

# Mineral Resources

## Chapter 3.11

### SUMMARY OF FINDINGS

The proposed Project will result in *Less Than Significant Impacts* related to Mineral Resources, as the Project site is not located near a known mineral resource area. No mitigation measures will be required. A detailed review of potential impacts is provided in the following analysis.

### INTRODUCTION

#### CEQA Requirements for Evaluation of Impacts to Mineral Resources

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

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

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<sup>1</sup> Tulare County General Plan Update 2030, Background Report, February 2010, page 10-18.

developed in part from information contained in Plan the Tulare County 2030 General Plan, the Tulare County General Background Report and/or the Tulare County General Plan Revised DEIR incorporated by reference and summarized below. Additional documents utilized are noted as appropriate. A description of the potential impacts of the proposed Project is provided and includes the identification of feasible mitigation measures (if necessary and feasible) to avoid or lessen the impacts.

#### Thresholds of Significance

The Tulare County 2030 General Plan identifies known Mineral Resource areas. The threshold of significance for this section will include the following:

- Impact a known Mineral Resource

### **ENVIRONMENTAL SETTING**

“There is estimated to be a total of 932 million tons of aggregate resources in Tulare County. This figure includes 219 million tons of reserves available for mining and 200 million tons that are located in the hard rock quarries southeast of Porterville. Of that total, 19 million tons are located in Northern Tulare County, which is expected to be depleted by the year 2010 unless new resources are permitted for mining. Lemon Cove has been the most highly extracted area for PCC quality aggregate supplies.”<sup>2</sup>

“Economically, the most important minerals that are extracted in Tulare County are sand, gravel, crushed rock and natural gas. Other minerals that could be mined commercially include tungsten, which has been mined to some extent, and relatively small amounts of chromite, copper, gold, lead, manganese, silver, zinc, barite, feldspar, limestone, and silica. Minerals that are present but do not exist in the quantities desired for commercial mining include antimony, asbestos, graphite, iron, molybdenum, nickel, radioactive minerals, phosphate, construction rock, and sulfur... The majority of these activities appear to occur in the Sierra Foothill Area.”<sup>3</sup>

“The following MRZ categories are used by the State Geologist in classifying the State’s lands. The geologic and economic data and the arguments upon which each unit MRZ assignment is based are presented in the mineral land classification report transmitted by the State Geologist to the SMGB...

- A. *MRZ-1*—Areas where adequate geologic information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence. This zone is applied where well developed lines of reasoning, based on economic-geologic principles and adequate data, indicate that the likelihood for occurrence of significant mineral deposits is nil or slight.
- B. *MRZ-2a*—Areas underlain by mineral deposits where geologic data show that significant measured or indicated resources are present. As shown on the diagram of the California Mineral Land Classification System, MRZ-2 is divided on the

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<sup>2</sup> Tulare County General Plan Update 2030, Background Report, February 2010, page 10-18

<sup>3</sup> Ibid, page 10-17

basis of both degree of knowledge and economic factors. Areas classified MRZ-2a contain discovered mineral deposits that are either measured or indicated reserves as determined by such evidence as drilling records, sample analysis, surface exposure, and mine information. Land included in the MRZ-2a category is of prime importance because it contains known economic mineral deposits. A typical MRZ-2a area would include an operating mine, or an area where extensive sampling indicates the presence of a significant mineral deposit.

- C. *MRZ-2b*—Areas underlain by mineral deposits where geologic information indicates that significant inferred resources are present. Areas classified MRZ-2b contain discovered deposits that are either inferred reserves or deposits that are presently sub-economic as determined by limited sample analysis, exposure, and past mining history. Further exploration work and/or changes in technology or economics could result in upgrading areas classified MRZ-2b to MRZ-2a. A typical MRZ-2b area would include sites where there are good geologic reasons to believe that an extension of an operating mine exists or where there is an exposure of mineralization of economic importance.
- D. *MRZ-3a*—Areas containing known mineral deposits that may qualify as mineral resources. Further exploration work within these areas could result in the reclassification of specific localities into the MRZ-2a or MRZ-2b categories. MRZ-3a areas are considered to have a moderate potential for the discovery of economic mineral deposits. As shown on the diagram of the California Mineral Land Classification System, MRZ-3 is divided on the basis of knowledge of economic characteristics of the resources. An example of a MRZ-3a area would be where there is direct evidence of a surface exposure of a geologic unit, such as a limestone body, known to be or to contain a mineral resource elsewhere but has not been sampled or tested at the current location.
- E. *MRZ-3b*—Areas containing inferred mineral deposits that may qualify as mineral resources. Land classified MRZ-3b represents areas in geologic settings which appear to be favorable environments for the occurrence of specific mineral deposits. Further exploration work could result in the reclassification of all or part of these areas into the MRZ-3a category or specific localities into the MRZ-2a or MRZ-2b categories. MRZ-3b is applied to land where geologic evidence leads to the conclusion that it is plausible that economic mineral deposits are present. An example of a MRZ-3b area would be where there is indirect evidence such as a geophysical or geochemical anomaly along a permissible structure which indicates the possible presence of a mineral deposit or that an ore-forming process was operative.
- F. *MRZ-4*—Areas where geologic information does not rule out either the presence or absence of mineral resources. The distinction between the MRZ-1 and MRZ-4 categories is important for land-use considerations. It must be emphasized that MRZ-4 classification does not imply that there is little likelihood for the presence of mineral resources, but rather there is a lack of knowledge regarding mineral occurrence. Further exploration work could well result in the reclassification of

land in MRZ-4 areas to MRZ-3 or MRZ-2 categories.”<sup>4</sup>

## **REGULATORY SETTING**

### ***Federal Agencies & Regulations***

No Federal Agencies or Regulations apply to the proposed Project.

### ***State Agencies & Regulations***

#### **Surface Mining and Reclamation Act of 1975 (SMARA)**

“The Surface Mining and Reclamation Act (SMARA), Chapter 9, Division 2 of the Public Resources Code, requires the State Mining and Geology Board to adopt State policy for the reclamation of mined lands and the conservation of mineral resources. These policies are prepared in accordance with the Administrative Procedures Act, (Government Code) and are found in California Code of Regulations, Title 14, Division 2, Chapter 8, Subchapter 1.

The Surface Mining and Reclamation Act of 1975 (SMARA, Public Resources Code, Sections 2710-2796) provides a comprehensive surface mining and reclamation policy with the regulation of surface mining operations to assure that adverse environmental impacts are minimized and mined lands are reclaimed to a usable condition. SMARA also encourages the production, conservation, and protection of the state’s mineral resources. Public Resources Code Section 2207 provides annual reporting requirements for all mines in the state, under which the State Mining and Geology Board is also granted authority and obligations.”<sup>5</sup>

#### **State Mining & Geology Board (SMGB)**

“The SMGB serves as a regulatory, policy, and appeals body representing the State's interests in geology, geologic and seismologic hazards, conservation of mineral resources and reclamation of lands following surface mining activities. The SMGB operates within the Department of Conservation, and is granted certain autonomous responsibilities and obligations under several statutes including the Alquist-Priolo Earthquake Fault Zoning Act, the Seismic Hazards Mapping Act, and the Surface Mining and Reclamation Act.”<sup>6</sup>

#### **The Office of Mine Reclamation (OMR)**

The Office of Mine Reclamation was created in 1991 to administer the SMARA requirements. OMR provides assistance to cities, counties, state agencies and mine operators for reclamation planning and promotes cost-effective reclamation. OMR strives to reclaim mined lands to a beneficial end-use through the implementation of SMARA, prevent or minimize the adverse environmental effects of mining by providing assistance to lead agencies and miners in the review of reclamation plans, and minimize residual hazards to public health and safety through the Abandoned Mine Lands program.”<sup>7</sup>

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<sup>4</sup> Guidelines for Classification and Designation of Mineral Land, page 4 to 6.  
<http://www.conservation.ca.gov/smgb/Guidelines/Documents/ClassDesig.pdf>

<sup>5</sup> SMARA Description, <http://www.conservation.ca.gov/smgb/Regulations/Pages/regulations.aspx>. Accessed June 2014.

<sup>6</sup> State Mining & Geology Board (SMGB), <http://www.conservation.ca.gov/smgb/Pages/Index.aspx>. Accessed June 2014.

<sup>7</sup> Office of Mine Regulation, <http://www.conservation.ca.gov/OMR/Pages/Index.aspx>. Accessed June 2014.

## Local Policy & Regulations

### Tulare County General Plan Policies

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

**ERM-2.1 Conserve Mineral Deposits** - The County will encourage the conservation of identified and/or potential mineral deposits, recognizing the need for identifying, permitting, and maintaining a 50 year supply of locally available PCC grade aggregate<sup>8</sup>.

**ERM-2.2 Recognize Mineral Deposits** - The County will recognize as a part of the General Plan those areas of identified and/or potential mineral deposits<sup>8</sup>.

**ERM-2.10 Incompatible Development** - Proposed incompatible land uses in the County shall not be on lands containing or adjacent to identified mineral deposits, or along key access roads, unless adequate mitigation measures are adopted or a statement of overriding considerations stating public benefits and overriding reasons for permitting the proposed use are adopted.<sup>8</sup>

**ERM-4.6 Renewable Energy** - The County shall support efforts, when appropriately sited, for the development and use of alternative energy resources, including renewable energy such as wind, solar, bio-fuels and co-generation<sup>8</sup>.

## IMPACT EVALUATION

### Would the project:

- a) **Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?**

#### Project Impact Analysis:

***No Impact***

The proposed Project area is not located in a known mineral resource zone (MRZ). The nearest MRZ (classified as “3a”), is located more than 10 miles east of the proposed Project site. The MRZ Class 3a, contains known mineral deposits that may qualify as mineral resources; however, further exploration work within these areas could result in the reclassification to a more significant category<sup>9</sup>. MRZ Class 3a areas are considered to have a moderate potential for the discovery of economic mineral deposits. Due to the distance separation between the identified MRZ Class 3a area and proposed Project area, there will be no loss of availability of a known mineral resource due to Project implementation. There will be ***No Project-specific Impacts*** related to this resource.

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<sup>8</sup> Tulare County General Plan Update 2030, Adopted August 28, 2012

<sup>9</sup> California Surface Mining and Reclamation Policies and Procedures. Guidelines for Classification and Designation of Mineral Lands. <http://www.conservation.ca.gov/smgf/Guidelines/Documents/ClassDesig.pdf>. Accessed June 2014.

Draft Environmental Impact Report  
Papich Construction Asphalt Batch Plant Project

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Cumulative Impact Analysis: *No Impact*

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

The proposed Project does not include mining operations and is not located within a known mineral resource zone. *No Cumulative Impacts* related to this checklist item will occur.

Mitigation Measures: **None Required.**

Conclusion: *No Impact*

As noted above, *No Project-specific* or *Cumulative Impacts* related to this resource will occur.

**b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?**

Project Impact Analysis: *No Impact*

As noted in the Response to 3.11 a), the proposed Project does not include a mining operation and the proposed Project site is not located in or near a known mineral resource zone. There will be no significant loss of local important mineral resource recovery site. According to U.S. Geological Survey, the nearest active mine and mineral production plant to the proposed Project is Lemon Cove Plant (operated by RMC Pacific Materials) located approximately 21 miles northeast of the proposed Project site within Tulare County<sup>10</sup>. The mine facility is located east of State Route 198 on Avenue 324, near the Sierra Mountains foothills. The Lemon Cove Plant generally produces sand and gravel materials<sup>11</sup>. The RMC Pacific Materials mine site is identified by U.S. Geological Survey Record ID, 133. The proposed Project will not create any project specific impacts related to this resource.

Cumulative Impact Analysis: *No Impact*

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

As noted in the Response to 3.11 a), the proposed Project does not include a mining operation and is not located within a mineral resource zone. As such, *No Cumulative Impacts* related to this resource will occur.

Mitigation Measures: **None Required.**

Conclusion: *No Impact*

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<sup>10</sup> USGS Mineral Resources On-Line Spatial Data, Active mines and mineral plants in the US. <http://mrdata.usgs.gov/mineral-resources/active-mines.html>. Accessed June, 2014.

<sup>11</sup> Ibid.

As noted above, no Project-specific or cumulative impacts related to this resource will occur.

## ACRONYMS

MRZ	Mineral Resource Zone
OMR	Office of Mine Reclamation
SMGB	State Mining & Geology Board
SMARA	Surface Mining and Reclamation Act

## REFERENCES

- California Surface Mining and Reclamation Policies and Procedures. Guidelines for Classification and Designation of Mineral Lands.  
<http://www.conservation.ca.gov/smgb/Guidelines/Documents/ClassDesig.pdf> . Accessed June 2014.
- Guidelines for Classification and Designation of Mineral Land, page 4 to 6.  
<http://www.conservation.ca.gov/smgb/Guidelines/Documents/ClassDesig.pdf>
- Office of Mine Regulation, <http://www.conservation.ca.gov/OMR/Pages/Index.aspx>. Accessed June 2014.
- SMARA Description, <http://www.conservation.ca.gov/smgb/Regulations/Pages/regulations.aspx>. Accessed June 2014.
- State Mining & Geology Board (SMGB),  
<http://www.conservation.ca.gov/smgb/Pages/Index.aspx>. Accessed June 2014.
- Tulare County General Plan Update 2030, Adopted August 28, 2012
- Tulare County General Plan Update 2030, Background Report, February 2010, page 10-17, 10-18.
- USGS Mineral Resources On-Line Spatial Data, Active mines and mineral plants in the US.  
<http://mrdata.usgs.gov/mineral-resources/active-mines.html>. Accessed June, 2014.