

D.11 Mineral Resources

This section evaluates the potential for the South Bay Substation Relocation Project (Proposed Project) and alternatives to impact mineral resources in the project area during construction and operation. Section D.11.1 provides a description of the environmental setting, and Section D.11.2 provides applicable regulations. Potential impacts and mitigation measures for the Proposed Project are outlined in Section D.11.3, and the mineral resource impacts related to project alternatives are discussed in Section D.11.4. The mitigation recommendations and the monitoring, compliance, and reporting program for mineral resources are presented in Section D.11.5.

D.11.1 Environmental Setting for the Proposed Project

The California State Legislature enacted the Surface Mining and Reclamation Act (SMARA) in 1975 to limit new development in areas containing significant mineral deposits. SMARA calls for the California State Geologist to classify the lands within California based on mineral resource availability.

Although California has a wide range of mineral commodities, it was recognized that regionally produced construction materials, such as sand, gravel, and crushed stone, are used in every urban area of the state and require special classification data. The California Division of Mines and Geology (CDMG) has classified urbanizing lands according to the presence or absence of significant sand, gravel, or stone deposits that are suitable as sources of aggregate.

Based on review of data from the U.S. Geological Survey (USGS) Mineral Resources Data system, no active mining operations are located within the Proposed Project boundary (USGS 2010). In addition, according to the City of Chula Vista General Plan, Environmental Element, no significant mineral resources (Mineral Resource Zone (MRZ)-2 areas) occur within the Proposed Project boundary (City of Chula Vista 2005). MRZ-2 areas are areas where adequate information indicates that significant mineral resource deposits are present or that a high likelihood for their presence exists on site. Western Salt Works (a commercial salt producer) is, however, located directly south, adjacent to the Proposed Project, and existing salt ponds are located southwest of the proposed Bay Boulevard Substation (SANDAG 2008). In addition, Chula Vista Evaporators (a past salt producer site) is located approximately 0.75 mile south of the proposed Bay Boulevard Substation (SDG&E 2010).

D.11.2 Applicable Regulations, Plans, and Standards

State

Surface Mining and Reclamation Act of 1975

SMARA was enacted by the State of California to address the need for a continuing supply of mineral resources while ensuring the proper reclamation of surface mining operations. Reclamation is regulated to prevent or minimize the negative impacts of surface mining operations. Under the authority of SMARA, the Department of Conservation is responsible for the classification and conservation of the state's mineral resources.

Local

City of Chula Vista Municipal Code

Surface mining in the City of Chula Vista (City) is implemented through Section 19.69 (Surface Mining Operations) of the Municipal Code. The intent of Section 19.69 is to ensure the continued availability of mineral resources; however, regulating surface mining operations is required by SMARA to ensure that adverse environmental impacts are prevented or minimized, the production and conservation of resources is encouraged, and that hazards to public health and safety are eliminated (City of Chula Vista 2003).

City of Chula Vista General Plan – Environmental Element

The Environmental Element of the City's General Plan contains objectives and policies regarding surface mining operations. Objective E-5 conveys the importance of reclaiming mined areas for future development, recreation, open space, or habitat restoration; and Policy E 5.2 directs mining operations to minimize impacts to existing and future surrounding land uses (City of Chula Vista 2005).

D.11.3 Environmental Impacts and Mitigation Measures

D.11.3.1 Definition and Use of Significance Criteria

Appendix G of the California Environmental Quality Act (CEQA) (14 CCR 15000 et seq.) provides guidance for evaluating whether a development project may result in significant impacts. Appendix G suggests that a development project could have a significant impact on mineral resources if the project would:

- 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
- 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.

D.11.3.2 Applicant Proposed Measures

The applicant did not propose any measures to reduce potential mineral resource impacts associated with the construction and operation of the Proposed Project.

D.11.3.3 Bay Boulevard Substation

Impact MIN 1: Project would impact mineral resources

There are no active mining operations within the project site boundary and no designated or delineated areas indicating that significant mineral resource deposits occur on site. Construction and operation of the Bay Boulevard Substation would not interfere with or preclude the operation of mineral resource management in the region. The Western Salt Works operation does occur south of the proposed Bay Boulevard Substation; however, salt is not classified as an aggregate and would, therefore, not be considered a locally important mineral resource. Therefore, the Bay Boulevard Substation would have no impact on mineral resources.

D.11.3.4 South Bay Substation Dismantling

Impact MIN 1: Project would impact mineral resources

There are no active mining operations within the South Bay Substation site boundary and no designated or delineated areas indicating that significant mineral resource deposits are present within the limits of the South Bay Substation site. Dismantling the South Bay Substation would not interfere with or preclude the operation of mineral resource management in the region. Therefore, dismantling the South Bay Substation would have no impact on mineral resources.

D.11.3.5 Transmission Interconnections

Impact MIN 1: Project would impact mineral resources

There are no active mining operations and no designated or delineated areas indicating that significant mineral resource deposits are present within the limits of the transmission interconnection corridors. Construction and operation of the proposed transmission interconnections would not interfere with or preclude the operation of mineral resource

management in the region. Therefore, the transmission interconnections would have no impact on mineral resources.

D.11.4 Project Alternatives

D.11.4.1 Gas Insulated Substation Technology Alternative

Environmental Setting

Section D.11.1 describes the existing mineral resources setting at the proposed Bay Boulevard Substation. Because the Gas Insulated Substation Technology Alternative would only decrease the development footprint of the Bay Boulevard Substation, the existing mineral resource setting would be the same as described in Section D.11.1.

Environmental Impacts and Mitigation Measures

Under this alternative, a smaller development footprint for the Bay Boulevard Substation would be required when compared to the Proposed Project. Mineral resource impacts resulting from construction of the Gas Insulated Substation Technology Alternative would not differ from those under the Proposed Project. No impacts would result with implementation of the Gas Insulated Substation Technology Alternative.

Comparison to the Proposed Project

Mineral resource impacts resulting from construction and operation of the Gas Insulated Substation Technology Alternative would remain the same as the Proposed Project for Impact MIN-1. No impacts would result with implementation of the Proposed Project or the Gas Insulated Substation Technology Alternative.

D.11.4.2 Tank Farm Site Alternative

Environmental Setting

Section D.11.1 describes the mineral resources setting in the project vicinity. Based on review of geological resources described in Section D.11.1, no significant mineral resources occur within the Tank Farm Site Alternative; therefore, the existing mineral resource setting would be the same as described in Section D.11.1.

D.11.4.2.1 Tank Farm Site – Air Insulated Substation Alternative

Environmental Impacts and Mitigation Measures

Since there are no active mining operations and no designated or delineated areas indicating that significant mineral resource deposits are present within this alternative site, no impacts to mineral resources would result with implementation of the Tank Farm Site – Air Insulated Substation Alternative.

Comparison to the Proposed Project

Mineral resource impacts resulting from the construction and operation of the Tank Farm Site – Air Insulated Substation Alternative would be the same when compared to the Proposed Project for Impact MIN-1.

D.11.4.2.2 Tank Farm Site – Gas Insulated Substation Alternative

Environmental Impacts and Mitigation Measures

The impacts would be the same as under the Air Insulated Substation Alternative because the alternative site does not contain mineral resources as discussed in Section D.11.4.2.

Comparison to the Proposed Project

Mineral impacts resulting from the construction and operation of the Tank Farm Site – Gas Insulated Substation Alternative would be the same when compared to the Proposed Project for Impact MIN-1.

D.11.4.3 Existing South Bay Substation Site Alternative

Environmental Setting

Section D.11.1 describes the existing mineral resources setting at the existing substation site. Because the Existing South Bay Substation Site Alternative would be within the same site boundary, the existing mineral resource setting would be the same as described in Section D.11.1.

D.11.4.3.1 Existing South Bay Substation Site – Air Insulated Substation Alternative

Environmental Impacts and Mitigation Measures

There are no mineral resources located on the existing South Bay Substation site or on the adjacent 3-acre parcel that would accommodate substation transformers, switchgear, and circuits; therefore, no impacts would occur.

Comparison to the Proposed Project

Impacts to mineral resources resulting from construction and operation of the Existing South Bay Substation Site – Air Insulated Substation Alternative would be the same when compared to the mineral resource impacts (Impact MIN-1) of the Proposed Project.

D.11.4.3.2 Existing South Bay Substation Site – Gas Insulated Substation Alternative

Environmental Impacts and Mitigation Measures

Section D.11.3.4 indicates that no mineral resources are located on this alternative site; therefore, no impacts would occur with implementation of the Existing South Bay Substation Site – Gas Insulated Substation Alternative.

Comparison to the Proposed Project

Mineral impacts resulting from the construction and operation of the Existing South Bay Substation Site – Gas Insulated Substation Alternative would be the same when compared to the Proposed Project for Impact MIN-1.

D.11.4.4 Power Plant Site Alternative

Environmental Setting

Based on review of geological resources described in Section D.11.1, no significant mineral resources occur within the Power Plant Site Alternative; therefore, the existing mineral resource setting would be the same as described in Section D.11.1.

D.11.4.4.1 Power Plant Site – Air Insulated Substation Alternative

Environmental Impacts and Mitigation Measures

Section D.11.4.4 indicates that no mineral resources are located on this alternative site; therefore, no impacts would occur with implementation of the Power Plant Site – Air Insulated Substation Alternative.

Comparison to the Proposed Project

Mineral impacts resulting from the construction and operation of the Power Plant Site – Air Insulated Substation Alternative would be the same when compared to the Proposed Project for Impact MIN-1.

D.11.4.4.2 Power Plant Site – Gas Insulated Substation Alternative

Environmental Impacts and Mitigation Measures

The impacts would be the same as under the Air Insulated Substation Alternative because the alternative site does not contain mineral resources, as discussed in Section D.11.4.4.

Comparison to the Proposed Project

Mineral impacts resulting from the construction and operation of the Power Plant Site – Gas Insulated Substation Alternative would be the same when compared to the Proposed Project for Impact MIN-1.

D.11.4.5 Broadway and Palomar Site Alternative

Environmental Setting

Based on review of geological resources described in Section D.11.1, no significant mineral resources occur within the Broadway and Palomar Site Alternative; therefore, the existing mineral resource setting would be the same as described in Section D.11.1.

D.11.4.5.1 Broadway and Palomar Site – Air Insulated Substation Alternative

The 9-acre Broadway and Palomar site is not physically large enough to accommodate the 10-acre Air Insulated Substation Alternative. As such, the Air Insulated Substation Alternative is not technically feasible at this site.

D.11.4.5.2 Broadway and Palomar Site – Gas Insulated Substation Alternative

Environmental Impacts and Mitigation Measures

Section D.11.4.5 indicates that no mineral resources are located on this alternative site; therefore, no impacts would occur with implementation of the Broadway and Palomar Site – Gas Insulated Substation Alternative.

Comparison to the Proposed Project

Mineral impacts resulting from the construction and operation of the Broadway and Palomar Site – Gas Insulated Substation Alternative would be the same when compared to the Proposed Project for Impact MIN-1.

D.11.4.6 Goodrich South Campus Site Alternative

Environmental Setting

Based on review of geological resources described in Section D.11.1, no significant mineral resources occur within the Goodrich South Campus Site Alternative; therefore, the existing mineral resource setting would be the same as described in Section D.11.1.

D.11.4.6.1 Goodrich South Campus Site – Air Insulated Substation Alternative

Environmental Impacts and Mitigation Measures

Since no mineral resources are identified in the project area, no impacts to mineral resources would result with implementation of Goodrich South Campus Site Alternative.

Comparison to the Proposed Project

Mineral impacts resulting from the construction and operation of the Goodrich South Campus Site – Air Insulated Substation Alternative would be the same when compared to the Proposed Project for Impact MIN-1.

D.11.4.6.2 Goodrich South Campus Site – Gas Insulated Substation Alternative

Environmental Impacts and Mitigation Measures

The impacts would be the same as under the Air Insulated Substation Alternative because the alternative site does not contain mineral resources, as discussed in Section D.11.4.6.

Comparison to the Proposed Project

Mineral impacts resulting from the construction and operation of the Goodrich South Campus Site – Gas Insulated Substation Alternative would be the same when compared to the Proposed Project for Impact MIN-1.

D.11.4.7 H Street Yard Site Alternative

Environmental Setting

Based on review of geological resources described in Section D.11.1, no significant mineral resources occur within the H Street Yard Site Alternative; therefore, the existing mineral resource setting would be the same as described in Section D.11.1.

D.11.4.7.1 H Street Yard Site – Air Insulated Substation Alternative

Environmental Impacts and Mitigation Measures

Section D.11.4.7 indicates that no mineral resources are located on this alternative site; therefore, no impacts would occur with implementation of the H Street Yard Site – Air Insulated Substation Alternative.

Comparison to the Proposed Project

Mineral impacts resulting from the construction and operation of the H Street Yard Site – Air Insulated Substation Alternative would be the same when compared to the Proposed Project for Impact MIN-1.

D.11.4.7.2 H Street Yard Site – Gas Insulated Substation Alternative

Environmental Impacts and Mitigation Measures

The impacts would be the same as under the Air Insulated Substation because the alternative site does not contain mineral resources, as discussed in Section D.11.4.7.

Comparison to the Proposed Project

Mineral impacts resulting from the construction and operation of the H Street Yard Site – Gas Insulated Substation Alternative would be the same when compared to the Proposed Project for Impact MIN-1.

D.11.4.8 Bayside Site Alternative

Environmental Setting

Based on review of geological resources described in Section D.11.1, no significant mineral resources occur within the Bayside Site Alternative; therefore, the existing mineral resource setting would be the same as described in Section D.11.1.

D.11.4.8.1 Bayside Site – Air Insulated Substation Alternative

Environmental Impacts and Mitigation Measures

Section D.11.4.8 indicates that no mineral resources are located on this alternative site; therefore, no impacts would occur with implementation of the Bayside Site – Air Insulated Substation Alternative.

Comparison to the Proposed Project

Mineral impacts resulting from the construction and operation of the Bayside Site – Air Insulated Substation Alternative would be the same when compared to the Proposed Project for Impact MIN-1.

D.11.4.8.2 Bayside Site – Gas Insulated Substation Alternative

Environmental Impacts and Mitigation Measures

The impacts would be the same as under the Air Insulated Substation Alternative because the alternative site does not contain mineral resources, as discussed in Section D.11.4.8.

Comparison to the Proposed Project

Mineral impacts resulting from the construction and operation of the Bayside Site – Gas Insulated Substation Alternative would be the same when compared to the Proposed Project for Impact MIN-1.

D.11.4.9 Environmental Impacts of the No Project Alternative

Under the No Project Alternative, none of the facilities associated with the project would be constructed, and therefore, none of the impacts identified in this section would occur. While SDG&E may be required to develop transmission upgrades to their existing system as described in Section D.7 of this EIR, these upgrades would be located primarily within developed areas and, therefore, not anticipated to impact mineral resources.

D.11.5 Mitigation Monitoring, Compliance, and Reporting

Because no impacts have been identified to mineral resources, no APMs or mitigation measures are necessary.

D.11.6 References

14 CCR 15000–15387 and Appendix A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.

City of Chula Vista. 2003. Municipal Code (Section 19.69 – Surface Mining Operations). Amended 2003.

City of Chula Vista. 2005. *City of Chula Vista Vision 2020 General Plan*. Adopted December 13, 2005.

SANDAG (San Diego Association of Governments). 2008. Salt Works Site Assessment and Draft Vision Plan. Document prepared by Schmidt Design Group. April 28, 2008.

SDG&E (San Diego Gas & Electric). 2010. Proponent’s Environmental Assessment (PEA) for the South Bay Substation Relocation Project. Prepared by Insignia Environmental. June 2010.

USGS (U.S. Geological Survey). 2010. Mineral Resource Data System: Conterminous U.S. Accessed September 19, 2010. <http://mrdata.usgs.gov/mineral-resources/mrds-us.html>.

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