

## 5.10 MINERAL RESOURCES

### 5.10.1 METHODOLOGY

This section of the EIR addresses potential impacts to mineral resources that would result from implementation of the Master Development Plan Input (MDPI). Information regarding mineral resources in the WNCBRA is based on review of maps published by the California Department of Conservation and the County of Los Angeles' current General Plan (1980) and 2008 Draft General Plan update. While the County's 2008 Draft General Plan has not been adopted, it is being reviewed for existing conditions information, which is not dependent on approval.

### 5.10.2 EXISTING CONDITIONS

#### Regulatory Setting

##### **State**

##### Surface Mining and Reclamation Act

The Surface Mining and Reclamation Act of 1975 (SMARA), as codified in the *California Public Resources Code*, Division 2, Chapter 9, Sections 2710 et seq., provides a comprehensive surface mining and reclamation policy for the regulation of surface mining operations to assure that adverse environmental impacts are minimized and mined lands are reclaimed to a usable condition. The SMARA also encourages the production, conservation, and protection of the State's mineral resources. *California Public Resources Code*, Section 2207 provides annual reporting requirements for all mines in the State, under which the State Mining and Geology Board (SMGB) is also granted authority and obligations.

The SMARA also mandates the classification of lands with valuable mineral resources so that land use decisions that may affect mineral-bearing lands will be made with the knowledge of these resources. The SMARA requires the State Geologist to classify areas with potential for significant mineral resources. It states:

The primary objective of the mineral land classifications is to assure that mineral potential and its significance is recognized and considered before land use decisions that could preclude mining are made. The availability of mineral resources is vital to our society. Yet for most types of minerals, economic deposits are rare, isolated occurrences. Access to terrain for purposes of mineral exploration and mine development has become increasingly difficult because California is also faced with growing land use competition.

The SMGB has classified land in California based on the availability of mineral resources. Four mineral resource zone (MRZ) designations have been established for the classification of sand, gravel, and crushed rock resources:

- **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 there is a high likelihood for their presence, and development should be controlled.
- **MRZ-3:** The significance of mineral deposits cannot be determined from the available data.
- **MRZ-4:** There is insufficient data to assign any other MRZ designation.

Under the SMARA, aggregate materials are classified as reserves or resources. Reserves are defined as aggregate materials believed to be acceptable for commercial use that exist within property boundaries owned or leased by an aggregate-producing company and for which permission allowing extraction and processing has been granted by the proper authorities. Aggregate resources include reserves and similar, potentially usable aggregate materials that may be economically mined in the future, but for which no use permit allowing extraction has been granted.

The mineral lands inventory is subject to local public review to ensure that mineral deposits of State or regional significance are identified and protected for future extraction. The State Geologist also prepares an annual mining report that includes information on the amount of land disturbed during the previous year, acreage reclaimed during the previous year, and amendments to the reclamation plan. SMARA further requires mining operations to have approved Mining/Reclamation Plans prior to the start of operations in order to allow for future reuse of the mine.

### Mineral Resources and Mineral Hazards Mapping Program

The California Mineral Resources and Mineral Hazards Mapping Program is administered by the California Geological Survey (CGS) and is divided into two projects: the Mineral Resources Project, which provides data on non-fuel mineral resources, and the Mineral Hazards Project, which provides data on minerals that pose public health issues such as naturally occurring heavy metals, asbestos, mercury, and radon. The Mineral Resources Project deals mainly with mineral land classification under the SMARA, as discussed above. The California Department of Conservation, Division of Mines and Geology map shows that the WND BRA and the rest of Los Angeles County are not likely to contain naturally occurring asbestos (DMG 2000). Mercury is present in volcanoes, hot springs, and natural mercury deposits, as well as in gold mines that used mercury for gold recovery. The project area was not historically a mercury or gold mine, nor are there volcanoes or hot springs in the project area. The CGS' Radon Potential Zone Map shows that WND BRA has low potential for indoor radon levels above 4.0 picocuries per liter (CGS 2005).

### **County**

#### Los Angeles County General Plan

The Los Angeles County Department of Regional Planning (LACDRP) defines mineral resources as "commercially viable aggregate or mineral deposits, such as sand, gravel, and other construction aggregate, oil, and natural gas" (Los Angeles County 2008). The LACDRP's 1980 Special Management Areas Map shows that there are no designated mineral resource areas/mineral resource zones within the WND BRA (Los Angeles County 1980). Near the project area, an MRZ is designated for the area west of the WND BRA, south of State Route (SR-60) in the City of Montebello. The County's 2008 draft Natural Resource Areas Map indicates an MRZ immediately northeast of the WND BRA, extending north to the foothills of the San Gabriel Mountains.

### **Environmental Setting**

Mineral resources are naturally occurring chemicals, elements, or compounds formed by inorganic processes or organic substances. These resources include bituminous rock, gold, sand, gravel, clay, crushed stone, limestone, diatomite, salt, borate, potash, geothermal, petroleum, and natural gas resources. Construction aggregate refers to sand and gravel

(natural aggregates) and crushed stone (rock) that are used as Portland-cement-concrete aggregate, asphaltic-concrete aggregate, road base, railroad ballast, riprap, and fill and for the production of other construction materials.

Sand and gravel resources are generally found along the major drainage channels, such as the San Gabriel River and Rio Hondo. However, due to urbanization, Mineral Resource Areas have not been designated by the State along the Rio Hondo or most of the length of the San Gabriel River except for the area at the base of the San Gabriel Mountains in Irwindale, where there are ongoing sand and gravel mining activities (SMGB 1984). Also, no minerals that may pose health issues are present in or near the WND BRA (DMG 2000, CGS 2005).

The 488-acre Montebello Oil Field, which has been actively producing oil since 1917, is located adjacent to the western boundary of the WND BRA (i.e., San Gabriel Boulevard) just south of SR-60 between North Montebello Avenue and North Lincoln Avenue (City of Montebello 2009). Standard Oil first drilled for oil in the Whittier Narrows area in 1917. Over the next several years, other oil companies drilled in the Whittier Narrows area and in the adjacent Montebello Hills (Wenk et al 2010).

Review of maps prepared by the DOC, Division of Oil, Gas, and Geothermal Resources (DOGGR) shows that there are oil fields in Montebello and Whittier but no gas or geothermal fields. Sedimentary basins with ongoing oil production are present in and near the WND BRA (DOGGR 2001). Regional wildcat maps show numerous oil wells in the Montebello oil field, several of which are located at the southern section of the WND BRA. None of the wells in the WND BRA are operating oil wells, but consist of plugged and abandoned dry holes and oil wells (DOGGR 2010).

### **5.10.3 THRESHOLDS OF SIGNIFICANCE**

The following significance criteria are derived from Appendix G of the State CEQA Guidelines. The project would result in a significant adverse impact related to mineral resources if it would:

**Threshold 5.10.1:** *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; or*

**Threshold 5.10.2:** *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 ENVIRONMENTAL IMPACTS**

#### **Project Design Features**

There are no project design features that specifically relate to mineral resources.

#### **Standard Conditions**

There are no standard conditions that specifically relate to mineral resources.

## **Impact Analysis**

### ***Regional Resources***

**Threshold 5.10.1: 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?**

There are no designated MRZs within the WNCBRA. Also, there are no current or historical sand and gravel resource extraction activities in the WNCBRA. No oil pumping activities are ongoing at the WNCBRA although oil production occurred in the past. Historic oil pumping operations are expected to have utilized underlying resources. Oil wells at the WNCBRA have been plugged and abandoned, and no future pumping is expected at these wells.

Implementation of the MDPI would result in continuation of the existing flood risk management, water conservation, and recreation functions of the WNCBRA. The proposed facilities and improvements would not result in the loss of accessibility to underlying oil resources since these resources have been extracted in the past. The MDPI proposes trails at the southern section where plugged and abandoned oil wells are located. No future oil drilling is expected in these areas.

The proposed MDPI facilities would not involve construction of extensive structures that would substantively preclude accessibility to underground resources. Rather, small and dispersed recreational facilities are proposed throughout the WNCBRA. Due to the presence of large open space areas, oil drilling operations could still be accommodated in the WNCBRA, including directional oil drilling if necessary. Thus, availability of underlying oil resources would not be affected by the MDPI.

Implementation of the proposed facilities and improvements under the MDPI would not indirectly impact the MRZ in the Irwindale production area to the north or the oil resources in the Montebello oil field to the west. Therefore, there would be a less than significant impact related to the loss of availability of a known mineral resource or a locally important mineral resource recovery site.

### ***Locally Important Resources***

**Threshold 5.10.2: 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?**

The oil wells at the WNCBRA are no longer in operation, and future oil drilling operations are not expected. Impacts associated with proposed facilities and improvements under the MDPI on the Montebello oil field are discussed above. No significant adverse impacts on sand and gravel resources are anticipated.

## **5.10.5 CUMULATIVE IMPACTS**

The cumulative impacts on mineral resources are evaluated based on the potential impacts of proposed facilities and improvements in the WNCBRA and in the San Gabriel Valley Production-Consumption Region and the Montebello oil field.

Proposed facilities and improvements recommended by the MDPI would contribute to cumulative demand for construction aggregates in the region. Most of the production-consumption regions in the State do not have sufficient supplies to meet their projected 50-year demand, including the San Gabriel Valley Production Consumption Region. This Production-Consumption Region is estimated to have a 50-year demand for 1.148 million tons of aggregate resources starting in 2006, with 370 million tons of permitted aggregate reserves. Thus, only 32 percent of demand can be met by existing local reserves, and additional resources need to be permitted for extraction.

While the MDPI's proposed facilities and improvements would generate part of the cumulative demand, the proposed facilities and improvements would represent a relatively minor amount of new development that is anticipated within the San Gabriel Valley Production-Consumption Region. The MDPI's cumulative demand for aggregate is considered less than significant.

Since there are no ongoing mining operations in the WND BRA, the MDPI is not expected to affect the availability of resources for production. Thus, no adverse impact on future resource production is expected from the MDPI or proposed facilities and improvements in the WND BRA.

The SMGB recognizes that urban development has precluded access to most of the resources either through building, roadway, or infrastructure construction over the resource areas or by increasing conflicts with abutting urban uses. The MDPI proposes trails at the southern section where plugged and abandoned oil wells are located. These wells are no longer in use and not expected to be used in the future. Drilling wells in the Montebello oil field are located near the WND BRA but would not be affected by the proposed facilities and improvements. Thus, no conflict with existing and future oil production at the Montebello oil field would occur. Cumulative impacts would be less than significant.

#### **5.10.6 MITIGATION MEASURES**

No significant adverse impacts on mineral resources in the WND BRA have been identified, and no mitigation measures are required.

#### **5.10.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION**

No loss of access to underlying resources would occur under the MDPI. Demand for sand and gravel resources by proposed facilities and improvements would not create significant adverse impacts on mineral resources. No cumulative or unavoidable impacts would occur.

## 5.10.8 REFERENCES

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