4.12 MINERAL AND ENERGY RESOURCES

4.12.1 INTRODUCTION

This section describes the availability of mineral and energy resources in the project area, and analyzes the project's potential to adversely affect these resources. The study area for mineral and energy resources includes the project sites and nearby areas. Natural gas would not be required for project construction or operation and is not discussed further in this section.

4.12.2 ENVIRONMENTAL SETTING

4.12.2.1 Mineral Resources

The California Department of Conservation, Division of Mines and Geology, currently known as the California Geological Survey (CGS), classifies land solely on the basis of geologic factors and without regard to existing land use. CGS has mapped nonfuel mineral resources of the State to show where economically significant mineral deposits are either present or likely to occur based on the best available scientific data. These resources have been mapped using the California Mineral Land Classification System, which includes the following four Mineral Resource Zones (MRZs):

- **MRZ-1.** Areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.
- **MRZ-2.** Areas where adequate information indicates that significant mineral deposits are present, where it is judged that a high likelihood for their presence exists, or contains known economic mineral deposits.
- **MRZ-3.** Areas containing known or inferred mineral occurrences of undetermined mineral resource significance.
- **MRZ-4**. Areas of no known mineral occurrences where geologic information does not rule out either the presence or absence of significant mineral resources.

The project study area includes MRZ-1 and MRZ-3 classifications. The cities of Palm Desert and Indio, and the unincorporated community of Thermal are classified as MRZ-1, which indicates that these locations do not, or are unlikely to contain, significant mineral resources (CGS 2015). The cities of Desert Hot Springs, Rancho Mirage, and La Quinta are classified as MRZ-3, which indicates these cities are located in areas containing known or inferred mineral occurrences, the significance of which cannot be determined. The type of mineral occurrence within the project areas that are classified MRZ-3 are aggregate deposits, but the significance of these deposits cannot be determined from available data. Extensive areas of the Coachella Valley (including the cities identified above within the MRZ-3 zone) are classified MRZ-3 for Portland cement concrete (PCC)-grade aggregate. PCC-grade includes sand and gravel deposits having material suitable for use as a concrete aggregate.

4.12.2.2 Current Energy Providers

The project sites are served by two energy providers, described below.

Imperial Irrigation District

The Imperial Irrigation District (IID) provides electricity to a service area of 6,471 square miles, including all of Imperial County and parts of Riverside and San Diego counties. IID delivers more than 1,100 megawatts (MW) of energy annually; energy generated by IID includes 20% renewable energy, 1% solar, 1% biogas, 4% geothermal, 6% biomass and 8% hydroelectricity. Of the project sites, 15 SBA well sites, the La Quinta WBA well cluster, La Quinta WBA Water Treatment Facility site, and the CRRF site (where WRP-4 is located) are currently served by IID.

Southern California Edison

Southern California Edison (SCE) is one of the largest energy providers in Southern California. SCE has a service area of 50,000 square miles and delivers approximately 88,000,000 MWh yearly. Energy generated by SCE includes 8% coal, 5% hydroelectricity, 54% natural gas, 23% nuclear and 13% renewable. Eight of the SBA well sites, the ID8 WBA well cluster and ID8 Water Treatment Facility site are currently served by SCE.

Table 4.12-1 shows existing energy usage by the SBA and WBA wells.

TABLE 4.12-1: EXISTING ENERGY USAGE BY SBA AND WBA WELLS (in MWh)

Well Site	Average Monthly Usage	Average Yearly Usage
SBA 4510-1	39	471
SBA 4610-1	48	572
SBA 4720-1	56	678
SBA 4721-1	51	609
SBA 4722-1	53	639
SBA 5676-2	150	1,804
SBA 5677-1	115	1,387
SBA 5678-1	146	1,748
SBA 5719-1	41	490
SBA 5720-1	58	695
SBA 6805-1	40	477
SBA 6808-1	50	599
SBA 5632-2	70	835
SBA 5664-1	36	433
SBA 5679-1	174	2,082
SBA 5657-2	4	50
SBA 5718-1	10	122
SBA 5717-1	15	180
SBA 5711-2	108	1,291
SBA 6701-1	73	879
SBA 6734-1	20	238
SBA 6726-1	58	700

TABLE 4.12-1: EXISTING ENERGY USAGE BY SBA AND WBA WELLS (in MWh)		
Well Site	**Average Monthly Usage**	**Average Yearly Usage**
SBA 6728-1	49	586
WBA 3405-1[1]	9	104
WBA 3408-1	100	1,198
WBA 3409-2	18	210
WBA 3410-1	28	339
WBA 6723-1	6	73
WBA 6724-1	80	966
WBA 6725-1	68	818
Total MWh	1,773	21,273

Source: Hazen and Sawyer, 2015.
[1] Well to be abandoned
Note: Well energy usage may vary slightly from year to year

4.12.3 REGULATORY FRAMEWORK

4.12.3.1 Federal

National Energy Policy Act of 2005

The National Energy Policy Act of 2005 sets equipment energy-efficiency standards and seeks to reduce reliance on nonrenewable energy resources and provides incentives to reduce current demand on these resources. For example, the act included $2.3 billion in incentives for high-efficiency vehicles, new and existing homes, commercial buildings, and for manufacturers of high-efficiency appliances. Additionally, the act addresses combined heat and power, appliance labeling, research and development, efficiency in federal and public facilities, building energy codes, public housing, and other efficiency topics.

4.12.3.2 State

Surface Mining and Reclamation Act of 1975

The State Mining and Reclamation Act (SMARA) was enacted in 1975 in response to land use conflicts between urban growth and essential mineral production. In accordance with SMARA and as discussed above in Section 4.12.2.1, the State has established the Mineral Land Classification System to help identify and protect mineral resources in areas that are subject to urban expansion or other irreversible land uses that would preclude mineral extraction. Protected mineral resources include construction materials, industrial and chemical mineral materials, metallic and rare minerals, and non-fluid mineral fuels.

2005 California Energy Action Plan II and 2008 Update

The Energy Action Plan II, and subsequent update in 2008, is the State's principal energy planning and policy document (CEC and CPUC 2005, 2008). The plan continues the goals of the original Energy Action Plan, describes a coordinated implementation plan for State energy policies, and identifies specific action areas to ensure that California's energy is adequate, affordable, technologically advanced, and environmentally sound. In accordance with this plan, the first-priority actions to address California's increasing energy demands are energy efficiency and demand response (i.e., reduction of customer

energy usage during peak periods in order to address system reliability and support the best use of energy infrastructure). Additional priorities include the use of renewable sources of power and distributed generation (i.e., the use of relatively small power plants near or at centers of high demand).

California Code of Regulations

The 2013 California Green Building Standards Code (CALGreen) is a code with mandatory and voluntary requirements for new residential and nonresidential buildings (including buildings for retail, office, public schools and hospitals) throughout California. As of July 1, 2012, some mandatory requirements were extended to certain nonresidential additions and alterations. The code is Part 11 of the California Building Standards Code in Title 24 of the California Code of Regulations (CCR) and is also known as the CALGreen Code. In short, the code is established to reduce construction waste, make buildings more efficient in the use of materials and energy, and reduce environmental impact during and after construction.

Building Energy Efficiency Standards

The Energy Efficiency Standards for Residential and Nonresidential Buildings, as specified in Title 24, Part 6, of the CCR, were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The California Energy Commission (CEC) adopted the 2008 Standards on April 23, 2008, and the Building Standards Commission approved them for publication on September 11, 2008. The 2008 Non-residential Compliance Manual was adopted January 14, 2009. The new standards went into effect January 1, 2010, and were updated again in 2011.

4.12.3.3 Regional and Local

Desert Renewable Energy Conservation Plan (DRECP)

The Desert Renewable Energy Conservation Plan (DRECP) will be a component of California's renewable energy planning efforts and is currently in the process of final adoption. Partners of the DRECP include the U.S. Bureau of Land Management (BLM), California Energy Commission, California Department of Fish and Wildlife, and the U.S. Fish and Wildlife Service. The plan has been designed to provide effective protection and conservation of desert ecosystems while allowing for the appropriate development of renewable energy projects. In particular, the DRECP is focused on addressing the counties of Imperial, Inyo, Kern, Los Angeles, Riverside, San Bernardino, and San Diego. The DRECP would result in an efficient and effective biological mitigation and conservation program providing renewable project developers with permit timing and cost certainty under the federal and California Endangered Species Acts while at the same time preserving, restoring and enhancing natural communities and related ecosystems. Approximately 22.5 million acres of federal and non-federal California desert land are in the DRECP Plan Area. The Final Environmental Impact Statement for Phase I of the DRECP was issued on November 10, 2015. Phase II, which involves the private lands component of the DRECP, is ongoing.

Riverside County Eligible Renewable Energy Resource Development (eRED) Planning Program

The purpose of the eRED program is to coordinate and encourage eligible renewable energy resource development in Riverside County at the General Plan level. The eRED program has been funded for two years with a grant from the California Energy Commission. Within the plan, an emphasis is placed on the development and expansion of geothermal resources in the Salton Sea region and the coordination of

solar resources in the far eastern desert portion of Riverside County. CVWD is not a direct participant in the eRED program. As a regional water authority, CVWD may support data and other requests for the program.

4.12.4 IMPACTS AND MITIGATION MEASURES

4.12.4.1 Significance Criteria

Based on Appendices F and G of the State CEQA Guidelines, a project would have a significant impact relating to mineral and energy resources if it would:

a. Use large or excessive amounts of fuel or energy in an unnecessary, wasteful, or inefficient manner.

b. Constrain local or regional energy supplies, require additional capacity, or substantially affect peak and base periods of electrical demand.

c. Require or result in the construction or expansion of new electrical generation and/or transmission facilities, the construction of which could cause significant environmental effects.

d. Conflict with existing energy standards, including standards for energy conservation.

e. 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.

f. 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.

4.12.4.2 Approach to Analysis

This analysis evaluates the potential project-related loss of availability of locally or regionally important mineral resources based on mapping conducted under the Mineral Land Classification System. Impacts related to the loss of mineral resources would be considered significant if construction activities would make known mineral resources temporarily unavailable, or if the construction of new facilities would make these resources permanently unavailable.

This analysis also evaluates the use of energy resources (direct and indirect) associated with construction and operation of the project facilities, including the analysis satisfying Appendix F of the State CEQA Guidelines. The goal of conserving energy implies the wise and efficient use of energy, with particular emphasis on avoiding or reducing inefficient, wasteful and unnecessary consumption of energy. Energy conservation implies that a project's cost effectiveness be reviewed not only in dollars, but also in terms of energy requirements. For construction and operation, the analysis considers whether the proposed project would use large amounts of fuels or electricity, and whether they would be used in an unnecessary, wasteful, or inefficient manner; estimates of energy demand and capacity of the existing transmission grid are also provided.

Areas of No Project Impact

The Project would not result in impacts related to three of the above-listed significance criteria. These significance criteria are not discussed further in the impact analysis for the following reasons:

d. Conflict with existing energy standards, including standards for energy conservation.

CVWD has incorporated the California Building Standards Code by reference into its Development Design Manual. As described in Section 4.12.3.2 above, Part 6 of the California Building Standards Code contains the California Energy Code (CCR Title 24, Part 6). Design and operation of the chromium-6 project would be performed in accordance with the California Building Standards Code. Therefore, no impact related to compliance with applicable energy standards would result, and this criterion is not evaluated further in this section.

e and f. 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 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 study area includes MRZ-1 and MRZ-3 classifications. The project sites classified as MRZ-1 either do not, or are unlikely to contain, significant mineral resources. The project sites classified as MRZ-3 (with the exception of the ID8 WBA Water Treatment Facility site) are existing developed CVWD parcels within developed residential areas; installation of project facilities on these sites would not have an impact on mineral resources. The ID8 WBA Water Treatment Facility site would be located in an MRZ-3 area and within the boundaries of the Willow Hole Conservation Area. When established, conservation areas within the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) area were coordinated to avoid active mining areas. Under the CVMSHCP, expansion of mining operations into conservation areas must hold a valid existing permit as of the date of permit issuance and must be consistent with the conservation objectives for the relevant conservation area. No existing mining locations are located near the ID8 WBA Water Treatment Facility site.

There are no locally important mineral resource recovery sites identified on a local general plan, specific plan, or other land use plan within the project area. Mineral extraction in the Coachella Valley is primarily limited to sand and gravel production. Relative to the ID8 WBA Water Treatment Facility site, the City of Desert Hot Springs has not identified significant deposits of mineral resources in this area. The majority of Desert Hot Springs is made up of alluvial fans, containing mostly sand and gravel. Certain mineral resources may represent an important economic resource but are limited to rocky outcroppings occurring in the Little San Bernardino Mountains, and are not located on the ID8 WBA Water Treatment Facility site. Therefore, the proposed project would not impact the accessibility of locally important mineral resources and these criteria are not discussed further.

4.12.4.3 Construction Impacts and Mitigation Measures

Impact ME-1: The project would not encourage activities that result in the use of large amounts of fuel and energy in a wasteful manner during construction. (Less than Significant)

Construction of the proposed project would require the use of fossil fuels (primarily gas, diesel, and motor oil) for a variety of activities, including excavation, grading, demolition, generator use, and vehicle travel. Direct energy use would also include the use of electricity required to power construction equipment (e.g., welding machines and electric power tools). In addition, project construction would also result in indirect energy use associated with the extraction, manufacturing, and transportation of raw materials to make construction materials. Construction equipment and activities for the chromium-6 project would be conducted in such a manner as to not result in the use of large amounts of fuel and energy in a wasteful manner.

Construction activities could result in wasteful or inefficient use of energy if construction equipment is not well maintained, if equipment is left to idle when not in use, or if haul trips are not planned efficiently. As part of the project, CVWD and its contractor would prepare a construction management plan that would ensure construction activities are conducted in a fuel-efficient manner. Although construction equipment and vehicles would use diesel fuel and gasoline, use of these resources in this manner is not considered a wasteful use of energy resources. This impact would be less than significant.

Impact ME-2: Implementation of the project would require the construction of connections to existing electrical distribution facilities, but the construction of these would not cause significant environmental effects. (Less than Significant)

Implementation of the project would require the construction of connections to existing electrical transmission facilities at the WBA Water Treatment Facilities and CRRF. Existing SBA and WBA well sites currently receive service from either IID or SCE, and would not require additional transmission lines. The WBA Water Treatment Facilities would include the construction of power distribution lines to connect new facilities' electrical equipment to existing IID or SCE transmission lines. Utility providers would serve new project facilities via outdoor pad-mounted transformers. After transformers are installed on site, the utility provider would extend power to the point of service. The ID8 WBA Water Treatment Facility would have service extended by SCE from Dillion Road, the proposed access road. These power lines would be installed underground, and would not conflict with conservation goals within the Willow Hole Conservation Area. The La Quinta WBA Water Treatment Facility would have power extended by IID to the site from existing utility lines located on Airport Boulevard. Electrical service would be provided to the CRRF by IID from their existing and planned transmission infrastructure within the area.

4.12.4.4 Operation Impacts and Mitigation Measures

Impact ME-3: The project would not encourage activities that result in the use of large amounts of fuel in an inefficient manner during operation. (Less than Significant)

Operation of the proposed project would result in new vehicle trips associated with operations and maintenance of the resin treatment system at SBA wells, the CRRF, and the WBA treatment facilities, as described below.

Emergency Generators – Fuel consumption at project facilities for operation would be limited to the use of emergency generators. Emergency generators would be installed at WBA well sites

6723-1 and 6724-1. Emergency generators installed at WBA well sites 6723-1 and 6724-1 would be automatically exercised every week for five minutes at a time, and would use diesel fuel to operate. Fully fueled, emergency generators have the capacity to run for approximately five hours, which allows emergency generators to be exercised approximately 60 times before needing to be refueled. Therefore, consumption of diesel fuel for emergency generators would not constitute a significant amount of fuel consumption.

SBA Well Site Vehicle Trips – As discussed in Section 3.4.5.1 SBA Well Site Treatment Operations, resin tank trailers would travel between the CRRF and each individual SBA well site on average up to eight times per year. With 23 SBA well sites, the total number of resin tank trailer trips is estimated to be 184 per year. Vehicle trips would consume fossil fuels and would contribute to the energy demand required to support operation of the proposed project. The average distance between the CRRF and the SBA well sites is approximately 15 miles, or 30 miles for a round trip visit. Assuming 184 resin trailer trips per year and 30 miles per round trip visit, SBA resin trailers would travel approximately 5,520 miles per year. Assuming an average fuel economy of 10 miles per gallon for the resin trailers, the estimated fuel required for these vehicle trips would be relatively small (approximately 552 gallons annually over the life of the project), which is not a significant amount of fuel consumption.

CVWD operations staff currently visit each well site approximately one to two times per week. With the addition of SBA treatment equipment at each site, these visits would increase to two to four times per week at each site, and would include collecting water samples. With 23 SBA well sites, the total number of new maintenance trips from the CRRF to SBA well sites is estimated to be between 104 and 216 per year at each site. Vehicle trips would consume fossil fuels and would contribute to the energy demand required to support operation of the proposed project. The average distance between the CRRF and the SBA well sites is approximately 15 miles, or 30 miles for a round trip visit. Assuming 104 to 216 maintenance trips per year and 30 miles per round trip visit, maintenance vehicles would travel approximately 3,120 to 6,480 miles per year. Assuming an average fuel economy of 10 miles per gallon for maintenance vehicles, the estimated fuel required for these vehicle trips would be relatively small (approximately 312 to 648 gallons annually over the life of the project), which is not considered excessive fuel consumption.

CRRF Vehicle Trips – Operation of the CRRF would be supported by approximately 11 employees (four resin transfer team members and seven CRRF operators), resulting in approximately 11 commuter vehicle trips per day. This minor amount of commuter vehicle trips would not generate excessive fuel consumption.

Deliveries of chemicals to the CRRF would vary depending on the usage of each chemical, and available storage. Sodium hypochlorite would be used on a daily basis for regeneration and would require regular deliveries. It is assumed that sodium hypochlorite would be delivered to the CRRF approximately three times per year. Hydrochloric acid would be used for electrocoagulation blade cleaning; the CRRF would require approximately 1.25 deliveries of hydrochloric acid for electrocoagulation blade cleaning per year. The treatment process would also require approximately 33 tanker truck deliveries of salt per year. Additional chemicals including sodium bisulfite, ferrous chloride and polymer would be delivered to the CRRF site as well. These chemicals would not be delivered regularly and would be used for emergency back-up treatment

only. Following an initial delivery of each chemical, yearly deliveries would vary but would be minimal. The chemical deliveries are a required part of CRRF operations.

Vehicle trips related to CRRF waste disposal would vary depending on the brine disposal method chosen. Iron solids would be a byproduct of the resin regeneration process regardless of disposal method; these solids would require disposal every nine days, or 19 trips per year, to a landfill in Utah. If the treated brine is sent to a crystallizer, the resulting salt cake would be hauled to Riverside County Lamb Canyon Landfill for disposal every 5 operation days, or 39 times per year. If the treated brine is sent to evaporation ponds, the resulting salt cake would be hauled to Riverside County Lamb Canyon Landfill for disposal every 3 operation days, or 61 times a year. These waste disposal trips are required for CRRF operations.

WBA Treatment Facilities Vehicle Trips – As discussed in Section 3.4.5.3, WBA Treatment Operations, the two WBA Water Treatment Facilities would be designed to operate remotely by automation, with all functions controlled by programmable logic controllers. However, a number of routine operational tasks and procedures are required as a normal part of operation and would require CVWD staff to visit each treatment facility on a weekly basis; thus there would be a total of 104 staff site visits per year for the WBA Water Treatment Facilities. WBA well sites would not require additional staff visits beyond the existing maintenance schedule.

In addition to staff vehicles, each WBA Water Treatment Facility would require resin and chemical deliveries, and disposal of spent resin at an appropriate landfill. WBA treatment facilities would require chemical deliveries of carbon dioxide, anti-scalant and sodium hydroxide. Approximately 50 tons of carbon dioxide can be stored at the ID8 WBA Water Treatment Facility and approximately 100 tons can be stored at the La Quinta WBA Water Treatment Facility. Carbon dioxide can be delivered in 20 ton increments. It is estimated that an initial delivery of three and five deliveries would be required at the ID8 and La Quinta sites, respectively. Anti-scalant would be stored in 2,000 and 4,000 gallon increments at the ID8 and La Quinta sites, respectively. An initial delivery of two truck trips would be made to both sites using a truck which can handle approximately 4,500 gallons of anti-scalant. Subsequent trips would be made to replenish existing storage in a single delivery with similar trucks that handle 4,500 gallon loads of anti-scalant. Similarly, sodium hydroxide would be stored at the ID8 and La Quinta sites in 2,000 and 3,000 gallon increments, respectively. Deliveries to each site would be made with a single truck which can handle 3,500 gallons of sodium hydroxide per trip. Chemical deliveries would be made to each site monthly. WBA resin would be disposed of once every two years at a landfill in Utah. The chemical deliveries and disposal trips are required as part of WBA Water Treatment Facility operations.

Impact Conclusion – Emergency generators can be exercised 60 times before needing to be refueled. The total number of new vehicle trips associated with the project would be a maximum of approximately 652 trips per year. Emergency generator fuel and vehicle trips would be required for the operation of the project, and are not intended to use large amounts of fuel in a wasteful or inefficient manner. This impact is less than significant.

Impact ME-4: The project would not constrain local or regional energy supplies, require additional capacity, or substantially affect peak and base periods of electrical demand during operation. (Less than Significant)

Operational power demands for the proposed project facilities are described below.

Operational Power Use at SBA Wells – The installation of resin treatment equipment at the 23 SBA well sites would result in an increase of average yearly energy use at these sites, as shown in Table 4.12-2.

TABLE 4.12-2: CHANGE IN SBA WELL ENERGY USAGE (in MWh)

Well Site	Existing Average Yearly Usage	Proposed Average Yearly Usage	Change in Yearly Usage
SBA 4510-1	39	541	502
SBA 4610-1	48	660	612
SBA 4720-1	56	780	724
SBA 4721-1	51	792	741
SBA 4722-1	53	735	682
SBA 5676-2	150	2,074	1,924
SBA 5677-1	115	1,593	1,478
SBA 5678-1	146	2,009	1,863
SBA 5719-1	41	563	522
SBA 5720-1	58	801	743
SBA 6805-1	40	530	490
SBA 6808-1	50	689	639
SBA 5632-2	70	942	872
SBA 5664-1	36	656	620
SBA 5679-1	174	2,430	2,256
SBA 5657-2	4	58	54
SBA 5718-1	10	141	131
SBA 5717-1	15	209	194
SBA 5711-2	108	1,506	1,398
SBA 6701-1	73	1,413	1,340
SBA 6734-1	20	283	263
SBA 6726-1	58	830	772
SBA 6728-1	49	679	630
Total (MWh)	1,464	20,914	19,450

Note: Well energy usage may vary slightly from year to year.

Operational Power Use at CRRF – Estimated energy usage for the CRRF and all proposed site equipment would be approximately 1,894 MWh per year if brine disposal by evaporation ponds is used, and approximately 4,390 MWh if brine disposal by crystallization is used. Energy demand for the CRRF would be less if treated brine is disposed of to the sanitary sewer or hauled to an offsite disposal facility; therefore, the crystallization method represents a worst case energy demand analyses for the project.

Operational Power Use at WBA Wells – WBA wells currently pump raw water directly to the potable distribution system. With the implementation of the project, WBA wells would pump water to the new WBA treatment sites. Table 4.12-3 identifies the estimated change in average annual energy use for WBA wells. WBA wells 3409-2, 3410-1, 6724-1 and 6725-1 would be outfitted with new pumps, which would help reduce the electrical demand at these two sites.

TABLE 4.12-3: CHANGE IN WBA WELL ENERGY USAGE (in MWh)

Well Site	Existing Average Yearly Usage	Proposed Average Yearly Usage	Change in Yearly Usage
WBA 3405-1[1]	104	0	-104
WBA 3408-1	1,198	1,198	0
WBA 3409-2	210	154	-56
WBA 3410-1	339	294	-45
WBA 6723-1	73	73	0
WBA 6724-1	966	811	-155
WBA 6725-1	818	687	-131
Total (MWh)	3,708	3,217	-491

[1] Well to be abandoned.

Operational Power Use at WBA Treatment Facilities – The ID8 WBA Water Treatment Facility is estimated to use approximately 7,061 MWh per year. The La Quinta WBA Water Treatment Facility would use approximately 5,571 MWh per year.

Impact Conclusion – Overall, the proposed increase in energy usage related to the project facilities is considered marginal in comparison to the energy usage within the Coachella Valley. To put this in perspective, Coachella Valley households used an average of 12 MWh/year in 2014 (Roth 2015). With approximately 126,680 households in jurisdictions where chromium-6 project facilities are proposed (DOF 2015), the current energy use is estimated at 1,583,120 MWh. The number of households in jurisdictions where chromium-6 project facilities are proposed is projected to increase to 163,739 households by 2035 (SCAG 2008); the projected energy demand for these households is estimated at 2,046,246 MWh. Projected growth in city and county populations and land uses in Coachella Valley would result in substantial increases in electricity and natural gas usage, to which the energy providers in Coachella Valley (i.e., SCE and IID) are planning for long-term growth and associated infrastructure.

Currently, the existing SBA and WBA well sites use approximately 21,270 MWh of electricity per year combined. The project as a whole would use a maximum of approximately 41,153 MWh of electricity per year, depending on the brine disposal option chosen, which represents nearly a doubling of the existing usage at the existing project well sites. This demand increase represents 0.00013% of Riverside County's electricity usage (14,691 kWh[1]) (California Energy Consumption Data Management System 2013). This increase in demand would be accommodated by the energy providers within Coachella Valley (SCE and IID), and would not constrain local or regional energy supplies, require additional capacity, or substantially affect peak and base periods of electrical demand during operation. Additionally, CVWD participates in programs whereby its

[1] Expressed in millions of kWh

domestic water pumps are automatically shut down (with no interruption in the delivery of domestic water) when the electrical grid is at peak demand, helping to preserve service to hundreds of homes that otherwise might experience a loss of service. Therefore, the energy demands of the proposed project would be accommodated by the existing local and regional energy supplies, no new capacity would be required, and the impact would be less than significant.

4.12.5 SIGNIFICANCE AFTER MITIGATION

No mitigation program is required.

4.12.6 CUMULATIVE IMPACTS

The geographic area for the analysis of mineral and energy impacts consists of Riverside County and the service areas of Southern California Edison and Imperial Irrigation District within Riverside County. This analysis was performed using the growth projection approach pursuant to State CEQA Guidelines Section 15130(b)(1)(B). The project would not result in project-specific impacts related to mineral resources; therefore, implementation of the project would not contribute to cumulative impacts to this resource.

Cumulative projects provided by local jurisdictions where project facilities are located were reviewed. Because growth and development are assumed to continue to occur throughout Riverside County, construction and operation of new development would result in incremental increases in energy demand. Since the project is a water treatment project that will enable CVWD to achieve compliance with the new chromium-6 regulation that was promulgated by the State of California in July 2014, the project involves treatment of existing drinking water supplies, and does not involve an expansion of the drinking water supply system or an increase in pumping from groundwater basins used for municipal supply. Therefore, the project would not directly or indirectly induce growth in the project area or the region, which would increase energy use in the long-term. As described in Impact ME-4, the project would have less-than-significant impacts on energy demand during construction and operation because it would not increase the long-term use of energy, would not use energy in a wasteful or inefficient manner, and the long-term energy demand for ongoing operation would be small in comparison to energy demand in Riverside County as a whole. During construction, CVWD and its contractor would prepare a construction management plan that would ensure construction activities are conducted in a fuel-efficient manner. Increases in demand during long-term operations would be accommodated by the energy providers within Coachella Valley (SCE and IID), and would not constrain local or regional energy supplies, require additional capacity, or substantially affect peak and base periods of electrical demand during operation. Projected city and county populations and land uses would result in substantial increases in electricity and natural gas usage, to which the energy providers in Coachella Valley (i.e., SCE and IID) are planning for long-term growth and associated infrastructure. As a result, the project's contribution to a cumulative impact on energy resources would not be cumulatively considerable.

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