservation Plan area, and has none of the species identified in the Recovery Plan for Upland Species in the San Joaquin Valley. Accordingly, there is no impact. There is no evidence to the contrary in the Public Record of Proceedings.

cc. Impact 3.11 a) and b) Statewide or Local Mineral Resources

Pursuant to the discussion in Section 3.11 a) and b) of the Final EIR, the proposed Project would result in less than significant impact to mineral resources locally or of statewide importance. The Commission concurs with this analysis.

Accordingly, based on substantial evidence in the Final EIR and the Public Record of Proceedings, the Commission finds and declares that the Project will cause a less than significant impact involving the loss or availability of known mineral resources, no mitigation is necessary or required.

In support of this finding, the evidence indicates that the proposed Project consists of expansion of an existing mining operation located within a known mineral resource zone (MRZ). The Project is located within 2a MRZ and 3a MRZ, which is considered compatible development within the established MRZ. As specified in Chapter 3.11 (Mineral Resources) of the Final EIR, Tulare County General Plan and were developed to promote compatible development near known mineral resource zones. These policies are designed to conserve and protect known mineral resources, such as the ones found on the proposed Project site. Accordingly, there would be less than significant impacts. There is no evidence to the contrary in the Public Record of Proceedings.

dd. Impact 3.12 a) Noise in Excess of Standards

Pursuant to the discussion in Section 3.12 a) of the Final EIR, the proposed Project is located along Deer Creek Road resulting in minimal traffic noise from the roadway. The normal operations of the proposed Project will have a minimal impact on the overall ambient noise levels of the area. The Commission concurs with this analysis.

Accordingly, based on substantial evidence in the Draft EIR, Technical Appendices, Response to Comments, Final EIR, and other evidence in the Public Record of Proceedings, the Commission finds and declares that the proposed Project will not result in a significant impact involving noise in excess of the applicable County standards. A less than significant impact would occur with implementation of Mitigation Measure 3.12-1.

In support of this finding, the evidence indicates that the Project is located along Road Deer Creek Road resulting in minimal traffic noise from the roadway. The normal operations of the proposed Project will have a minimal impact on the overall ambient noise levels of the area. Accordingly, impacts will be less than significant with implementation of Mitigation Measure 3.12-1. There is no evidence to the contrary in the Public Record of Proceedings.

ee. Impact 3.12 b) Expose or Generate Excessive Ground-borne Vibration or Noise

Pursuant to the discussion in Section 3.12 b) of the Final EIR, the proposed Project would result in a less than significant impact or generation of excessive vibration or ground borne noises. The Commission concurs with this analysis.

Accordingly, based on substantial evidence in in the Draft EIR, Technical Appendices, Response to Comments, Final EIR, and other evidence in the Public Record of Proceedings, the Commission finds and declares that the Project will not cause a significant impact involving any vibration or ground borne noises in excess of the applicable County standards; no mitigation is necessary or required.

In support of this finding, the evidence indicates that the Project will include vibration impacts from the highest vibration source (large bulldozer and caisson drilling at (L_v 87). The nearest residence is approximately 875 feet away from the proposed Project's boundary. Using the highest vibration level (L_v 87) shown in Table 3.12-8 of the DEIR ...the anticipated vibration level at the nearest residence is 57 VdB. Accordingly, there is less than significant impact. There is no evidence to the contrary in the Public Record of Proceedings.

ff. Impact 3.12 c) Increase in Noise Levels Above No-Project Levels

Pursuant to the discussion in Section 3.12 c) of the Final EIR, the proposed Project would result in less than significant impacts above existing Project Levels for both construction and operationally. The Commission concurs with this analysis.

Accordingly, based on substantial evidence in the Draft EIR, Technical Appendices, Response to Comments, Final EIR, and other evidence in the Public Record of Proceedings, the Commission finds and declares that the Project will cause a less than significant impact involving any noise in excess of No-Project conditions. The Commission concurs with this analysis.

In support of this finding, the evidence indicates that the ambient noise environment in the vicinity of the proposed Project site is dominated by agricultural-related uses. 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. There is no evidence to the contrary in the Public Record of Proceedings.

gg. Impact 3.12 d) Temporary or periodic increase in ambient noise levels

Pursuant to the discussion in Section 3.12 d) of the Final EIR, the proposed Project would result in less than significant impacts above existing Project Levels for both construction and operationally with Mitigation Measure 12-2. The Commission concurs with this analysis.

Accordingly, based on substantial evidence in the Draft EIR, Technical Appendices, Response to Comments, Final EIR, and other evidence in the Public Record of Proceedings, the Commission finds and declares that without implementation of Mitigation Measure 12-2, the proposed Project's off-site traffic noise exposure for the Cumulative 2040 Plus Project scenario at Receptor 6 would be significant. The Commission concurs with this analysis.

In support of this finding, the evidence indicates that the ambient noise environment in the vicinity of the proposed Project site is dominated by agricultural-related uses. 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. There is no evidence to the contrary in the Public Record of Proceedings.

hh. Impact 3.12 e) and f) Airport Noise

Pursuant to the discussion in Section 3.12 e) and f) of the Final EIR, the proposed Project would result in no impact from exposure to excessive airport noises. The Commission concurs with this analysis.

Accordingly, based on substantial evidence in the Draft EIR, Technical Appendices, Response to Comments, Final EIR, and other evidence in the Public Record of Proceedings, the Commission finds and declares that the Project will not cause a significant impact involving an airport land use plan within two miles of a public airport, or locate persons within the vicinity of an operating airstrip; no mitigation is necessary or required.

In support of this finding, the evidence indicates that the Project is not located near an airport runway or airfield (airstrip). Accordingly, there is no impact. There is no evidence to the contrary in the Public Record of Proceedings.

ii. Impact 3.13 a) – c) Population and Housing

Pursuant to the discussion in Section 3.13 a) – c) of the Final EIR, there will be a less than significant impact to the environment involving population and housing. The Commission concurs with this analysis.

Accordingly, based on substantial evidence in the Final EIR and the Public Record of Proceedings, the Commission finds and declares that the Project will not cause a significant impact to population and housing, and thus, no mitigation is necessary or required.

In support of this finding, the evidence indicates that construction of the Project is consistent with the County's General Plan Land Use Element, and zoning designations, and will not encourage additional population growth in this rural area of the County. No dwellings on the Project site or rural homes in the surrounding area will be relocated, built, or demolished as a result of the Project. Accordingly, there will not be any impacts on population or housing conditions in the Project area vicinity. There is no evidence to the contrary in the Public Record of Proceedings.

jj. Impact 3.14 a) Public Services – Fire

Pursuant to the discussion in Section 3.14 a) of the Final EIR, there will not be a significant impact to the environment involving public services. The Commission concurs in this analysis.

Accordingly, based on substantial evidence in the Final EIR and the Public Record of Proceedings, the Commission finds and declares that the Project will not cause a significant impact to public services, and thus, mitigation is not necessary or required.

In support of this finding, the evidence indicates that the Project will continue to be served by the Doyle Colony Fire Station located at 1551 E. Success Drive in Porterville, approximately four miles west of the Project site. Accordingly, there will not be any impacts on Public Fire Protection Services. There is no evidence to the contrary in the Public Record of Proceedings.

kk. Impact 3.14 a) Public Services – Police, Parks, Schools, and Libraries

Pursuant to the discussion in Section 3.14 a) Police, Parks, and Schools of the Final EIR, there will not be a significant impact to the environment involving police; park, and school-related public services. The Commission concurs in this analysis.

Accordingly, based on substantial evidence in the Final EIR and the Public Record of Proceedings, the Commission finds and declares that the Project will not cause a significant impact to the services rendered by police, the use of parks, or the need for additional libraries or schools due to this Project, and thus, no mitigation is necessary or required.

In support of this finding, the evidence indicates that construction of the Project will not impact the County's Sherriff support needs, the use of the surrounding parks, or increase the need for additional library or school facilities. Accordingly, there will not be any impacts on sheriff's

services, parks, or school services in the Project area vicinity. There is no evidence to the contrary in the Public Record of Proceedings.

ll. Impact 3.15 a) and b) Recreational Facilities

Pursuant to the discussion in Section 3.15 a) and b) of the Final EIR, there will not be a significant impact to recreational facilities within the Project's vicinity. The Commission concurs with this analysis.

Accordingly, based on substantial evidence in the Final EIR and the Public Record of Proceedings, the Commission finds and declares that the Project will not cause a significant impact to recreational facilities within the Project's vicinity and thus, no mitigation is necessary or required.

In support of this finding, the evidence indicates that with the high unemployment in Tulare County, employment will most likely center on hiring persons currently living in the County. Even if some of the new employees move to the nearest city, the City of Porterville, the impact on existing recreation facilities will be less than significant. There is no evidence to the contrary in the Public Record of Proceedings.

mm. Impact 3.16 a) and b) Conflict with County Traffic Levels of Service

Pursuant to the discussion in Section 3.16 a) and b) of the Final EIR, there will no significant impact to the environment involving traffic increases or level of service standards. The Commission concurs with this analysis.

Accordingly, based on substantial evidence in the Draft EIR, Technical Appendices, Response to Comments, Final EIR, and other evidence in the Public Record of Proceedings, the Commission finds and declares that the Project will not cause a significant impact to the proposed Project impacts involving traffic increases or the level of service standards for roads. As such, no mitigation is necessary or required.

In support of this finding, evidence is contained in the Draft EIR, Technical Appendices, Response to Comments, Final EIR, and other evidence in the Public Record of Proceedings; potential Project-specific and cumulative impacts related to this Checklist item will be Less Than Significant. There is no evidence to the contrary in the Public Record of Proceedings.

nn. Impact 3.16 c), d), and e) Air Traffic, Design Feature, and Emergency Access

Pursuant to the discussion in Section 3.16 c), d), and e) of the Final EIR, there will not be a significant impact to Air Traffic, Design Features, or Emergency Access by this Project. The Commission concurs with this analysis.

Accordingly, based on substantial evidence in the Draft EIR, Technical Appendices, Response to Comments, Final EIR, and other evidence in the Public Record of Proceedings, the Commission finds and declares that the Project will not cause a significant impact involving increase in air, design, or emergency facilities; and thus, no mitigation is necessary or required.

In support of this finding, the evidence indicates that the Project has no discernable or possible effect on these items, and thus there is no impact. There is no evidence to the contrary in the Public Record of Proceedings.

oo. Impact 3.16 f) Bicycle Traffic

Pursuant to the discussion in Section 3.16 f) of the Final EIR, there will be a less than significant impact involving Bicycle Traffic. The Commission concurs with this analysis.

Accordingly, based on substantial evidence in the Final EIR and the Public Record of Proceedings, the Commission finds and declares that the Project impacts will be less than significant.

In support of this finding, the evidence indicates that the Proposed Project will generate additional light- and heavy-duty vehicles. The roads adjacent to the surrounding proposed Project site do not include sidewalks, bus stops, bus turnouts, or bike lanes. 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. Potential Project-specific and cumulative impacts related to this Checklist item will be Less Than Significant. There is no evidence to the contrary in the Public Record of Proceedings.

pp. Impact 3.17 a), b) and d) Exceed Water Supplies, Wastewater Treatment Capacity, and RWQCB Requirements

Pursuant to the discussion in Section 3.17 a) b) and d) of the Final EIR, there will be a less than significant impact involving wastewater treatment. The Commission concurs with this analysis.

Accordingly, based on substantial evidence in the Final EIR and the Public Record of Proceedings, the Commission finds and declares that the Project will cause a less than significant impact to RWQCB regulated storm water; and thus, no mitigation is necessary or required.

In support of this finding, the evidence indicates that the Project is subject requirements of the Central Valley Regional Water Quality Control Board. The mining operation does not require wastewater treatment. Therefore, the Project has a less than significant impact. There is no evidence to the contrary in the Public Record of Proceedings.

qq. Impact 3.17 c) Proposed Drainage Facilities

Pursuant to the discussion in Section 3.17 c) of the Final EIR, there will be a less than significant impact involving drainage facilities. The Commission concurs with this analysis.

Accordingly, based on substantial evidence in the Final EIR and the Public Record of Proceedings, the Commission finds and declares that the Project will cause a less than significant impact from proposed drainage facilities, and no mitigation is necessary or required.

In support of this finding, the evidence indicates that storm water on the Project site will be directed to an existing on-site drainage detention basin that 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. Therefore, the Project has a less than significant impact. There is no evidence to the contrary in the Public Record of Proceedings.

rr. Impact 3.17 e) Wastewater Treatment

Pursuant to the discussion in Section 3.17 e) of the Final EIR, there will be no impact to wastewater treatment by this Project. The Commission concurs with this analysis.

Accordingly, based on substantial evidence in the Final EIR and the Public Record of Proceedings, the Commission finds and declares that the Project will not cause a significant impact involving increase of wastewater treatment capacity; and thus, no mitigation is necessary or required.

In support of this finding, the evidence indicates that the Project site currently utilizes an existing septic system that is adequate to treat the waste water needs of the proposed use. It will not be necessary for wastewater to be treated at a wastewater treatment facility, and thus, there is no impact. There is no evidence to the contrary in the Public Record of Proceedings.

ss. Impact 3.17 f) and g) Solid Waste

Pursuant to the discussion in Section 3.17 f) and g) of the Final EIR there will be no significant impact to solid waste facilities by this Project. The Commission concurs with this analysis.

Accordingly, based on substantial evidence in the Final EIR and the Public Record of Proceedings, the Commission finds and declares that the Project will not have an impact on landfill capacity or compliance with federal, state, or local statutes regarding solid waste; and thus, no mitigation is necessary or required.

In support of this finding, the evidence indicates that the proposed Project does not include activities that will result in solid waste generation and does not include the creation or expansion of a solid waste facility. Thus, there will be a less than significant impact. There is no evidence to the contrary in the Public Record of Proceedings.

tt. Impact 3.18 a) Mandatory Findings of Significance: Wildlife Species or Historical Impacts

Pursuant to the discussion in Section 3.18 a) of the Final EIR, there will be less than significant impact to wildlife species or historical resources by this Project with implementation of Mitigation Measures 3.5-1 through 3.5-3. The Commission concurs with this analysis.

Accordingly, based on substantial evidence in the Final EIR and the Public Record of Proceedings, the Commission finds and declares that with Mitigation Measures 3.5-1 through 3.5-3, the Project will not cause a significant impact involving wildlife species or historical resources.

In support of this finding, the evidence indicates that the site of the proposed Project is an intensely disturbed landscape devoid of natural habitat, wetlands, foraging areas, or movement corridors thus eliminating the potential for impacts to biological species. No significant cultural resources were identified within ½ mile of the Project site; however, in order to address the potential of cultural resources being unearthed as a result of Project-related ground excavation,

Mitigation Measures 3.5-1 through 3.5-3 were added in the unlikely event that human remains are unearthed during Project-related ground excavation.

uu. Impact 3.18 b) Cumulative Impacts

See Section IV Cumulative Impacts below.

vv. Impact 3.18 c) (Substantial Adverse Affects)

Pursuant to the discussion in Section 3.18 c) of the Final EIR, there will not be a direct or indirect significant impact due to substantial adverse affects to humans by the Project. The Commission concurs with this analysis.

Accordingly, based on substantial evidence in the Final EIR and the Public Record of Proceedings, the Commission finds and declares that there are no significant environmental adverse effects from this project to human beings.

In support of this finding, the evidence indicates that the Project would not result in any impacts to human beings beyond what has already been analyzed in Chapters 3.1 to 3.17, and thus there is a less than significant impact. There is no evidence to the contrary in the Public Record of Proceedings.

IV

CUMULATIVE IMPACTS

"CEQA Guidelines Section 15130 (a) requires that an EIR discuss the cumulative impacts of a Project when the Project's incremental effect is "cumulatively considerable," meaning that the Project's incremental effects are considerable when viewed in connection with the effects of past, current, and probable future Projects. A consideration of actions included as part of a cumulative impact scenario can vary by geographic extent, time frame, and scale. They are defined according to environmental resource issue and the specific significance level associated with potential impacts. CEQA Guidelines 15130(b) requires that discussions of cumulative impacts reflect the severity of the impacts and their likelihood of occurrence. The CEQA Guidelines note that the cumulative impacts discussion does not need to provide as much detail as is provided in the analysis of Project-only impacts and should be guided by the standards of practicality and reasonableness and 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 impacts."

A. Aesthetic Impacts

Pursuant to the discussion in Section 3.1 a) through d) of the Final EIR, the impact of the Project would not cause a potentially cumulatively significant impact to aesthetic resources. The Commission concurs with this analysis. Accordingly, based on substantial evidence in the Public Record of Proceedings, the Commission finds and declares that the Mitigation's required in Mitigation Measure 3.1-1 will lessen any significant impacts to cumulative aesthetic resources. This cumulative impact relating to aesthetic resources will be reduced to a level of insignificance. The Commission further finds that there are specific economic, legal/public policies, social, or

other considerations which make infeasible any further Mitigation Measures or Project alternatives.

In support of this finding, the evidence indicates that the direct impacts are not significant. Glare is typically a daytime occurrence caused by light reflecting off highly polished surfaces such as window glass or polished metallic surfaces. It is not anticipated that as no new structures will be constructed, there will not be an increase in appreciable glare. No Mitigation Measures are required as potential cumulative impacts related to this Checklist item will result in less than significant impacts.

B. Air Quality Impacts

Pursuant to the discussion in Section 3.3 a) through c) of the Final EIR, the operational-related incremental impact of the Project may cause a potentially cumulatively significant impact to air quality resources. The Commission concurs with this analysis. Accordingly, based on substantial evidence in the Public Record of Proceedings, the Commission finds and declares that the mitigations required in Mitigation Measures 3.3-1 through 3.3-4 will lessen any significant impacts to cumulative air quality. This cumulative impact relating to air quality will be reduced to a level of insignificance. The Commission further finds that there are specific economic, legal/public policies, social, or other considerations which make infeasible any further Mitigation Measures or Project alternatives.

In support of this finding, the evidence indicates that since the direct impacts are not significant, and the baseline is currently under any of the quantified SJVAPCD thresholds, the emissions from the Project could potentially add significantly to surrounding cumulative impacts to air quality. As such, the Applicant will be required to obtain and maintain all required permits from the Air District. Further, the adopted Mitigation Measures will assure that any air quality impacts are mitigated by the Applicant's conformance to Air District standards through implementation of Mitigation Measures 3.3-1 through 3.3-4, potential cumulative impacts related to this Checklist item will be reduced to a level considered less than significant.

C. Cultural Resources

Pursuant to the discussion in Section 3.5 a) through d) of the Final EIR, the construction related incremental impact of the Project may cause a potentially cumulatively significant impact to cultural resources. The Commission concurs with this analysis. Accordingly, based on substantial evidence in the Public Record of Proceedings, the Commission finds and declares that the Mitigation's required in Mitigation Measures 3.5-1, 3.5-2 and 3.5-3 will lessen any significant impacts to cumulative ground water quality. This cumulative impact relating to water quality will be reduced to a level of insignificance. The Commission further finds that there are specific economic, legal/public policies, social, or other considerations which make infeasible any further Mitigation Measures or Project alternatives.

In support of this finding, the evidence indicates that there is no recorded evidence of archeological sites at the Project site. The adopted Mitigation Measures will assure that any Native American burial sites or unidentified skeletal remains encountered are either avoided, treated in accordance with the recommendations of the most likely descendant, or relocated, and will assure that any historical or cultural resources are properly evaluated, thereby reducing this impact to a less than significant level. With implementation of Mitigation Measures 3.5-1, 3.5-2 and 3.5-3, potential cumulative impacts related to this checklist item will be reduced to a level considered less than significant.

D. Greenhouse Gas Emissions

Pursuant to the discussion in Section 3.7 a) and b) of the Final EIR, the incremental impact of the Project will not cause a potentially cumulatively significant impact on Greenhouse Gas Emissions. The Commission concurs with this analysis. Accordingly, based on substantial evidence in the Public Record of Proceedings, the Commission finds and declares that the no mitigation measure are necessary or required to lessen any significant impacts to cumulative Greenhouse Gas Emissions.

This cumulative impact relating to Greenhouse Gas Emissions will be less than significant. The Commission further finds that there are specific economic, legal/public policies, social or other considerations which make infeasible any further mitigation measures or Project alternatives. In support of this finding, the evidence indicates that the Project is consistent with aforementioned plans, policies, and regulations, and less than significant cumulative impacts related to this Checklist item will occur without mitigation. Accordingly, based on substantial evidence in the Public Record of Proceedings, the Commission finds and declares that the no mitigation measure are necessary or required to lessen any significant impacts to cumulative Greenhouse Gas Emissions.

E. Hydrology and Water Quality

Pursuant to the discussion in Section 3.9 a) through j) of the Final EIR, the incremental impact of the Project may cause a potentially cumulatively significant impact on groundwater degradation. The Commission concurs with this analysis. Accordingly, based on substantial evidence in the Public Record of Proceedings, the Commission finds and declares that the mitigation measures are not required or necessary to lessen any significant impacts to cumulative ground water quality.

This cumulative impact relating to water quality will be less than significance. The Commission further finds that there are specific economic, legal/public policies, social or other considerations which make infeasible any further mitigation measures or Project alternatives. In support of this finding, the evidence indicates that the Project is committed to following the regulations of the Central Valley Regional Water Quality Control Board's Title 27 regulations. In addition, the Project is required to comply with provisions in previously approved Surface Mining Permit (PMR 09-002). By following these requirements, there will not be any Project-level significant impacts, and there should not be any cumulative groundwater quality impacts.

This cumulative impact relating to water quality will be less than significant. As such, mitigation measures have are not required or necessary for this Project. Mitigation monitoring is also required for this Project by the County and the Regional Water Quality Control Board. If any groundwater quality impacts are identified, appropriate corrective action will be required by these public agencies.

F. Transportation/Traffic

Pursuant to the discussion in Section 3.16 a) through f) of the Final EIR, the incremental impact of the Project will not result in potentially cumulatively significant impacts on Transportation/Traffic. The Commission concurs with this analysis. Accordingly, based on substantial evidence in the Public Record of Proceedings, the Commission finds and declares and

declares that the no mitigation measure are necessary or required to lessen any significant impacts to cumulative Transportation/Traffic impacts.

In support of this finding, the evidence indicates that the cumulative impacts are not significant. Although traffic generated as a result of the Project will increase, the increase in not significant such that Levels of Service would degrade below acceptable levels. As such, no mitigation measures are necessary or required as potential cumulative impacts related to this Checklist item will result in less than significant impacts.

G. Conclusion

In further support of the foregoing discussion, the applicant complies with Mitigation Measures outlined in the Mitigation Monitoring and Reporting Program.

V

GROWTH INDUCING IMPACTS

Pursuant to the discussion in Chapter 6 of the EIR and consistent with Public Resources Code Section 21100(b)(5) and CEQA Guidelines Section 15126.2(b), the Commission finds and declares that there are no direct growth-inducing impacts resulting from this Project.

Based on substantial evidence in the EIR and the Public Record of Proceedings, the Commission finds and declares that the Project will not cause a significant growth inducing impact, and as such, no mitigation is necessary or required. There is no evidence to the contrary in the Public Record of Proceedings.

In support of this finding, the evidence indicates that the development of the Project is unlikely to result in or contribute to population growth inducement because the Project will not result in an increase in employment, and correspondingly, would not result in an increase in population or associated demand for housing in the area. For these reasons, the Project is not anticipated to result in growth inducement. Therefore, the operation of the proposed Project would not result in new growth in the area relating to the potential population increase.

The proposed Project does not include new homes, and the proposed expansion will result in an increase of seven new employees. The 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 expansion of this business will not induce nearby parcels to build new residences or create new businesses. As such, the proposed Project does not have the potential to induce significant growth in Tulare County.

VI

SIGNIFICANT AND UNAVOIDABLE IMPACTS OF THE PROJECT

Pursuant to the discussion in Section 6.2 of the EIR and consistent with Public Resources Code Section 21100(b)(2)(A) and the State CEQA Guidelines Section 15126.2(b), the Commission finds and declares that there are no significant environmental impacts that cannot be avoided, including Project-related and cumulative air quality impacts.

In support of this finding, the evidence indicates that there are various implications from the significant environmental impacts. There are no feasible Mitigation Measures that are necessary or required, other than those required and adopted for this Project, that could further reduce these impacts to a level of less than significant.

As there are no significant and unavoidable environmental impacts, the Project is proposed and approved to enable the applicant to achieve the Project's basic objectives; including: (1) to establish and operate an economically viable and competitive Project in compliance with applicable laws and regulations; (2) to optimally utilize available land resources; and (3) to mitigate environmental impacts to the extent feasible. In addition, alternative designs or locations that would possibly achieve these objectives would not reduce the identified cumulative impacts to a level of less than significant. Feasible Mitigation Measures have been required for this Project, and with the imposition of feasible Mitigation Measures, there will be no cumulative environmental impacts that remain significant and unavoidable.

VII

ANALYSIS OF ALTERNATIVES

In connection with alternatives, CEQA and the State CEQA Guidelines require that an EIR provide a reasonable range and discussion of alternatives (Public Resources Code §§ 21002, 21002.1; Guidelines § 15126.6).

A. Alternatives:

The Proposed Project constitutes the 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 basic objectives of the Project, as described in the EIR, are to operate an economically viable and competitive mining facility in compliance with applicable laws and regulations, optimally utilizing the available land resource and mitigating environmental impacts to the extent feasible. CEQA requires that an EIR analyze a reasonable range of alternatives. (Public Resources Code Sections 21102, 21002.1 and Guidelines Section 15126.6.) The alternatives to the Project that were considered in the EIR are described as:

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

The No Project Alternative was identified as the environmentally superior Project, while the four Alternatives listed above did not have the same greenhouse gas reduction, agricultural lands, hydrology/water quality, and transportation/traffic impacts. The comparison of various factors was considered in Chapter 5 of the EIR. Table 5.1 and 5.2 of the EIR (made a part hereof)

provides matrices that compares the environmental impacts of differing Project Alternatives against the Project.

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

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	Less	**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

B. Environmentally Superior Alternative:

CEQA requires that, in addition to the analysis of individual Alternatives, the Alternatives must be ranked according to which Alternatives have the lesser environmental effects. This ranking is shown above in Table 5-1 & 5-2.

As compared above, Alternatives 2, and 3 would result in higher greenhouse gases (GHGs) if implemented, as these alternatives do not include all the proposed Project components these Alternatives would not have the full environmental benefit related to GHGs. Alternative 1 by definition would not meet the objectives of the proposed project. Alternative 2 may be physically possible; however, an alternative site has the potential to create the same or more impacts at another site which would subsequently be converted into an active mining operation. Alternative 3 could result in more impacts related to Agriculture and Forestry Resources, and more impacts related to Greenhouse Gas Emissions. After this full, substantial, and deliberate analysis the proposed Project remains the preferred alternative.

The Commission finds that the County has required that this applicant undertake Mitigation Measures. These Measures are restrictive and are applied to mining facilities. Thus, it is in the public interest for the County to advance socially desirable, necessary and enlightened progress, which is both environmentally and economically sound. In light of the foregoing discussion, and when balancing these interests, the Commission finds and concludes that these considerations and benefits are deemed to be substantial, that the Project will not cause a significant or unavoidable environmental impact, and that the Project should be approved.

The Commission finds and concludes that, as discussed in the Statement of Overriding Considerations (Chapter 7 of the DEIR), There are 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 outweigh any unavoidable and unmitigatable impacts warranting a Statement of Overriding Considerations.

The EIR is available at Tulare County Resource Management Agency at 5961 South Mooney Boulevard, Visalia, California 93277 (Telephone No. (559) 624-7000). The custodian for these documents and other materials is Mr. Hector Guerra, Chief Environmental Planner, Environmental Planning Division.