5.10 MINERAL RESOURCES

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential project impacts on mineral resources from the Agua Mansa Commerce Park Specific Plan project (proposed project). Mineral resources have been identified within Riverside County, and more specifically, within the Jurupa Valley area, and therefore are evaluated to determine the potential effects of project implementation.

Minerals are defined as any naturally occurring chemical elements or compounds formed from inorganic processes and organic substances. Minable minerals or an “ore deposit” is defined as a deposit of ore or mineral having a value materially in excess of the cost of developing, mining, and processing the mineral and reclaiming the project area.

5.10.1 Environmental Setting

5.10.1.1 REGULATORY BACKGROUND

State

Surface Mining and Reclamation Act

The regulatory setting regarding mineral resources consists of the California Geological Survey Mineral Resources Project, as authorized under the Surface Mining and Reclamation Act of 1975 (SMARA) (California Public Resources Code Sections 2710 et seq.), including designation of Mineral Resource Zones.

Mineral Resource Classification

The California Geological Survey (CGS) Mineral Resources Project provides information about California’s nonfuel mineral resources. The Mineral Resources Project classifies lands throughout the state that contain regionally significant mineral resources as mandated by SMARA. Nonfuel mineral resources include metals such as gold, silver, iron, and copper; industrial metals such as boron compounds, rare-earth elements, clays, limestone, gypsum, salt, and dimension stone; and construction aggregate, including sand, gravel, and crushed stone. Development generally results in a demand for minerals, especially construction aggregate. Urban preemption of prime deposits and conflicts between mining and other uses throughout California led to passage of the SMARA, which requires all cities and counties to incorporate in their General Plans the mapped designations approved by the State Mining and Geology Board.

The classification process involves six distinct steps:

1. Determination of Study Boundary: Study areas may be a county, a portion of a county, or a Production-Consumption (P-C) region that may contain parts of one or more counties. P-C regions were selected such that the majority (95 percent) of the construction aggregate produced in the region is consumed in the region.

2. Establishment of Mineral Resource Zones (MRZs): Based on geologic appraisals, lands within the study area are classified as:
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- **MRZ-1**: Adequate information indicates that no significant mineral deposits are present or likely to be present.
- **MRZ-2**: Adequate information indicates that significant mineral deposits are present or adequate information indicates that significant inferred resources are present.
- **MRZ-3**: The significance of mineral deposits cannot be determined from the available data.
- **MRZ-4**: Insufficient data to assign any other MRZ designation.
- **SZ Areas**: Containing unique or rare occurrences of rocks, minerals, or fossils that are of outstanding scientific significance.

3. **IRA Areas**: County or State Division of Mines and Geology Identified Areas where adequate production and information indicates that significant minerals are present.

4. **Identification of Sectors**: Lands known to contain significant concrete grade aggregate resources (areas classified as MRZ-2 in Step 2 above) are evaluated to determine if current uses of these lands preclude mining.

5. **Calculation** of resource tonnages within Sectors.


**Regional Policies**

There are no regional policies that are applicable to the topic of mineral resources in Jurupa Valley.

**City General Plan Policies**

The site is not used for mineral extraction. As such, there are no policies applicable to this issue.

**5.10.1.2 EXISTING CONDITIONS**

Historically, mineral extraction has been an important component of Jurupa Valley's economy. Western Riverside County supports extensive deposits of clay, limestone, iron, sand, and aggregates. Along with agricultural production, mineral extraction plays an important role in the county’s economy. Activities associated with the conservation, extraction, and processing of mineral resources are important in meeting the needs of both the county and many dependent industries outside of the county, and allowing for the continuation of regional growth. However, mineral resources are nonrenewable, and careful management of known and suspected mineral deposits is required to ensure that these resources are not depleted through waste, exploitation, and/or encroaching urbanization. Presently, the most economically valuable mineral resources found and extracted within the county are those that are used as building materials and in their manufacture: clay, limestone, sand and gravel, specialty sands, and rock. Most of the economically valuable mineral deposits known to occur in the county are located along Interstates 15, 215, and 60.
Mineral Resource Zones

While the majority of Jurupa Valley is classified as MRZ-3, two major areas in the city are identified as MRZ-2: the eastern portion of the city following the Santa Ana River, and an area in the northwestern corner of the city. There is one area designated as MRZ-1 located in the eastern portion of the City (see Figure 5.10-1, Mineral Resource Zones). County mapping data indicates the “upper” third of the Santa Ana River within the city boundaries is considered a significant source of construction aggregate (i.e., sand and gravel) (Jurupa Valley 2017). In addition to the State Mining and Geology Board's (SMGB) established MRZs, the CGS has also designated Aggregate Mineral Resource areas in the county (see Figure 5.10-2). As shown in Figure 5.10-1, Mineral Resource Zones, the western portion of the project site is designated MRZ-2. However, the site is not designated by the CGS as containing regionally significant PCC-grade aggregate resources (see Figure 5.10-2). As a former cement plant facility, the southern portion of the site was mined for many years for deposits of clay, limestone, iron, sand, and aggregates. However, there are no longer any active mines in this area. Additionally, the river and adjacent lands in this area are designated Public/Quasi-Public Land in the county's general plan.

San Bernardino County Production-Consumption Region

The project site is located within the San Bernardino County P-C Region, which spans parts of southwestern San Bernardino County and parts of western Riverside County. The anticipated consumption of aggregate in the San Bernardino P-C Region for the next 50 years (through the year 2057) is estimated to be 1,131 million tons, of which 735 million tons must be PCC quality. There remains an estimated 5,986 million tons of unpermitted PCC-grade aggregate resources in the San Bernardino P-C Region (CGS 2008).

Mines

The Crestmore Quarry (Mine ID 91-33-0026) in the southern portion of the project site is listed on the Mines Online database maintained by the California Department of Conservation Division of Mine Reclamation. Its primary product is quartz crystal, and it is owned by the Riverside Cement Company. The mine is closed and inactive; however, reclamation activities have not started (DOC 2017).

Other mines near the project site include the closed Pacific Ride Industrial Park Mine (Mine ID 91-33-0059) and the Avalon Mine (Mine ID 91-33-0002). The inactive Pacific Ride Industrial Park Mine is approximately 0.7 mile west of the project site and is an open pit owned by Pacific Equipment Company. The active Avalon Mine is approximately 0.7 mile southwest of the project site and is an open pit owned by Proficiency Rubidoux LLC, with primary products including sand, gravel, and decomposed granite (DOC 2017).

5.10.2 Notice of Preparation (NOP)/Scoping Comments

A Notice of Preparation (NOP) for the proposed project was circulated for public review on July 17, 2017. None of the comments received during the NOP comment period pertain to the topic of mineral resources.
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In addition, a scoping meeting was held on July 27, 2017, at the Jurupa Valley City Hall, 8930 Limonite Avenue, Jurupa Valley, CA 92509, to elicit comments on the scope of the DEIR. A list of attendees is provided in Appendix A; no verbal or written comments were received during the scoping meeting.

5.10.3 Thresholds of Significance

The City of Jurupa Valley has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. Criteria for determining the significance of impacts related to mineral resources are based on criteria contained in Appendix G of the CEQA Guidelines. According to Appendix G, a project would normally have a significant effect on the environment if the project would:

M-1 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.

M-2 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.

5.10.4 Applicable Policies and Design Features

5.10.4.1 PLANS, POLICIES, AND PROGRAMS

No existing plans, policies, or programs are applicable to the proposed project’s impacts to mineral resources.

5.10.4.2 PROJECT DESIGN FEATURES

There are no project design features that apply to mineral resources.

5.10.5 Environmental Impacts

The following impact analysis addresses thresholds of significance that are considered potentially significant impacts.

**Impact M-1 Threshold:** Would the project 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?

As stated above, most of Jurupa Valley is designated MRZ-3. The only areas designated MRZ-2—areas where geologic data indicate that significant mineral resources are present—are in the most northwestern corner of the city and in the eastern portion of the city along the Santa Ana River, which includes the northwestern portion of the project site (see Figure 5.10-1, Mineral Resource Zones). However, the State Mining Board does not designate the project site as a regionally significant PCC-grade aggregate resource (Figure 5.10-2). The City’s General Plan does not designate the site as a mineral resource land use designation that allows for mineral extraction on the basis of the SMARA classification, or an area held in reserve for future mining activities (Jurupa Valley 2017). The area is classified as MRZ-2 and MRZ-3.
Figure 5.10-1 - Mineral Resource Zones

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- **MRZ-1**: Areas where available geologic information indicates that little likelihood exists for the presence of significant mineral resources.
- **MRZ-2**: Areas where available geologic data indicate significant PCC-Grade aggregate resources are present.
- **MRZ-3**: Areas containing known or inferred mineral occurrences of undetermined mineral resource significance.

Source: City of Jurupa Valley, 2017
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Figure 5.10-2 - Aggregate Resource Sector Map for Northern San Bernardino P-C

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Source: California Geologic Survey, 2008
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Development of the proposed Specific Plan would redevelop the site from a former cement plant and mine into industrial and business parks with open space. The Specific Plan proposes development of an industrial park and business park with retail overlay use in the northwestern portion of the site that is designated MRZ-2. Most of this area is already built up with buildings and structures associated with the Riverside Cement Plant, including an administrative building, cement-bagging building, a research and development building, silos and sheds, etc. The MRZ-2 area onsite also encompasses a segment of the Union Pacific Railroad right-of-way that transects the western portion of the site. This northwestern area of the site was never utilized for mining of mineral resources. Mining operations occurred in the southern portion of the site in the Crestmore mine, which consisted of a mine and four quarries. The mining operations terminated in the 1980s and the cement plant operations ceased in 2014. The site is no longer utilized for the mining of mineral resources and, according to the Mines Online database maintained by the California Department of Conservation Division of Mine Reclamation, the Crestmore mine is listed as closed and inactive (DOC 2017).

Further, the City's General Plan includes a land use designation for Open Space-Mineral Resources that would allow for mineral extraction and processing facilities per the SMARA classification. Areas held in reserve for future mining activities also fall under the Open Space-Mineral Resources designation. However, the site is not designated Open Space-Mineral Resources (see Figure 5.10-3).

Since the former Riverside Cement Plant buildings and structures currently occupy the areas onsite designated MRZ-2 and MRZ-3, the site is not designated as a regionally significant PCC-grade resource, the Crestmore mine is closed and inactive, and the site is not designated for mineral extraction or held in reserve for future mining activities, redevelopment of the site into the proposed Agua Mansa Commerce Park would have less than significant impacts to mineral resources.

**Level of Significance before Mitigation:** Impact M-1 would be less than significant.

<table>
<thead>
<tr>
<th>Impact M-2 Threshold:</th>
<th>Would the project 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?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>See response to Impact M-1, above.</td>
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</tbody>
</table>

**Level of Significance before Mitigation:** Impact M-2 would be less than significant.

### 5.10.6 Cumulative Impacts

Cumulative impacts refer to incremental effects of an individual project when viewed in connection with the effects of past projects, current projects, and probable future projects. The geographic area for cumulative analysis for minerals would be the San Bernardino P-C.

As population levels increase in the region, greater demand for aggregate and other mineral materials will be placed on mineral resources, especially sand and gravel. Similarly, development pressures in areas where these materials are known or expected to occur would result in the loss of availability of these mineral resources. The anticipated consumption of aggregate in the San Bernardino P-C Region for the next 50 years (through the
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Year 2057) is estimated to be 1,131 million tons, of which 735 million tons must be PCC quality. There remains an estimated 5,986 million tons of unpermitted PCC-grade aggregate resources in the San Bernardino P-C Region (CGS 2008).

Mineral resource development within the San Bernardino P-C will be conducted in line with SMARA, which requires all cities and counties to incorporate into their General Plans the mapped designations approved by the State Mining Board. Both the County and the City’s General Plan policies require future development to coordinate carefully between proposed mining and existing development, or between existing mining and proposed development. These programmatic goals, policies, and programs will help reduce the cumulative impacts between mining and development within the city to less than significant levels.

5.10.7 Level of Significance Before Mitigation

Impacts M-1 and M-2 are less than significant.

5.10.8 Mitigation Measures

No mitigation measures are required.

5.10.9 Level of Significance After Mitigation

Impacts would be less than significant.

5.10.10 References


Figure 5.10-3 - Jurupa Valley General Plan Land Use Plan

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Source: City of Jurupa Valley, 2017
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