

3.0 ERRATA TO THE DRAFT EIR

3.1 Introduction

This section includes the minor changes to the Draft EIR because of typographical errors, clarification of wording, correction of references, or minor additions to expand or amplify existing text. Minor revisions to the environmental analyses are shown in Table 3-1 below. None of these changes constitute significant new information, as defined under CEQA Guidelines Section 15088.5.

TABLE 3-1: List of Sections with Replacement Pages to the Draft EIR

Resource Topic	EIR Section Number
Agricultural Resources	4.3
Air Quality	4.4
Greenhouse Gas	4.8
Traffic and Transportation	4.17
Alternatives	6.0
Air Quality and Greenhouse Gas Report	Appendix B

3.2 Replacement Pages

This section contains the replacement pages associated with the Final EIR. To reduce the cost of preparing the Final EIR, only those pages of the Draft EIR which have been modified have been reproduced. These replacement pages are presented in a manner which allows the reader to easily use in conjunction with the Draft EIR.

The replacement pages are presented by section, as they would appear in the Draft EIR. Text that has been added to the document is indicated in red, while text that has been deleted is indicated with red strikethrough. The headers and footers are in the same format as the Draft EIR, but have been modified to indicate the new date which reflects the release of the Final EIR. If the addition of new text resulted in additional pages, these new pages are numbers with an upper case letter (i.e., Page 4.9-15A, Page 4.9-15B).

Agricultural Resources: Two numerical references on page 4.3-9 were changed to correct a typographical error.

Air Quality: As construction plans have been refined, the project engineers and contractor have determined that additional materials would need to be imported to the ID8 Treatment Facility site in order to achieve project objectives. Therefore, revisions were made to the Air Quality, Greenhouse Gas, and Traffic and Transportation sections of the Draft Environmental Impact Report (Draft EIR) to account for emissions associated with additional material import and associated haul trips. The changes are based on the current estimate that the ID8 Treatment facility will require 60,000 cubic yards of material to be imported to the site. As a result, changes were made to pages 4.4-15 & 16; 4.4-19; and 4.4-24.

Greenhouse Gas: Consistent with the refinements described above under Air Quality, this section was modified to address the haul trips at the ID8 Treatment Facility. Changes were made to pages 4.8-5 and 4.8-7.

Traffic and Transportation: Consistent with the refinements described above under Air Quality, this section was modified to address the haul trips at the ID8 Treatment Facility. Changes were made to page 4.17-19.

Alternatives: This section was modified to address consistency with the naming convention of the Alternatives to use alpha-numeric letters instead of Roman Numerals. Changes were made throughout the section.

Air Quality and Greenhouse Gas Report Appendix B: Consistent with the refinements described above under Air Quality, this Appendix was modified to address the haul trips at the ID8 Treatment Facility. The report also contains the CalEEMOD Model Runs associated with this refinement. Changes were made to pages 20-22, 25, and 29-31.

Also important is consideration of the level or extent of the loss of agricultural lands. According to the CVWD 2014 Crop Report, the irrigable lands within the CVWD service area totals 76,354 acres (CVWD 2014). The 14 acres of CVWD-owned land proposed for removal from agricultural production constitute 0.0018% of the total irrigable acreage. As previously noted, the proposed CRRF site is already subject to the fragmenting effects of surrounding development, including the existing WRP-4 facilities, WRP-4 access along the north and the existing Fillmore Street on the west. The CRRF site is more influenced by the existing WRP-4 use than the prevailing off-site agricultural land use. Conversion of the subject 14 acres to the proposed CRRF use would have a less than significant impact on important farmlands in the Coachella Valley.

Therefore, the proposed chromium-6 project will have a less than significant impact on important farmland in the Coachella Valley.

4.3.4.4 Operation Impacts and Mitigation

Impact AG-2: Implementation of the CRRF component of the project would result in the permanent conversion of Prime Farmland to a non-agricultural use. (Less Than Significant)

The CRRF parcel is designated as Prime/Local Importance Farmland and is located within the larger WRP-4 parcel owned by CVWD, which is designated Urban and Built Up Land. In the early 1980s, CVWD purchased approximately 700 acres in this area, and set aside 50 acres of this land for wastewater treatment facilities. Most of the remaining land was leased by CVWD for agricultural production. These lands are generally bounded by Fillmore Street on the west, the Coachella valley Stormwater Channel on the east, Avenue 62 on the north and Avenue 64 on the south. Over the years, CVWD has expanded the WRP-4 to accommodate an increase in wastewater treatment demands. The first of these expansions required a two-acre increase of development on the existing WRP-4 parcel. The second expansion occurred in 2007 on the southernmost side of the facility, for construction of three replacement drying beds.

While agricultural land conversion would occur, this conversion is considered less than significant based on several factors including: 1) the County's zoning designation of A-2 Heavy Agriculture, which allows for public utility facilities; and 2) the Federal classification of the site as having "very severe limitations that make them less suitable for cultivation and that restrict their use mainly to grazing, forestland, or wildlife." The CRRF site is therefore not considered optimal for crop farming by the USDA.

As noted above, the proposed CRRF and its adjacent evaporation ponds would result in the permanent conversion of approximately 14 acres of prime agricultural land to a non-agricultural use. These lands are already constrained by the effects of surrounding development, including the existing WRP-4 facilities, WRP-4 access along the north and the existing Fillmore Street on the west. The CRRF site is more influenced by the existing WRP-4 use than the prevailing off-site agricultural land use. Furthermore, the 14 acres of CVWD-owned land proposed for removal from agricultural production constitute 0.0018% of the total irrigable acreage. Therefore, the operation of the proposed chromium-6 project will have a less than significant impact on important farmland in the Coachella Valley.

TABLE 4.4-7: CALEEMOD CONSTRUCTION INPUT ASSUMPTIONS	
Facility	Construction
WBA Well Sites (6 sites)	<ul style="list-style-type: none"> • 3.23 acres total of disturbance • Material Import: 0 • Material Export: 0 • Paving: 0 • Demolition Export: 15 tons
SBA Well Sites (23 sites)	<ul style="list-style-type: none"> • 14.7 acres total of disturbance • Material Import: 3,279 cubic yards • Material Export: 0 • Paving: 3.1 acres • Demolition Export: 45 tons
ID8 WBA Water Treatment Plant Site and Pipelines	<ul style="list-style-type: none"> • 44.97 acres of disturbance • Material Import: 060,000 cubic yards • Material Export: 0 cubic yards • Paving: 6.15 acres • Access Road (gravel): 1.3 acres • Demolition Export: 53,842 tons
LA Quinta WBA Water Treatment Plant Site and Pipelines	<ul style="list-style-type: none"> • 3.23 acres of disturbance • 36,012 square foot building (light industrial) • Material Import: 0 cubic yards • Material Export: 0 cubic yards • Paving: 1.82 acres • Demolition Export: 26,919 tons
CRRF Site and Water Pipeline	<ul style="list-style-type: none"> • 38.5 acres of disturbance • 67,300 square foot building (light industrial) • Material Import: 6,876 cubic yards • Material Export: 0 • Paving: 17 acres • Demolition Export: 0
TOTALS FOR INPUT	<ul style="list-style-type: none"> • Site acreage of disturbance: 103.4 acres • Building Space: 103,312 square feet • Material Import: 10701,155 cubic yards • Material Export: 0 cubic yards • Paving: 28.07 acres • Gravel: 1.3 acres • Demolition Export: 80,821 tons

Construction Year	CO	NO _x	ROG	SO _x	PM ₁₀	PM _{2.5}
2016	85.7475.98	123.71416.56	12.0041.30	0.14	30.46	10.5240.01
2017	82.5973.36	115.50409.13	11.2140.58	0.120.10	15.0044.10	9.869.53
2018	138.76	122.40	67.94	0.24	12.28	7.66
2019	20.93	17.73	67.67	0.03	1.93	1.19
SCAQMD Threshold*	550.00	100.00	75.00	150.00	150.00	55.00
Impact?	No	Yes	No	No	No	No

Source: CalEEMod Version 2013.2. See Appendix [C-B](#) for detailed tables. Value shown represents the average unmitigated emissions from summer and winter.

*Source: "SCAQMD Air Quality Significance Thresholds" prepared by South Coast Air Quality Management District, March 2015. Construction thresholds apply to both the South Coast Air Basin and Coachella Valley (Salton Sea and Mojave Desert Air Basins). Thresholds are pounds per day in a single year. Project construction emissions from 2016-2019 are not cumulative.

As shown in Table 4.4-8, SCAQMD daily thresholds for criteria pollutants CO, ROG, SO_x, PM₁₀ and PM_{2.5} would not be exceeded during construction of the chromium-6 project. However, NO_x emissions have the potential to exceed SCAQMD thresholds during the 2016-2018 construction years; this impact is considered significant and requires mitigation. Implementation of Mitigation Measure AQ-2 would reduce NO_x emission from a high of ~~122.4~~123.71 pounds per day to a high of ~~90.5~~89.2.81 pounds per day, which is approximately 10 pounds below the daily NO_x threshold (See Table 4.4-9). As shown in Table 4.4-9 below, all criteria pollutants would be below SCAQMD daily thresholds under mitigated conditions. This impact is less than significant.

Mitigation Measure AQ-2: Implement air quality control measures during construction.

The construction contractor shall implement the following air quality control measures during construction of the Cr6 project to reduce NO_x emissions to less than significant levels:

- To reduce NO_x emissions, construction equipment shall utilize aqueous diesel fuels, diesel particulate filters and diesel oxidation catalyst (30% reduction equivalent or better) during all construction activities.

		CO	NO _x	ROG	SO _x	PM ₁₀	PM _{2.5}
Chromium-6 Project Buildout	2016	85.7475.98	92.8185.66	12.0041.30	0.14	15.84	7.957.45
	2017	82.5973.37	86.5980.23	11.2140.58	0.120.10	10.009.14	7.296.97
	2018	138.76	90.58	67.94	0.24	12.28	7.66
	2019	20.93	12.57	67.67	0.03	1.93	1.19
SCAQMD Threshold*		550.00	100.00	75.00	150.00	150.00	55.00
Impact Statement		No	No	No	No	No	No

Source: CalEEMod Version 2013.2. See Appendix [C-B](#) for detailed tables. Value shown represents the average unmitigated emissions from summer and winter.

*Source: "SCAQMD Air Quality Significance Thresholds" prepared by South Coast Air Quality Management District, March 2015. Construction thresholds apply to both the South Coast Air Basin and Coachella Valley (Salton Sea and Mojave Desert Air Basins). Thresholds are pounds per day in a single year. Project construction emissions from 2016-2019 are not cumulative.

TABLE 4.4-12: LOCALIZED SIGNIFICANCE THRESHOLDS (LBS/DAY)				
Facility Type	CO	NOx	PM₁₀	PM_{2.5}
25 Meters, 1 Acre				
SBA/WBA Sites	15.25	20.75	3.08	2.02
LST	878	132	4	3
Impact	No	No	No	No
50 Meters, 1 Acre				
SBA/WBA Sites	15.25	20.75	3.08	2.02
LST	1,387	166	13	5
Impact	No	No	No	No
100 Meters, 1 Acre				
SBA/WBA Sites	15.25	20.75	3.08	2.02
LST	2,565	238	35	10
Impact	No	No	No	No
200 Meters, 1 Acre				
SBA/WBA Sites	15.25	20.75	3.08	2.02
LST	6,021	376	80	24
Impact	No	No	No	No
500 Meters, 1 Acre				
SBA/WBA Sites	15.25	20.75	3.08	2.02
LST	24,417	733	214	105
Impact	No	No	No	No
50 Meters, 5 Acres				
La Quinta WBA Water Treatment Facility Site*	138.76123.47	92.8195.07	15.8418.53	7.959.47
LST	3,237	340	44	11
Impact	No	No	No	No
200 Meters, 5 Acres				
ID8 WBA Water Treatment Facility Site*	138.76123.47	92.8195.07	15.8418.53	7.959.47
LST	10,178	547	112	37
Impact	No	No	No	No
Source: CalEEMod Version 2013.2. See Appendix 6B . Emissions show the highest emitting day for the highest emitting year for all emissions generated onsite during construction.				
* Emissions show mitigated conditions and application of standard dust control practices. See Table 4.4- 149 .				

Health Risk Assessment

Construction activities and equipment used, and hence the TAC emissions, would vary from location to location and month to month. Therefore, short-duration construction activities were not evaluated for health risk impacts (see Appendix B, Health Risk Assessment).

Impact AQ-4: Project construction activities would not create objectionable odors affecting a substantial number of people. (Less than Significant)

Construction of the project has the potential to result in short term odors associated with asphalt paving and use of heavy equipment; however, any such odors would be quickly dispersed below detectable thresholds as distance from the construction site increases. Additionally, odors related to construction activities are not considered a “nuisance” under SCAQMD Rule 402 because they will not be released in quantities that would cause injury,

since there is no odor potential during operation of the project, this air quality impact would be less than significant.

4.4.5 SIGNIFICANCE AFTER MITIGATION

Residual impacts would be less than significant. As discussed in Impact AQ-2, above, construction of the project has the potential to exceed SCAQMD daily thresholds for NO_x. NO_x emissions are directly related to the operation of construction equipment. To reduce NO_x emissions below the SCAQMD threshold of 100 pounds per day, oxidation catalysts with a 30% reduction equivalent were applied to all construction equipment. It should be noted that CalEEMod assumes all pieces of equipment are operating at the same time during each phase of construction (i.e. grading phase, building construction phase, paving phase etc.). In reality, fewer pieces of construction equipment may be running at any given time. Thus, emissions of NO_x are likely to be overstated and the analysis is considered conservative.

Table 4.4-18 shows that under mitigated conditions, all criteria pollutants would be below SCAQMD daily thresholds. The project would be required to implement the mitigation measure provided under Mitigation Measure AQ-2, above. Adherence to the mitigation measures would ensure this air quality impact would be less than significant.

TABLE 4.4-18: MITIGATED CONSTRUCTION EMISSIONS SUMMARY MAXIMUM DAILY EMISSIONS (LBS/DAY)							
		CO	NO_x	ROG	SO_x	PM₁₀	PM_{2.5}
Chromium-6 Project Buildout	2016	85.74 <u>75.98</u>	92.81 <u>85.66</u>	12.00 <u>11.30</u>	0.14	15.84	7.95 <u>7.45</u>
	2017	82.59 <u>73.37</u>	86.59 <u>80.23</u>	11.21 <u>10.58</u>	0.12 <u>0.10</u>	10.00 <u>9.14</u>	7.29 <u>6.97</u>
	2018	138.76	90.58	67.94	0.24	12.28	7.66
	2019	20.93	12.57	67.67	0.03	1.93	1.19
SCAQMD Threshold*		550.00	100.00	75.00	150.00	150.00	55.00
Impact Statement		No	No	No	No	No	No
Source: CalEEMod Version 2013.2. See Appendix C <u>B</u> for detailed tables. Value shown represents the average unmitigated emissions from summer and winter.							
*Source: "SCAQMD Air Quality Significance Thresholds" prepared by South Coast Air Quality Management District, March 2015. Construction thresholds apply to both the South Coast Air Basin and Coachella Valley (Salton Sea and Mojave Desert Air Basins). Thresholds are pounds per day in a single year. Project construction emissions from 2016-2019 are not cumulative.							

4.4.6 CUMULATIVE IMPACTS

Impact AQ-7: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors). (Less than Significant)

Due to the dispersing nature of air emissions, the geographic scope for the analysis of potential cumulative air quality impacts is the overall Salton Sea Air Basin (SSAB) region in which the

the remaining project energy demands were modeled using the IID GHG intensity factor. The GHG intensity factors are based on California Air Resources Board's (CARB) Local Government Operations Protocol (LGO), updated public utility protocols, and E-Grid values.

4.8.4.3 Construction Impacts and Mitigation Measures

Impact GHG-1: Construction of the project would generate greenhouse gas emissions, either directly or indirectly, that would not have a significant impact on the environment. (Less than Significant)

Construction of the project is anticipated to occur over a 3-year period starting in 2016 with buildout in 2019. Construction activities include site preparation, site grading, operation of construction equipment, stationary power, building construction and related off-site travel, and off-gassing from paving and architectural coatings. Construction related air quality emissions are temporary and end once construction is complete. Operation of mobile equipment is the primary source of greenhouse gas emissions during construction, including off-road emissions from construction equipment and material hauling. Table 4.8-1 summarizes the estimated GHG emissions from all construction activities from 2016 through 2019; emissions were computed on an annual basis. As shown in the table, construction of the project would result in a total of 3,340.44 metric tons of CO₂e emissions totaled over the three-year construction timeframe. This emission level is less than the SCAQMD's annual 10,000 MT operational threshold; therefore, the construction-related GHG emissions impact is considered less than significant and no mitigation is required.

TABLE 4.8-1: CONSTRUCTION GHG EMISSIONS SUMMARY (Metric Tons/Year)				
Year	CO₂	CH₄	N₂O	Total CO₂e
2016	819.23765.83	0.11	0.00	821.73768.32
2017	1,016.29900.11	0.23	0.00	1,021.18904.99
2018	1,462.39	0.22	0.00	1,467.17
2019	199.37	0.02	0.00	199.95
Total Construction CO₂e				3,510.043,340.44
SQAQMD Threshold (per year)				10,000
Significant Impact?				No
Source: CalEEMod Versions 2013.2. See Appendix B for detailed tables. Values shown represent the total unmitigated GHG emission projections for construction of the proposed project.				

Impact GHG-2: Construction of the project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. (Less than Significant)

The Riverside County Climate Action Plan (2015) provides GHG emission reduction policies and regulations specific to construction activities that apply to the proposed project. These

Table 4.8-3 shows the projected operational annual emissions of greenhouse gases for the project for both the CRRF evaporation pond process and the brine crystallization process. Separate GHG model runs were prepared for each utility provider (IID and SCE) based on the operational demand assumptions presented in Table 4.8-2, above. The ID8 WBA Water Treatment Facility is the only facility to be modeled using the SCE GHG intensity factor due to its location within the SCE service boundary. Therefore, GHG emissions from the ID8 WBA Water Treatment Facility are provided separately from the remaining project facilities, which were modeled within IID service boundaries. This separation of operational emissions is shown in the table below.

The five emission source categories that contribute either directly or indirectly to operational GHG emissions (energy/electricity usage, area emissions, mobile sources, off-road sources, and wastewater) are shown separately in the table. Per guidance from SCAQMD, construction-period GHG emissions were amortized over a 30-year period and the resulting average annual emissions were added to operational emissions and compared to the significance threshold.

TABLE 4.8-3: OPERATIONAL GHG EMISSIONS SUMMARY (METRIC TONS/YEAR)					
	Source	CO₂	CH₄	N₂O	CO₂e
CRRF Evaporation Pond Process	Area	0.002	0.000	0.000	0.002
	Energy	5,952.05	0.135	0.028	5,963.62
	Mobile	60.60	0.002	0.000	60.65
	Off-Road	20.18	0.001	0.000	20.32
	Water	186.90	0.782	0.019	209.30
	IID Operational Emissions Total				6,253.90
	SCE Operational Emissions Total (ID8 Facility)				2,028.64
	Operation plus Amortized Construction GHG Emissions*				8,399.548,393.88
	SCAQMD Threshold (per year)				10,000
	Impact?				No
CRRF Brine Crystallization Process	Source	CO₂	CH₄	N₂O	
	Area	0.002	0.000	0.000	0.002
	Energy	7,391.53	0.168	0.034	7,405.89
	Mobile	60.60	0.002	0.000	60.65
	Off Road	14.63	0.001	0.000	14.73
	Water	186.90	0.782	0.019	209.30
	IID Operational Emissions Total				7,690.57
	SCE Operational Emissions Total (ID8 Facility)				2,028.64
	Operation plus Amortized Construction GHG Emissions*				9,836.219,830.55
	SCAQMD Threshold (per year)				10,000
Impact?				No	
Source: CalEEMod Version 2013.2.2. See Appendix B-C for detailed tables. Values shown represent the total unmitigated GHG emission projections for operation of the proposed project.					
* The total construction GHG emissions, 3,340.443,510.04 metric tons, over 30 years equals 111,34117.00 metric tons per year.					

aspect of the project is not anticipated to result in significant impacts to adjoining streets or intersections. This conclusion is based on the limited SBA construction-related traffic and the threshold of significance set forth in the Riverside County Traffic Impact Study Guidelines, which indicate that analysis is only required at any intersection where a project contributes 50 or more peak hour trips. Traffic from each individual construction site is not expected to overlap. The project will have no measurable effect on peak hour or daily traffic volumes due to the low daily traffic volumes generated during construction and ongoing operations.

Construction Traffic Impacts at WBA Well Sites

All construction activities at the WBA well sites are anticipated to occur within each site boundary, with site ingress and egress where access is taken from a public street; however, no staging areas are anticipated exterior to the sites on the adjacent roadways. In the case of the WBA well sites, construction activities will largely be limited to equipment retrofits and the installation of new onsite pipelines to convey raw well water to the associated offsite WBA treatment facility. Therefore, ingress and egress turning movements associated with construction of the improvements constitute the traffic impacts associated with WBA well component of the proposed project. The project construction traffic related to WBA well site facility improvements at each well site is five (5) vehicles per hour (both AM and PM peak hour conditions), with daily traffic generation of 13 trips per day. Based on the amount of construction equipment, number of construction workers, and anticipated hours of arrival and departure, the construction traffic related to the WBA well site improvements is not anticipated to result in a significant impact. This conclusion is based on the limited WBA construction-related traffic and the threshold of significance set forth in the Riverside County Traffic Impact Study Guidelines, which indicate that analysis is only required at an intersection where a project contributes 50 or more peak hour trips. Traffic from each individual construction site is not expected to overlap. The project will have no measurable effect on peak hour or daily traffic volumes due to the low daily traffic volumes generated during construction and ongoing operations.

Construction Traffic Impacts at WBA Treatment Facility Sites

An assessment was made of the potential traffic impacts associated with the construction of each of the two WBA treatment facilities planned for construction at the ID8 Site (Desert Hot Springs) and the La Quinta Site. Access to the ID8 WBA Water Treatment Facility will be from a new gravel-paved access road that would extend south of Dillon Road approximately 300-feet east of Nancy Drive.

Approximately 60,000 cubic yards of fill material will also be imported to the ID8 Treatment Facility site to construct this facility. This will generate an additional 2,500± two-way haul trips over a period of two months. Assuming weekday hauling activity only, the import of this fill would generate an additional 50 haul trips (100 trip ends) per day, and 100 associated in and out trips at Dillon Road or about 8 per hour. Fill material will be sourced from a purveyor in Cabazon, approximately 15 miles west of the site. The haul route will be predominantly on Dillon Road, State Highway 62 and US Interstate-10, with alternative I-10 access from Indian Canyon Drive. It is assumed that 75% of these haul trips will use Highway 62 to access I-10, with the remaining 25% using Indian Canyon Drive.

Average daily trip volumes in 2015 on Dillon Road west of Palm Drive were 6,764 vehicles, with peak season volumes of 8,161 vehicles per day. The ID8 Treatment Facility imported fill hauling will add 0.7% to off-peak and about 0.6% average daily traffic volumes to Dillon Road. Between eight (8) and ten (10) hourly in and out trips would also occur during this two-month period at the ID8 access drive onto Dillon Road.

Traffic volumes on the east Cabazon segment of US Interstate-10 is about 95,000 average annual daily trips (AADT; Caltrans 2015). Traffic volumes of State Highway 62 between US Interstate-10 and the Pierson Boulevard are approximately 16,300 AADT. Haul trips and other construction-related trips associated with the ID8 Treatment Facility represent a very low and short-term contribution to traffic volumes along the haul route. Based upon the 16 trip end per hour associated with hauling, a total 48 trips per hour would be generated during this period, less than the 50 vehicles per hour significance threshold. Therefore, impacts to these roadway segments and associated intersections will be less than significant. Standard traffic control measures at the ID8 site will further ensure that traffic entering and leaving the site will have a minimum and short-term impacts on traffic operations and safety along Dillon Road, and impacts will be less than significant.

The La Quinta WBA Water Treatment Facility is proposed immediately north of Airport Boulevard, from which construction traffic will access the site. Construction traffic related to WBA treatment facility improvements at each treatment facility site is 15 vehicles per hour (both AM and PM peak hour conditions), with daily traffic generation of 38 trips per day.

Construction traffic associated with development of the La Quinta WBA Water Treatment Facility is expected to take direct access from Airport Boulevard. However, currently the La Quinta Site is in a relatively natural state with both native and ornamental plantings throughout. Therefore, initial site grubbing and grading may require that some early phase construction traffic use a portion of the Airport Boulevard frontage for equipment staging or short-term on-street parking. Construction activities at the La Quinta WBA Water Treatment Site are expected to be accomplished in a matter of a few days and may temporarily affect pedestrian and bicycle facilities located along the north side of Airport Boulevard.

Based on the amount of construction equipment, number of construction workers, and anticipated hours of arrival and departure, the construction traffic related to the WBA treatment facility aspect of the project is not anticipated to result in a significant impact. This conclusion is based on the limited WBA construction-related traffic and the threshold of significance set forth in the Riverside County Traffic Impact Study Guidelines, which indicate that analysis is only required at any intersection where a project contributes 50 or more peak hour trips. Traffic from construction of the two subject WBA treatment sites is not expected to overlap. The project will have no measurable effect on peak hour or daily traffic volumes due to the low daily traffic volumes generated during construction and ongoing operations.

The proposed CRRF site is immediately adjacent to and located on a portion of the existing CVWD Water Reclamation Plant No. 4 (WRP-4), which is located adjacent to the Coachella Valley Stormwater Channel. Important system and cost synergies are realized with the CRRF located at this site, including a readily available facility for final stages of wastewater treatment and disposal and access to process make-up water. For these reasons, alternative sites were considered but rejected from further consideration because they failed to meet basic project objectives, were infeasible and/or did not substantially lessen or avoid significant environmental impacts.

6.4 SELECTED CEQA ALTERNATIVES

Introduction and Alternatives Summary

The following is a brief summary of the project alternatives assessed in this EIR.

Alternative 1-I: “No Project” Alternative (State CEQA Guidelines, Section 15126(3)). This alternative considers impacts associated with the continued use of the subject wells without further water treatment. CEQA Guidelines Section 15126.6 requires that an EIR include an evaluation of the No Project Alternative to provide decision-makers with the information necessary to compare the relative impacts of approving a project to not approving a project. The No Project Alternative is defined as a continuation of existing conditions, as well as conditions that are reasonably expected to occur in the event that a proposed project is not implemented.

Alternative 2-II: “More Intense” Project Alternative. This alternative adds more wells and treatment facilities to increase the extent of the chromium-6 treatment system.

Alternative III: “Less Intense” Project Alternative. This alternative would reduce the number of treated wells and eliminate one treatment facility.

To provide a basis for comparison with each of the areas of environmental impact that were analyzed in Section 4, the same areas are considered in this section for each alternative.

In accordance with CEQA requirements, an alternative must meet the following three criteria:

- 1) The alternative would attain most of a project’s basic objectives;
- 2) The alternative would avoid or substantially reduce the significant environmental impacts of the proposed project; and
- 3) The alternative would be feasible.

6.4.1 ALTERNATIVE 1: NO PROJECT ALTERNATIVE

Alternative 1-I: “No Project” Alternative

Under the No Project Alternative, the existing 29 wells planned for treatment would, if used, continue to provide groundwater that exceeds the new State of California standard of 10 ppb or less. This alternative assumes that the wells would continue to be used or would be taken entirely out of service. One additional well in the ID8 well field, proposed for abandonment under the proposed project, would continue to be available for production under the No Project Alternative.

6.5 ALTERNATIVES ANALYSIS

6.5.1 Overview

As set forth in section 15126.6 of the State CEQA Guidelines, the purpose of the alternatives analysis is to focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly. CEQA Guidelines Section 15126.6(e)(2) states that if the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives evaluated. The environmentally superior alternative is generally defined as the alternative that would result in the fewest adverse environmental impacts on the project sites and surrounding areas.

6.5.2 Aesthetics

Alternative #1: No Project Alternative

The No Project Alternative will result in the continuation of existing conditions at each of the project sites. There would be no new facilities at the SBA well sites, and no new treatment facilities at the ID8, La Quinta or WRP-4 area. No long-term aesthetic impacts would occur from the installation of project pipelines. The visual character and quality of surrounding viewsheds, regardless of value, would be unaffected. Under the No Project Alternative, abandonment of currently affected wells could become necessary, and these wells would be held as reserve infrastructure or stranded assets of the District.

Alternative #2: More Intense Project Alternative

The More Intense Alternative would include one additional WBA treatment facility and six additional WBA wells. The location of the third WBA treatment facility would depend upon the rate of population growth and domestic water demand in areas with groundwater with high levels of chromium-6. The visual impacts associated with development of six additional well sites would likely be associated with development plans for specific projects, and are typically mitigated through the project design review process. The additional wells could occur on sites dedicated to the District through the development process, but not yet built out. These sites would be surrounded by a wall consistent with project walls, as required by each jurisdiction's design review process, and would not impact the visual character of development projects, either existing or future.

A third WBA treatment facility would occupy several acres and would include larger scale facilities than the well sites. These facilities would require sensitive design, screening and landscaping to lessen visual impacts. These design features, however, are typical of the development process in all affected jurisdictions, have been implemented for the WBA treatment sites that are part of the Project, and would not require special conditions or mitigation measures. Similar to the proposed project, aesthetic impacts associated with the More Intense Alternative would be less than significant. However, because more facilities would be constructed, aesthetic impacts associated with the more intense alternative would be marginally greater than the proposed project. Impacts associated with this Alternative would be marginally greater than the Less Intense Alternative, and would have a greater impact than the No Project Alternative.

Alternative #3: Less Intense Alternative

The Less Intense Alternative would eliminate one WBA treatment facility and two WBA wells from the La Quinta area. The elimination of a WBA treatment facility would depend upon the ability of the District to mix groundwater containing no or little chromium-6 with water having high levels of chromium-6. The dilution would allow the District to deliver potable water with chromium-6 levels of 10 ppb or less.

A reduction in visual impacts associated with the Less Intense Alternative is largely limited to elimination of the WBA Treatment Facility planned along Airport Boulevard. The subject property is well set back from residences and is along a wide public thoroughfare that provides panoramic views of the mountains to the west. The elimination of this WBA Treatment Facility would result in a modest reduction in visual impacts for nearby residences and for the public traveling on Airport Boulevard as compared to the proposed project. With the elimination of this WBA facility, aesthetic impacts associated with the Less Intense Alternative would be less than significant and slightly less than the proposed project and the More Intense Alternative, and greater than the No Project Alternative.

Summary of Alternatives Analysis

From an aesthetic perspective, the No Project Alternative is environmentally superior to the proposed project and the other project alternatives. The More Intense Alternative could result in greater project impacts than the proposed project, while the Less Intense Alternative would have reduced impacts. Again, it should be noted that there will be no significant impacts to aesthetic resources from implementation and operation of the proposed project.

6.5.3 Agriculture and Forest ResourcesAlternative #1: No Project Alternative

The No Project Alternative will result in the continuation of existing conditions at each of the project sites. There would be no new facilities at the SBA well sites, and no new treatment facilities at the ID8, La Quinta or WRP-4 sites. There will be no changes to existing zoning, land use, or conversion of existing agricultural lands. There will be no impacts to agricultural resources

Alternative #2: More Intense Project Alternative

The More Intense Alternative would include one additional WBA treatment facility and six additional WBA wells. The location of the third WBA treatment facility would depend upon the rate of population growth and domestic water demand in areas with groundwater with high levels of chromium-6. The locations of the additional sites are currently unknown.

In comparison to the proposed project, the More Intense Alternative will result in the same potential impacts to agricultural resources associated with SBA wells 6805-1 and 6808-1, and the CRRF and its off-site water pipeline. Any mitigation measures required for the proposed project would also apply to the More Intense Alternative, therefore reducing potential impacts to less than significant levels.

Alternative #3: Less Intense Alternative

The Less Intense Alternative would eliminate one WBA treatment facility and two WBA wells from the La Quinta area. However an additional site would be selected for storage and associated pipelines. The location of the additional site is currently unknown. There will be no changes to existing zoning, land use, or conversion of existing agricultural lands.

In comparison to the project, the Less Intense Alternative will result in the same potential impacts to agricultural resources associated with SBA wells 6805-1 and 6808-1, and the CRRF and its off-site water pipeline. Any mitigation measures required for the proposed project would also apply to the Less Intense Alternative, therefore reducing potential impacts to less than significant levels.

Summary of Alternatives Analysis

The No Project Alternative is considered environmentally superior from an agriculture and forest resource perspective because there will be no action resulting in changes to existing zoning, land use, or conversion of existing agricultural lands. The project, More Intense Alternative, and Less Intense Alternative have equal potential to impact agricultural resources, assuming the selection of additional alternative sites consistently evaluated impacts to such resources.

6.5.4 Air Quality

Alternative #1: No Project Alternative

The No Project Alternative will result in the continuation of existing conditions at each of the project sites. There would be no new facilities at the SBA well sites, and no new treatment facilities at the ID8, La Quinta or WRP-4 sites. Therefore, related construction or operational activities would not occur. There will be no environmental impacts associated with air quality.

Alternative #2: More Intense Project Alternative

The More Intense Alternative would include one additional WBA treatment facility and six additional WBA wells. The location of the third WBA treatment facility would depend upon where growth in demand occurs, and in the District's access to potable water. For analysis purposes, it was assumed that the new WBA treatment facility and WBA well sites would be similar in size and electricity usage as the existing proposed infrastructure.

Air Quality Plans, Rules, and Regulations

The More Intense Alternative would be developed in accordance with all applicable air quality management plans. All development within the SSAB is subject to the current SCAQMD Air Quality Management Plan and 2003 PM₁₀ Coachella Valley State Implementation Plan. These comprehensive plans establish control strategies and guidance on regional emission reductions for air pollutants. While the project could benefit from these strategies and regulations, construction of the project would not prevent the SCAQMD from implementing these actions. The impact to air quality management plans would be less than significant, and consistent with the impacts associated with the project.

Construction

Construction of the More Intense Alternative will create somewhat greater impacts than those projected for the proposed project. This is due to additional treatment facilities and overall project acreage. For analysis purposes, similar development assumptions (i.e. demolition, grading cut and fill, site acreage) were used for evaluating both the project and More Intense Alternative. The table below shows that SCAQMD daily thresholds will not be exceeded for any criteria pollutant during construction of the More Intense Alternative; however, emissions are slightly higher than those of the proposed project due to an increase in overall acreage, project facilities, paving, and architectural coating surfaces. It should be noted that emissions reflect mitigated conditions, with the same mitigation measures applied to the More Intense Alternative as are applied to the proposed project.

TABLE 6.5.4-2: MORE INTENSE ALTERNATIVE OPERATIONAL EMISSIONS OF CRITERIA POLLUTANTS (LBS/DAY)							
CRRF Evaporation Pond Process		CO	NO_x	ROG	SO_x	PM₁₀	PM_{2.5}
	Proposed	6.66	3.52	38.90	0.01	0.55	0.24
	More Intense	7.13	3.64	42.14	0.01	0.61	0.26
	SCAQMD Threshold	550.00	100.00	75.00	150.00	150.00	55.00
	Impact?	No	No	No	No	No	No
CRRF Brine Crystallization Process		CO	NO_x	ROG	SO_x	PM₁₀	PM_{2.5}
	Proposed	6.66	3.52	38.90	0.01	0.55	0.24
	More Intense	7.13	3.64	42.13	0.01	0.61	0.26
	SCAQMD Threshold	550.00	100.00	75.00	150.00	150.00	55.00
	Impact?	No	No	No	No	No	No
Source: CalEEMod Version 2013.2.2. See Appendix B for detailed tables. Value shown represents average daily unmitigated emission across summer and winter activities.							

Potential Odors

Construction of the More Intense Alternative has the potential to result in short term odors associated with asphalt paving and use of heavy equipment; however, any such odors would be quickly dispersed below detectable thresholds as distance from the construction site increases. Therefore, this air quality impact would be less than significant.

Operation of the More Intense Alternative would not cause objectionable odors that could affect a substantial number of people, because the project wells would run on electrical power (no direct emissions) and chemicals used for water treatment would be stored in the well facility buildings. In addition, water treatment facilities are not typically a source of odor complaints. Therefore, since there is no odor potential during operation of the More Intense Alternative, this air quality impact would be less than significant.

Alternative #3: Less Intense Alternative

The Less Intense Alternative would eliminate one WBA treatment facility and two WBA wells from the La Quinta area. The elimination of a WBA treatment facility would depend upon the ability of the District to mix lower level chromium-6 groundwater with that having high levels of chromium-6. This alternative could require the construction of additional storage and new pipelines. The appropriate energy demands, building square footage, employee commute, and total acres disturbed were adjusted accordingly to reflect the elimination and addition of the above-mentioned facilities.

Air Quality Plans, Rules, and Regulations

The Less Intense Alternative would be developed in accordance with all applicable air quality management plans. All development within the SSAB is subject to the current SCAQMD Air Quality Management Plan and 2003 PM₁₀ Coachella Valley State Implementation Plan. These comprehensive plans establish control strategies and guidance on regional emission reductions for air pollutants. While the project could benefit from these strategies and regulations, construction of the project would not prevent the SCAQMD from implementing these actions. The impact would be less than significant, consistent with that of the project and the More Intense Alternative.

6.5.5 Biological Resources

Alternative #1: No Project Alternative

The No Project Alternative will result in the continuation of existing conditions at each of the project sites. There would be no new facilities at the SBA well sites, and no new treatment facilities at the ID8, La Quinta or WRP-4 facilities. No impacts to biological resources would occur. The character and quality of on-site and surrounding habitats, including those within CVMSHCP Conservation Areas, would be unaffected. Therefore, impacts associated with the No Project Alternative would be less than all other alternatives.

Alternative #2: More Intense Project Alternative

The More Intense Alternative would add a third WBA treatment facility and six additional WBA wells. The location of the third WBA treatment facility would depend upon the rate of population growth and domestic water demand in areas with groundwater with high levels of chromium-6 and other contaminants. The selection of additional WBA well sites and a third treatment site could also be driven by the limited opportunities for the purchase of land within the District service area affected by chromium-6, and the geologic constraints in the local groundwater basins. If developed in association with larger development master plans, potential impacts to biological resources would typically be mitigated through the project design review process and compliance with all requirements of the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP). The WBA facility could occur outside any CVMSHCP Conservation Area, and would mitigate its impacts to biological resources through consistency with the CVMSHCP and the implementation of the same mitigation measures included in the proposed project. Should it occur in a Conservation Area, the mitigation measures included under the proposed project would apply, and impacts would be equivalent. Biological resource impacts associated with the More Intense Alternative could be mitigated to levels of insignificance but in general would be equal to or greater than those associated with the proposed project.

Alternative #3: Less Intense Alternative

The Less Intense Alternative would eliminate one WBA treatment facility and two WBA wells from the La Quinta area. The elimination of a WBA treatment facility would depend upon the ability of the District to mix groundwater with no or little chromium-6 with that having high levels of chromium-6. The dilution would allow the District to deliver potable water with chromium-6 levels of 10 ppb or less. This alternative could require the construction of additional storage facilities and new pipelines.

New pipelines would likely occur in existing right of way, and would have no impact on biological resources. If the added storage and mixing facilities were to be developed in association with other development plans, potential impacts to biological resources would typically be mitigated through the project design review process and payment of development impact fees associated with the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP). The storage facilities could occur outside any CVMSHCP Conservation Area, and would mitigate their impacts to biological resources through the payment of these fees and the implementation of the same mitigation measures included in the proposed project. Should they occur in a Conservation Area, the mitigation measures included under the proposed project would apply, and impacts would be equivalent. Therefore, given that the Less Intense Alternative would result in the construction of new storage and pipeline facilities, it is unlikely that this Alternative would reduce project impacts compared to the proposed project.

Summary of Alternatives Analysis

The No Project Alternative is the environmental superior alternative, since it would have no impact on biological resources. Impacts associated with the other two alternatives and the proposed project would be equivalent, though the type, location and extent of facilities would somewhat differ. Again, it should be noted that there will be no unmitigated significant impacts to biological resources from implementation and operation of the proposed project, with implementation of mitigation measures. Similarly, the Less Intense and More Intense Alternatives would be required to implement the same mitigation measures.

6.5.6 Cultural Resources

Alternative 1: No Project Alternative

The No Project Alternative will result in the continuation of existing conditions at each of the project sites. There would be no new ground disturbance or facilities at the SBA well sites, and no new disturbances or treatment facilities at the ID8, La Quinta or WRP-4 sites. No impacts to cultural resources would occur. The character and quality of on-site and surrounding lands would be unaffected.

Alternative #2: More Intense Project Alternative

The More Intense Alternative would add a third WBA treatment facility and six additional WBA wells to the proposed project. The location of the third WBA treatment facility would depend upon the rate of population growth, and domestic water demand in areas with groundwater with high levels of chromium-6 and other contaminants. The selection of additional WBA well sites and a third treatment site could also be driven by the limited opportunities for land purchases available within the District service area and the geologic constraints in the local groundwater basins. If developed in association with development plans, potential impacts to cultural resources would typically be mitigated through the site surveys, design review process and implementation of appropriate mitigation plans associated with those development proposals. If developed on lands currently held by the District but undeveloped and outside of proposed development projects, impacts to cultural resources could affect more land than those considered for the proposed project. However, the mitigation measures provided for the proposed project, including the monitoring of ground disturbing activities, would be applied to these sites, resulting in equivalent, and less than significant impacts. Cultural resource impacts associated with the More Intense Alternative would be mitigated to levels of insignificance and would be equal to or greater than those associated with the proposed project, but would be mitigated to less than significant levels.

Alternative #3: Less Intense Alternative

The Less Intense Alternative would eliminate one WBA treatment facility and two WBA wells from the La Quinta area. The elimination of a WBA treatment facility would depend upon the ability of the District to mix groundwater with no or low levels of chromium-6 with that having high levels of chromium-6. The dilution would allow the District to deliver potable water with chromium-6 levels of 10 ppb or less. This alternative could require the construction of additional storage facilities and new pipelines, in an area that has seen extensive urban development.

New pipelines would likely occur in existing right of way, and would have no impact on cultural resources. The added storage and mixing facilities, if developed in association with development plans, would typically be mitigated through the project design review process conducted under CEQA for those projects. The storage facilities could occur on lands owned by the District but outside development project areas. In this case, impacts to cultural resources would involve more land than considered as part of the proposed project. However, the mitigation measures provided for the proposed project,

including the monitoring of ground disturbing activities, would be applied to these sites, resulting in equivalent, and less than significant impacts. The Less Intense Alternative would have equivalent or somewhat greater impacts than those associated with the proposed project, but these impacts would be mitigated to less than significant levels.

Summary of Alternatives Analysis

The No Project Alternative is the environmental superior alternative, since no development would occur and no impacts to cultural resources would result. Impacts associated with the other two alternatives and the proposed project would be roughly equivalent, though the type and extent of facilities would somewhat differ, but both the More Intense and Less Intense Alternatives will result in the disturbance of additional land compared to the proposed project, and the potential for greater impacts to cultural resource. Again, it should be noted that there will be no unmitigated significant impacts to cultural resources from implementation and operation of the proposed project. The Less Intense and More Intense Alternatives would be required to implement the same mitigation measures.

6.5.7 Geology and Soils

Alternative 1: No Project Alternative

Under the No Project Alternative, there would be no ground disturbance at either the existing District properties where facilities are being added, or at the new sites proposed for the CRRF and WBA sites. There would therefore be no potential for the loss of topsoil or soil erosion from wind or water, beyond that which would occur currently. The No Project Alternative would also not result in the construction of facilities in a seismically active area, including the construction of facilities crossing a known earthquake fault, or in areas with a high potential for liquefaction. There would not be any potential for impacts to structures or people as a result of the No Project Alternative. Therefore, impacts associated with geology and soils would be less than those associated with any other alternative.

Alternative #2: More Intense Project Alternative

The implementation of the More Intense Project Alternative would add a third WBA treatment facility and six additional WBA wells to the proposed project. The location of the third WBA treatment facility would depend upon the rate of population growth, and domestic water demand in areas with groundwater with high levels of chromium-6 and other contaminants. The construction of these additional facilities will result in additional structures of the same type as those analyzed for the proposed project, and would include equivalent soil disturbance seismic hazards, depending on the location of the additional wells and WBA treatment facility. Impacts would, as with the proposed project, result in less than significant impacts, since the same construction techniques and Building Code requirements would apply to these additional facilities. Impacts associated with the More Intense Project Alternative would be equivalent to the proposed project, and would be less than significant.

Alternative #3: Less Intense Alternative

The Less Intense Alternative would eliminate one WBA treatment facility and two WBA wells from the La Quinta area. The elimination of a WBA treatment facility would depend upon the ability of the District to mix groundwater with no or low levels of chromium-6 with that having high levels of chromium-6. The dilution would allow the District to deliver potable water with chromium-6 levels of 10 ppb or less. This alternative could require the construction of additional storage facilities and new pipelines, in an area that has seen extensive urban development.

The implementation of this alternative could result in the construction of storage facilities and pipelines that would require similar construction activities as those proposed for the proposed project. New facilities, depending on their location, would result in the disturbance of soil, and the construction of structures that would be governed and controlled by current Building Code requirements, including those requirements relating to seismic safety. Impacts associated with this Alternative will result in equivalent, less than significant impacts on geology and soils.

Summary of Alternatives Analysis

The No Project Alternative is the environmentally superior alternative. The No Project Alternative will result in the least impacts, since no development would occur. The More Intense and Less Intense Alternatives would have similar impacts, which would be equivalent to those of the proposed project, insofar as new construction would occur under either alternative. However, as with the proposed project, those impacts would be less than significant.

6.5.8 Greenhouse Gas

Alternative 1: No Project Alternative

The No Project Alternative will result in the continuation of existing conditions at each of the project sites. There would be no new facilities at the SBA well sites, and no new treatment facilities at the ID8, La Quinta or WRP-4 sites. Therefore, related construction or operational activities would not occur. There will be no new environmental impacts associated with greenhouse gases.

Alternative #2: More Intense Project Alternative

The More Intense Alternative would include one additional WBA treatment facility and six additional WBA wells. Construction of this alternative would generate approximately 3,381.71 metric tons of CO₂e annually, which is 41.27 metric tons more than construction emissions associated with the project (3,340.44 metric tons per year). This emission level is less than the SCAQMD’s annual 10,000 MT operational threshold; therefore, the construction-related GHG emissions impact is considered less than significant for both the proposed project and the More Intense Alternative.

As shown in Table 6.5.8-1 below, the More Intense Alternative will generate more greenhouse gas emissions than the proposed project under both CRRF process scenarios. The evaporation pond process will not exceed SCAQMD thresholds, however the crystallization process would result in a significant impact. Greenhouse gas emissions offsets could be proposed as mitigation in attempt to reduce the impact significance, however the More Intense Alternative would result in a significant impact with implementation of the Brine Crystallization Process and other components. This impact is greater than the Less Intense Alternative and proposed project, which result in less than significant operational impacts.

TABLE 6.5.8-1 MORE INTENSE ALTERNATIVE TOTAL OPERATIONAL GREENHOUSE GAS EMISSIONS (METRIC TONS/YEAR)		
CRRF Evaporation Pond Process		CO ₂ e
	Proposed Project	8,393.88
	More Intense	9,464.55
	Threshold	10,000
	Significant Impact?	No

TABLE 6.5.8-1 MORE INTENSE ALTERNATIVE TOTAL OPERATIONAL GREENHOUSE GAS EMISSIONS (METRIC TONS/YEAR)		
CRRF Brine Crystallization Process		CO2e
	Proposed Project	9,830.55
	More Intense	10,898.61
	Threshold	10,000
	Significant Impact?	Yes
Source: CalEEMod Version 2013.2.2. See Appendix B for detailed tables.		

Alternative #3: Less Intense Alternative

The Less Intense Alternative would eliminate one WBA treatment facility and two WBA wells from the La Quinta area. The elimination of a WBA treatment facility would depend upon the ability of the District to mix lower level chromium-6 groundwater with that having high levels of chromium-6. This alternative could require the construction of additional storage and new pipelines. The appropriate energy demands, building square footage, employee commute, and total acres disturbed were adjusted accordingly to reflect the elimination and/or addition of the above-mentioned facilities.

Construction of this alternative would generate approximately 3,298.76 metric tons of CO2e annually, which is 41.68 metric tons less than construction emissions associated with the proposed project (3,340.44 metric tons per year). This emission level is less than the SCAQMD’s annual 10,000 MT operational threshold; therefore, the construction-related GHG emissions impact is considered less than significant and no mitigation is required.

As shown in Table 6.5.8-2 below, operation of the Less Intense Alternative would generate more than 50% fewer greenhouse gas emissions than the proposed project under both CRRF process scenarios. Neither process would exceed SCAQMD thresholds and mitigation measures are not required. The Less Intense Alternative would result in considerably fewer greenhouse gas emissions than both the More Intense Alternative and proposed project.

TABLE 6.5.8-1 LESS INTENSE ALTERNATIVE TOTAL OPERATIONAL GREENHOUSE GAS EMISSIONS (METRIC TONS/YEAR)		
CRRF Evaporation Pond Process		CO2e
	Proposed Project	8,393.88
	Less Intense	3,203.59
	Threshold	10,000
	Significant Impact?	No
CRRF Brine Crystallization Process		CO2e
	Proposed Project	9,830.55
	Less Intense	4,639.76
	Threshold	10,000
	Significant Impact?	No
Source: CalEEMod Version 2013.2.2. See Appendix B for detailed tables.		

Summary of Alternatives Analysis

From a greenhouse gas perspective, the No Project Alternative is environmentally superior because no action would be taken, and there would be no additional emission of greenhouse gases. The More Intense Alternative will generate the highest levels of criteria pollutants at build out, resulting in a significant impact, and therefore will have greater impacts than the other alternatives and the proposed project. The Less Intense Alternative would provide the greatest reduction in greenhouse gas emissions compared to the proposed project and the More Intense Alternative. However, both the Less Intense Alternative and proposed project result in less than significant impacts associated with greenhouse gas emissions.

6.5.9 Hazards and Hazardous Materials

Alternative 1: No Project Alternative

The No Project Alternative would result in no change in the environment, and no construction at any of the project sites. Under this alternative, there would be no new use of chemicals or other substances, and therefore no potential for release of these substances beyond that which currently is possible at existing well sites. The No Project Alternative would have no impact associated with hazards or hazardous materials.

Alternative #2: More Intense Project Alternative

The implementation of the More Intense Project Alternative would add a third WBA treatment facility and six additional WBA wells to the proposed project. The location of the third WBA treatment facility would depend upon the rate of population growth, and domestic water demand in areas with groundwater with high levels of chromium-6 and other contaminants. As described in Section 4.9 of this EIR, the construction and operation of the proposed project will result in the use of chemicals, solvents and other materials. The chemical processes involved in the treatment of domestic water will include the use of resin at the WBA treatment facilities. The additional WBA wells will not require the use of chemicals or other hazardous materials, but would include emergency generators.

The impacts associated with hazards and hazardous materials under the More Intense Alternative would be equivalent to those under the proposed project, since the facilities would be the same as those proposed under that alternative. The construction impacts would be equivalent to those described for the project, and the mitigation measures included in this document would be applied to the facilities under this alternative. The WBA well sites would result in six additional emergency generators, which would be subject to the same maintenance and operations regulations as those under the proposed project, including extensive local, regional and state regulations. The resin used at the additional WBA treatment facility would be handled, stored and disposed in the same manner as described for the project. Although implementation of this alternative would result in more facilities on more sites, the impacts would be equivalent to those under the proposed project.

Alternative #3: Less Intense Alternative

The Less Intense Alternative would eliminate one WBA treatment facility and two WBA wells from the La Quinta area. The elimination of a WBA treatment facility would depend upon the ability of the District to mix groundwater with no or low levels of chromium-6 with that having high levels of chromium-6. The dilution would allow the District to deliver potable water with chromium-6 levels of 10 ppb or less. This alternative could require the construction of additional storage facilities and new pipelines, in an area that has seen extensive urban development.

Under the No Project Alternative there would be no increase in runoff, no changes to local or area-wide drainage patterns, and neither groundwater nor surface water quality would be affected.

Alternative #2: More Intense Project Alternative

The More Intense Alternative would add a third WBA treatment facility and six additional WBA wells, would increase development on currently vacant lands and would result in a modest increase in surface runoff. The location of the third WBA treatment facility would depend upon where growth in demand occurs, and in the District's access to potable water.

If developed in conjunction with development projects, the potential impacts of this alternative to area drainage and local and regional water quality would typically be mitigated through the site analysis, engineering design and review process for those projects, and the implementation of appropriate retention or detention facilities within these projects. If constructed on lands owned by the District outside of development projects, the facilities proposed under this alternative would be subject to the same NPDES standards as the facilities included in the project, and would be required to conform to those standards, including on-site retention and water quality management planning. The construction of facilities under this alternative would be subject to the same requirements as construction of project facilities, and would be required to implement the same mitigation measures for the reduction of erosion and siltation. Impacts to area drainage and water quality associated with the More Intense Alternative would be equal to or greater than those associated with the proposed project.

As discussed in Section 4.10, drainages in the vicinity of the ID8 site and its proposed treated water pipeline alignment along Dillon Road prompted preparation of a jurisdictional delineation study of these areas. Most of the identified drainages examined were typical of dryland fluvial systems, including sparsely vegetated washes with sand or sand and gravel beds.

Depending on sites selected for additional wells and treatment facilities, the More Intense Alternative could have an equal or greater impact on area drainage and water quality when compared to the proposed project. However, on-site management and that associated with regional drainage and surface water management facilities would reduce impacts to less than significant levels.

Alternative #3: Less Intense Alternative

The Less Intense Alternative would eliminate one WBA treatment facility and two WBA wells from the La Quinta area. The elimination of a WBA treatment facility would depend upon the ability of the District to mix lower level chromium-6 groundwater with that having high levels of chromium-6. This alternative could require the construction of additional storage and new pipelines.

Drainage management in the La Quinta area of the project is generally controlled by on-site stormwater detention facilities, and this approach would be applied as necessary to facility sites for the Less Intense Alternative. The construction of facilities under this alternative would be subject to the same requirements as construction of project facilities, and would be required to implement the same mitigation measures for the reduction of erosion and siltation. Impacts to area drainage and water quality associated with the Less Intense Alternative would be equal to those associated with the proposed project.

Summary of Alternatives Analysis

The No Project Alternative is the environmental superior alternative. Impacts associated with the other alternatives and the proposed project would be roughly equivalent though the type and extent of

facilities would somewhat differ. Again, it should be noted that there will be no unmitigated significant impacts to hydrology or water quality from implementation and operation of the proposed project.

6.5.11 Land Use and Planning

Alternative 1: No Project Alternative

The No Project Alternative will result in the continuation of existing conditions at each of the project sites. There would be no new facilities at the SBA well sites, and no new treatment facilities at the ID8, La Quinta or WRP-4 sites. There will be no impacts on existing communities, conflicts with land planning and regulatory programs, or conflicts with habitat conservations plans.

Alternative #2: More Intense Project Alternative

The More Intense Alternative would include one additional WBA treatment facility and six additional WBA wells. The location of the third WBA treatment facility would depend upon the rate of population growth and domestic water demand in areas with groundwater with high levels of chromium-6. The site selection for the additional facilities will be contingent upon the reduction or avoidance of significant impacts associated with land use and planning. The existing proposed project impacts related to land use and planning would also apply to the More Intense Alternative. The implementation of this alternative would not result in the division of established communities, since facilities would be located on vacant lands in the service area. The additional facilities could occur in a CVMSHCP Conservation Area, and if so located, would be subject to the same mitigation measures as those identified for the ID8 facility. The implementation of these mitigation measures would reduce the impacts associated with conflicts with an existing conservation plan to less than significant level. The implementation of the More Intense Alternative would result in the disturbance of more acreage, but would have equivalent land use impacts as compared to the proposed project.

Alternative #3: Less Intense Alternative

The Less Intense Alternative would eliminate one WBA treatment facility and two WBA wells from the La Quinta area. This alternative could require the construction of additional storage and new pipelines. The elimination of a LA Quinta WBA treatment facility located on the southern edge of the Greg Normal Golf Course would reduce impacts associated with dividing an established community from “Less Than Significant” to “No Impact.” The construction of storage facilities and pipelines would result in construction of additional facilities in the La Quinta area. These facilities would occur on vacant land, and would not divide an established community. There are no Conservation Areas in the La Quinta area, and therefore there would be no potential for facilities to occur in such an area. Although the Less Intense Alternative would disturb additional acreage, its land use impacts would be equivalent to those associated with the project.

Summary of Alternatives Analysis

The No Project Alternative is environmentally superior, since it would not disturb any land, and would not affect a CVMSHCP Conservation Area. Both the More and Less Intense Alternatives would result in equivalent impacts to the proposed project when compared to the project. In all cases, however, land use and planning impacts would be less than significant with the implementation of mitigation measures.

6.5.12 Mineral and Energy Resources

Alternative 1: No Project Alternative

The No Project Alternative will result in the continuation of existing conditions at each of the project sites. There would be no new demand for fuel or energy, or loss in mineral resources. The No Project Alternative will have no impact on such resources.

Alternative #2: More Intense Project Alternative

The More Intense Alternative would add a third WBA treatment facility and six additional WBA wells. The location of the third WBA treatment facility would depend upon where growth in demand occurs, and in the District's access to potable water.

Energy

Based on the current energy demand projections for the WBA treatment facilities (ID8 and La Quinta), adding an additional treatment facility would increase energy demand by 5,500,000-7,500,000 kWh per year. For the WBA well sites, energy demands are typically reduced by approximately 50,000-150,000 kWh per year per well site according to energy demand projections. However the reduction in energy demand created by the six additional WBA wells is minor in comparison to the additional demand created by the WBA treatment facility. Any reduction measures related to fuel or energy proposed for development of the proposed project would also apply to the More Intense Alternative. However, because of the increase in constructed facilities associated with this alternative, impacts to energy resources would be greater than those associated with the proposed project.

Minerals

The More Intense Alternative proposes additional WBA treatment and well sites. The site selection for the additional facilities will be contingent upon the reduction or avoidance of significant impacts associated with mineral resources. Impacts are not anticipated to be significant, due to the lack of locally important mineral resources recovery sites in the general project area. Impacts are expected to be less than significant. However, due to the increase in overall project acreage, the More Intense Alternative has the potential to increase impacts associated with the loss of mineral resources.

Alternative #3: Less Intense Alternative

The Less Intense Alternative would eliminate one WBA treatment facility and two WBA wells from the La Quinta area. The elimination of a WBA treatment facility would depend upon the ability of the District to mix lower level chromium-6 groundwater with that having high levels of chromium-6. This alternative could require the construction of additional storage and new pipelines.

Energy

Elimination of the La Quinta WBA treatment facility and two WBA well sites would reduce overall energy demands by approximately 7,140,000 kWh per year. This alternative would also result in the construction of storage facilities for the mixing of groundwater, which would result in additional equipment associated with pumping. Although specific equipment specifications are not known, it can be assumed that the equipment would be similar to that used at existing well sites. A typical well site uses 530,000 kWh annually. Therefore, the addition of storage facilities could increase energy demand. This increase, however, would be offset by the 7.1 million kWh reduction resulting from the elimination of the WBA wells and treatment facility. Any reduction measures related to fuel or energy proposed for development of the proposed project would also apply to the new facilities required for the Less Intense Alternative. This alternative results in a reduction in energy use of approximately 6.6 million kWh

annually, and would therefore have a lesser impact on energy resources than either the More Intense Alternative or proposed project.

Minerals

Elimination of the La Quinta WBA treatment facility and two WBA well sites would reduce overall project acreage. Some or all of this acreage, however, would be required for the construction of storage facilities. Similar to the proposed project, the Less Intense Alternative would not significantly impact locally important mineral resources, and impacts are expected to be less than significant. Impacts associated with this alternative would be equivalent to the More Intense Alternative, and equivalent to or greater than those associated with the project.

Summary of Alternatives Analysis

From a mineral and energy perspective, the No Project Alternative is environmentally superior because there will be no added demand for such resources. The More Intense Alternative would result in an increase energy use of 5 to 7 million kWh annually, and therefore would have greater impacts than the proposed project and the other alternatives. The Less Intense Alternative would result in a net reduction of approximately 7.1 million kWh annually from the proposed project, which would represent a lower energy impact. As relates to mineral resources, both the More Intense and Less Intense Alternatives result in some increase in the loss of land as compared to the proposed project, and so could be marginally more impacting than the project. However, all development alternatives would have a less than significant impact on energy and mineral resources, and would not require mitigation.

6.5.13 Noise and Vibration

Alternative 1: No Project Alternative

The No Project Alternative would not generate any development, and as a result would not result in any noise beyond that already occurring at existing well sites. Under this alternative, there would be no La Quinta WBA facility, so neither construction nor operational noise in the vicinity of residential receptors, would occur. Other facilities proposed for the project, including the ID8 site and the CRRF site, are proposed in areas with sparse development that would not be disturbed under this alternative. Although impacts associated with noise and the project are less than significant with the implementation of mitigation measures, the No Project Alternative would have the least impact on noise.

Alternative #2: More Intense Project Alternative

The More Intense Alternative would add a third WBA treatment facility and six additional WBA wells. The location of the third WBA treatment facility would depend upon where growth in demand occurs, and in the District's access to potable water. Under this alternative, construction noise would occur at an additional location which could be in the vicinity of sensitive receptors, particularly residents. This construction activity would result in noise levels equivalent to those described for the proposed project, and would exceed acceptable noise levels. The construction of the WBA facility would be required to implement the same mitigation measures as the project, and would have less than significant impacts on the environment surrounding this added facility. The added facility would also result in an operational noise source at one additional location. The WBA facility, however, would be consistent in terms of design and equipment with the other planned facilities for the project, and would generate identical noise levels, which would result in less than significant impacts to adjacent receptors, if there were any. Therefore, the More Intense Alternative would result in marginally greater noise impacts by adding one location to the project, but the noise impacts would remain less than significant.

Alternative #3: Less Intense Alternative

The Less Intense Alternative would eliminate one WBA treatment facility and two WBA wells from the La Quinta area. The elimination of a WBA treatment facility would depend upon the ability of the District to mix lower level chromium-6 groundwater with that having high levels of chromium-6. This alternative could require the construction of additional storage and new pipelines. The elimination of the La Quinta WBA facility would reduce noise levels at that site, both during construction and operation of the facilities. In this regard, the impacts of this alternative would be less than those associated with the project. This alternative would also result in the need for storage facilities in this portion of the District's service area, which could occur at the WBA location or elsewhere. Although the exact type of equipment that would be required at a storage facility is not known, it can be expected that the equipment, and associated noise levels, would be equivalent to those of an active well site. As described in Section 4.13, these noise levels are well within the operational noise thresholds established by La Quinta, should the storage occur there; or the other jurisdictions in this portion of the District's service area. Therefore, it can be expected that the noise impacts associated with this alternative would result in equivalent or somewhat lesser impacts relating to noise, as compared with the project.

Summary of Alternatives Analysis

The No Project Alternative would be the environmentally superior alternative, because no new facilities would be constructed and no new noise would occur. The More Intense Alternative would result in the addition of facilities which would add noise sources, and have a somewhat greater impact on the noise environment as compared to the proposed project. The Less Intense Alternative would add a facility and remove another, and therefore would result in equivalent noise impacts when compared to the project. However, in all cases, the impacts associated with noise remain less than significant with the implementation of mitigation measures for construction activities.

6.5.14 Population and HousingAlternative 1: No Project Alternative

The No Project Alternative will result in the continuation of existing conditions at each of the project sites. There would be no new facilities at the SBA well sites, and no new treatment facilities at the ID8, La Quinta or WRP-4 locations. The project does not result in population growth, but instead responds to it. Under this alternative, however, natural population increases occurring in each affected jurisdiction in the project area would not have access to domestic water supplies with acceptable levels of chromium-6. Increased numbers of people would need to rely on bottled water for drinking and cooking. Under this alternative, indirect impacts to greater population in the valley would be more significant than the implementation of the project or any of the alternatives.

Alternative #2: More Intense Project Alternative

The More Intense Alternative would add a third WBA treatment facility and six additional WBA wells. The location of the third WBA treatment facility would depend upon where growth in demand occurs, and in the District's access to potable water. Additional treatment facilities and treated wells will not result in a population increase or increase demand for housing. However, the natural increases in population occurring over time would have greater access to treated water, and the District would be able to provide a greater supply of water with low levels of chromium-6 to this increased population. This alternative, therefore, would have lower indirect impacts associated with population growth in the service area as compared to the proposed project.

Alternative #3: Less Intense Alternative

The Less Intense Alternative would eliminate one WBA treatment facility and two WBA wells from the La Quinta area. The elimination of a WBA treatment facility would depend upon the ability of the District to mix lower level chromium-6 groundwater with that having high levels of chromium-6. This alternative could require the construction of additional storage and new pipelines. The elimination of treatment facilities and treated wells, or the addition of storage facilities for mixing water will not result in a population increase or increase demand for housing. However, the natural increases in population occurring over time would have the same level of access to treated water under this alternative as it would under the proposed project, and the District would be able to provide water with low levels of chromium-6 to this increased population. This alternative, therefore, would have equivalent indirect impacts associated with population growth in the service area.

Summary of Alternatives Analysis

None of the project alternatives will have a direct impact on population or housing, consistent with the project. However, in this case, the No Project Alternative will have the greatest potential indirect impact, since no treated water would be available to existing or future populations in the service area. Both the More Intense and Less Intense Alternatives would have equivalent and beneficial indirect impacts, since both, and the proposed project, would provide treated water to affected people and households.

6.5.15 Public ServicesAlternative 1: No Project Alternative

The No Project Alternative will result in the continuation of existing conditions at each of the project sites. There would be no new facilities at the SBA well sites, and no new treatment facilities at the ID8, La Quinta or WRP-4 sites. There would be no additional population increase or demand for public services. Therefore, there will be no impact to these resources.

Alternative #2: More Intense Project Alternative

The More Intense Alternative would add a third WBA treatment facility and six additional WBA wells. The location of the third WBA treatment facility would depend upon where growth in demand occurs, and in the District's access to potable water. Additional facilities would marginally increase demand for public services in the event of a fire or request for police services at those sites. Therefore, the More Intense Alternative would result in slightly greater impacts than the proposed project.

Alternative #3: Less Intense Alternative

The Less Intense Alternative would eliminate one WBA treatment facility and two WBA wells from the La Quinta area. The elimination of a WBA treatment facility would depend upon the ability of the District to mix lower level chromium-6 groundwater with that having high levels of chromium-6. This alternative could require the construction of additional storage and new pipelines. This alternative would result in no net change in the number of facilities, since the WBA facility would be replaced by a storage facility. Therefore, although the location for public services might change, the impacts associated with this alternative would be equivalent to those of the project.

Summary of Alternatives Analysis

From a public services perspective, the No Project Alternative is the environmentally superior alternative to the proposed Project and the other project alternatives, since there would be no increase in demand for public services. As compared to the proposed project, the More Intense Alternative could

result in a minor increase in demand for emergency services, while the Less Intense Alternative would have reduced impacts. As identified in Section 4.15, impacts associated with public services will be less than significant in all cases.

6.5.16 Recreation

Alternative #1: No Project Alternative

The No Project Alternative will result in the continuation of existing conditions at each of the project sites. There would be no new facilities at the SBA well sites, and no new treatment facilities at the ID8, La Quinta or WRP-4 sites. The project has no impact on recreational resources, and this alternative would not impact these resources either.

Alternative #2: More Intense Project Alternative

The More Intense Alternative would include one additional WBA treatment facility and six additional WBA wells. The location of the third WBA treatment facility would depend upon the rate of population growth and domestic water demand in areas with groundwater with high levels of chromium-6. Additional treatment facilities and treated wells will not result in a population increase or increase demand for recreational resources. Therefore, there will be no impact to these resources.

Alternative #3: Less Intense Alternative

The Less Intense Alternative would eliminate one WBA treatment facility and two WBA wells from the La Quinta area. The elimination of a WBA treatment facility would depend upon the ability of the District to mix lower level Chromium-6 groundwater with that having high levels of chromium-6. The dilution would allow the District to deliver potable water with Cr-6 levels of 10 ppb or less. Eliminating treatment facilities and treated wells will not result in a population increase or increase demand for recreational resources. Therefore, there will be no impact to these resources.

Summary of Alternatives Analysis

Due to the nature of the proposed project and project alternatives, no impacts would occur related to recreation and therefore there would be no differences in impacts between the proposed project and the alternatives. There is no environmentally inferior or superior alternative.

6.5.17 Traffic and Transportation

Alternative 1: No Project Alternative

The No Project Alternative will result in the continuation of existing conditions at each of the project sites and adjacent and nearby roadways and intersection. There would be no new access taken to sites from public roads for construction or operations, and all current operations and maintenance traffic would have the same impacts as they currently generate. No additional impacts to local or regional transportation facilities, including transit and other multi-modal facilities, would occur.

Alternative #2: More Intense Project Alternative

The More Intense Alternative would add a third WBA treatment facility and six additional WBA wells, would increase development on currently vacant lands and would result in a modest increase in construction and O&M traffic. Construction traffic associated with the improvements necessary at the added WBA facility and the wells would be consistent with construction traffic described in Section 4.17. The same mitigation measures, requiring the implementation of traffic management plans would be applied to this alternative, resulting in less than significant impacts. As noted in Section 4.17, O&M

traffic volumes associated with this project are very low, essentially negligible. The location of the third WBA treatment facility would depend upon where growth in demand occurs and in the District's access to potable water; however, impacts associated with the addition of one WBA facility and associated O&M traffic would be less than significant. Overall, impacts associated with the More Intense Alternative would be equivalent or slightly greater to those of the project, and would be less than significant, as with the project.

Alternative #3: Less Intense Alternative

The Less Intense Alternative would eliminate one WBA treatment facility and two WBA wells from the La Quinta area. The elimination of a WBA treatment facility would depend upon the ability of the District to mix lower level chromium-6 groundwater with that having high levels of chromium-6. This alternative could require the construction of additional storage and new pipelines. Based on the assumed alternative treatment method (blending), there would be roughly comparable construction traffic but less O&M traffic associated with this alternative, because of a reduction in overall equipment needs, and associated maintenance. Therefore, the Less Intense Alternative would reduce project impacts to traffic and transportation facilities compared to the proposed project.

Summary of Alternatives Analysis

The No Project Alternative is the environmentally superior alternative as it relates to traffic impacts, since no change in traffic patterns would occur. Impacts associated with construction and operation of the other alternatives and the proposed project would be roughly equivalent and are less than significant (with the implementation of the mitigation measure associated with construction), though the type and extent of facilities and the type and amount of traffic they generate would somewhat differ. Generally, the impacts associated with the More Intense Alternative would potentially be the greatest compared to the proposed project. Again, it should be noted that there will be no unmitigated significant impacts to traffic or transportation systems from implementation and operation of the proposed project.

6.5.18 Utilities and Service Systems

Alternative 1: No Project Alternative

The No Project Alternative would not include any construction or additions to existing facilities, and as a result would not generate construction waste or excavated soil, and would therefore have no impact on landfills. This alternative would also not require any additional water for the start up or on going operation of facilities. The No Project Alternative, therefore, will have no impact on utilities or service systems.

Alternative #2: More Intense Project Alternative

The More Intense Alternative would add a third WBA treatment facility and six additional WBA wells. The location of the third WBA treatment facility would depend upon where growth in demand occurs, and in the District's access to potable water. Implementation of this alternative would result in construction of an additional WBA facility, and modifications at six existing well sites, which would result in an increase in construction waste generated by the project. However, as with the project, the quantity of construction waste is expected to be small, and local landfills have capacity to accommodate it.

The implementation of this alternative would also result in the need for start up and operational domestic water at one additional WBA treatment facility. As described in Section 4.18, the water

required for start up would range from 1.2 to 1.7 million gallons, which would be continuously recycled, and approximately 1,300 gallons per year for employee facilities such as toilets and water fountains. The processed water would become part of the domestic water supply that the District will use to serve its customers, and would not be in addition to the water demand in the service area.

Overall, the More Intense Alternative would result in one additional treatment facility which would marginally increase the solid waste generation associated with the project, and with domestic water supply for the project. This alternative would have somewhat greater impacts on utilities and service systems.

Alternative #3: Less Intense Alternative

The Less Intense Alternative would eliminate one WBA treatment facility and two WBA wells from the La Quinta area. The elimination of a WBA treatment facility would depend upon the ability of the District to mix lower level chromium-6 groundwater with that having high levels of chromium-6. This alternative could require the construction of additional storage and new pipelines. Under this alternative, the construction of one facility would be replaced with another, so construction waste generated and requiring disposal would be equivalent to that of the proposed project. The elimination of the WBA treatment facility would reduce the amount of water needed for that facility at start up, but would be expected to be required to fill the storage facility. Therefore, the Less Intense Alternative is expected to have impacts equivalent to those of the proposed project as they relate to utilities and service systems.

Summary of Alternatives Analysis

The No Project Alternative would be the environmentally superior alternative, since it would result in no impact to utilities or service systems. The More Intense Alternative would have somewhat greater impacts than the proposed project, while the Less Intense Alternative would have equivalent impacts to the proposed project. However, under all development alternatives, impacts will be less than significant and will not require mitigation.

6.6 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The CEQA Guidelines Section 15126.6(e) requires that an environmentally superior alternative be identified among the alternatives considered. According to CEQA Guidelines Section 15126.6(e)(2), if the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives evaluated. The environmentally superior alternative is generally defined as the alternative that would result in the fewest adverse environmental impacts on the project sites and surrounding areas.

In this case, the No Project Alternative is the environmentally superior alternative, insofar as it would result in no direct impacts on the environment. However, the No Project Alternative would not meet any of the project objectives, and would not allow the District to meet State mandates for reduced levels of chromium-6 in potable water. In addition, the No Project Alternative could result in other impacts associated with residents of the District's service area having to either buy or truck in potable water for consumption.

The Less Intense and More Intense Alternatives generally have similar impacts when compared to the proposed project, all of which result in projects with less than significant impacts, with the exception of impacts associated with greenhouse gas emissions. In that case, the Less Intense Alternative, which

SECTION III. PROPOSED PROJECT IMPACTS

Development of the CVWD Chromium-6 Water Treatment Facilities Project will result in the direct and indirect generation and emission of air pollutants during project construction and operation. Criteria air pollutant and greenhouse gas emissions from construction will be temporary; however, emissions from daily operation will be ongoing. The following discussion describes the major sources of air pollutants associated with the development of the proposed project, and emission projections for criteria pollutants and greenhouse gases.

A. Construction Related Air Quality Emissions

To estimate the potential emissions of criteria pollutants associated with the proposed Chromium-6 project, the California Emissions Estimator Model (CalEEMod) Version 2013.2.2 was used. For air quality analysis purposes, it is assumed construction of the project would occur from July 2016 through July 2019 (three years). Detailed construction input assumptions are provided per facility type in Table 6 below.

Table 6	
CalEEMod Construction Input Assumptions	
Facility	Construction
WBA Well Sites (6 sites)	<ul style="list-style-type: none"> • 3.23 acres total of disturbance • Material Import: 0 • Material Export: 0 • Paving: 0 • Demolition Export: 15 tons
SBA Well Sites (23 sites)	<ul style="list-style-type: none"> • 14.7 acres total of disturbance • Material Import: 3,279 cubic yards • Material Export: 0 • Paving: 3.1 acres • Demolition Export: 45 tons
ID8 WBA Treatment Plant Site and Pipelines	<ul style="list-style-type: none"> • 44.97 acres of disturbance • Material Import: 0 60,000 cubic yards • Material Export: 0 cubic yards • Paving: 6.15 acres • Access Road (gravel): 1.3 acres • Demolition Export: 53,842 tons
LA Quinta WBA Treatment Plant Site and Pipelines	<ul style="list-style-type: none"> • 3.23 acres of disturbance • 36,012 square foot building (light industrial) • Material Import: 0 cubic yards • Material Export: 0 cubic yards • Paving: 1.82 acres • Demolition Export: 26,919 tons

CRRF Site and Water Pipeline	<ul style="list-style-type: none"> • 38.5 acres of disturbance • 65,000 square foot building (light industrial) • Material Import: 6,876 cubic yards • Material Export: 0 • Paving: 17 acres • Demolition Export: 0
TOTALS FOR INPUT	<ul style="list-style-type: none"> • Site acreage of disturbance: 103.4 acres • Building Space: 103,312 square feet • Material Import: 1070,155 cubic yards • Material Export: 0 cubic yards • Paving: 28.07 acres • Gravel: 1.3 acres • Demolition Export: 80,821 tons

Construction Emissions

Air pollutants are generated from such construction activities as demolition, site grading and other ground disturbance, operation of construction equipment, stationary power, building construction and related off-site travel, and off gassing from paving and architectural coatings. Construction related air quality and greenhouse gas emissions are temporary and end once construction is complete.

CalEEMod produces emission data for both unmitigated and mitigated conditions. The application of standard dust control measures, use of vehicle oxidation catalysis (30% reduction equivalent), and use of reduced VOC level coatings are captured in the mitigated condition. Unmitigated conditions are presented in Table 7 below.

Table 7 Construction Emissions Summary Maximum Daily Emissions (Lbs/Day)						
Construction Year	CO	NO_x	ROG	SO_x	PM₁₀	PM_{2.5}
2016	85.7475.98	123.71116.56	12.0011.30	0.14	30.46	10.5210.01
2017	82.5973.36	115.50109.13	11.2110.58	0.120.10	15.0014.10	9.869.53
2018	138.76	122.40	67.94	0.24	12.28	7.66
2019	20.93	17.73	67.67	0.03	1.93	1.19
SCAQMD Threshold*	550.00	100.00	75.00	150.00	150.00	55.00
Impact?	No	Yes	No	No	No	No

Source: CalEEMod Version 2013.2. See Appendix A for detailed tables. Value shown represents the average unmitigated emissions from summer and winter.
*Source: "SCAQMD Air Quality Significance Thresholds" prepared by South Coast Air Quality Management District, March 2015. Construction thresholds apply to both the South Coast Air Basin and Coachella Valley (Salton Sea and Mojave Desert Air Basins). Thresholds are pounds per day in a single year. Project construction emissions from 2016-2019 are not cumulative.

As shown in Table 7, SCAQMD daily thresholds for criteria pollutants CO, ROG, SO_x, PM₁₀ and PM_{2.5} would not be exceeded during construction of the chromium-6 project. However, NO_x emissions have the potential to exceed SCAQMD thresholds during the 2016-2018 construction years; this impact is considered significant and requires mitigation.

NO_x emissions are directly related to the operation of construction equipment. To reduce NO_x emissions below the SCAQMD threshold of 100 pounds per day, oxidation catalysts with a 30% reduction equivalent were applied to all construction equipment. It should be noted that CalEEMod assumes all pieces of equipment are operating at the same time during each phase of construction (i.e. grading phase, building construction phase, paving phase etc.). In reality, fewer pieces of construction equipment may be running at any given time. Thus, emissions of NO_x are likely to be overstated and the analysis is considered conservative.

Table 8 shows that under mitigated conditions, all criteria pollutants would be below SCAQMD daily thresholds. The project would be required to implement the mitigation measures and best management practices set forth in **Section V** of this report. Adherence to the mitigation measures would ensure this air quality impact would be less than significant.

Table 8							
Mitigated Construction Emissions Summary							
Maximum Daily Emissions (Lbs/Day)							
		CO	NO_x	ROG	SO_x	PM₁₀	PM_{2.5}
Chromium -6 Project Buildout	2016	75.98 75.98	85.66 85.66	11.30 11.30	0.14 0.14	15.84 15.84	7.45 7.45
	2017	73.37 73.37	80.23 80.23	10.58 10.58	0.10 0.10	9.14 9.14	6.97 6.97
	2018	138.76	90.58	67.94	0.24	12.28	7.66
	2019	20.93	12.57	67.67	0.03	1.93	1.19
SCAQMD Threshold*		550.00	100.00	75.00	150.00	150.00	55.00
Impact Statement		No	No	No	No	No	No

Source: CalEEMod Version 2013.2. See Appendix A for detailed tables. Value shown represents the average unmitigated emissions from summer and winter.
*Source: "SCAQMD Air Quality Significance Thresholds" prepared by South Coast Air Quality Management District, March 2015. Construction thresholds apply to both the South Coast Air Basin and Coachella Valley (Salton Sea and Mojave Desert Air Basins). Thresholds are pounds per day in a single year. Project construction emissions from 2016-2019 are not cumulative.

Localized Construction-Related Significance Thresholds and Emissions

The purpose of analyzing Localized Significance Thresholds (LST) is to determine whether or not a project may generate significant adverse localized air quality impacts in relation to the nearest exposed individual, or sensitive receptor. Air quality sensitive receptors include, but are not limited to, schools, churches, residences, hospitals, day care facilities, and elderly care facilities. Sensitive receptors in the project area include single- and multi-family residences, public parks, and the Palm Springs High School.

Use of LSTs by a local government is voluntary and are designed for projects that are less than or equal to 5-acres. The proposed project is comprised of 32 individual sites totaling approximately 104-acres. Although the total project area is greater than 5-acres, the area of daily disturbance is expected to be

Facility Type	CO	NOx	PM ₁₀	PM _{2.5}
500 Meters, 1 Acre				
SBA/WBA Sites	15.25	20.75	3.08	2.02
LST	24,417	733	214	105
Impact?	No	No	No	No
50 Meters, 5 Acres				
La Quinta Treatment Plant Site*	138.76123.47	92.8195.07	15.8418.53	7.959.47
LST	3,237	340	44	11
Impact?	No	No	No	No
200 Meters, 5 Acres				
ID8 Treatment Plant Site*	138.76123.47	92.8195.07	15.8418.53	7.959.47
LST	10,178	547	112	37
Impact?	No	No	No	No
Source: CalEEMod Version 2013.2. See Appendix A. Emissions show the highest emitting day for the highest emitting year for all emissions generated onsite during construction.				
* Emissions show mitigated conditions and application of standard dust control practices. See Table 8.				

Results of the LST analysis are shown in Table 11 and indicate that LST thresholds are not expected to be exceeded under mitigated conditions. As previously discussed, the project would be developed in accordance with SCAQMD Rule 403, and apply best management practices to ensure impacts to sensitive receptors are less than significant.

Potential Odors

The proposed project is not expected to generate significant objectionable odors during any of the phases of construction or at project buildout. The proposed project has the potential to result in short-term odors associated with asphalt paving and other construction activities. However, construction-related odors would be quickly dispersed below detectable thresholds as distance from the construction site increases. Therefore, impacts from objectionable odors are expected to be less than significant.

B. Operational Emissions

Air pollutant emissions from on-going facility operations are largely the consequence of three emission source categories: Energy, Mobile, and Area sources. Energy sources refer to direct and indirect use of fossil fuels for energy use, including natural gas and electricity usage in buildings, lighting for parking structures, ventilation, and operation of elevators. Mobile sources refer to emissions associated with motor vehicle trips generated by the proposed project. Area sources refer to consumable products such as landscaping, building maintenance and cleaning supplies, kitchen and restroom supplies, and periodic reapplication of architectural coatings.

Moving Source Emissions

The CRRF site would be the only project facility with full-time workers, generating approximately 58 commuter trips per weekday. The WBA and SBA wells, and the WBA treatment facilities would only require occasional maintenance trips, chemical deliveries, and resin pick-up/deliveries. For conservative

Table 16 Health Risk Results – ID8 WBA			
Impact Parameter	Health Risk Impact	SCAQMD Significance Thresholds	Significant (Yes/No)
MICR – Resident	9.82E-09	1 E-05	No
HIC – Resident	3.32E-06	1.0	No
HIA – Resident	0.0	1.0	No
MICR - Worker	1.53E-09	1 E-05	No
HIC - Worker	3.32E-06	1.0	No
HIA - Worker	0.0	1.0	No
Cancer Burden	---	0.5	No

Objectionable Odors

Operation of the project would not cause objectionable odors that could affect a substantial number of people, because the project wells would run on electrical power (no direct emissions) and chemicals used for water treatment would be stored in the well facility buildings. In addition, water treatment facilities are not typically a source of odor complaints. Therefore, since there is no odor potential during operation of the chromium-6 project, this air quality impact would be less than significant.

C. Greenhouse Gas Emissions

Construction Related Greenhouse Gas Emissions

Construction of the project is anticipated to occur over a three-year period starting in 2016 with buildout in 2019. Construction activities include site preparation, site grading, operation of construction equipment, stationary power, building construction and related off-site travel, and off-gassing from paving and architectural coatings. Construction related air quality emissions are temporary and end once construction is complete. Operation of mobile equipment is the primary source of greenhouse gas emissions during construction, including off-road emissions from construction equipment and material hauling. Table 17 summarizes the estimated GHG emissions from all construction activities from 2016 through 2019; emissions were computed on an annual basis. It should be noted that emissions include construction of both operational processes proposed for the CRRF site. As shown in the table, construction of the project would result in a total of ~~3,340.44~~ 3,510.04 metric tons of CO₂e emissions totaled over the three-year construction timeframe. This emission level is less than the SCAQMD’s annual 10,000 MT operational threshold; therefore, the construction-related GHG emissions impact is considered less than significant and no mitigation is required.

Table 17				
Construction GHG Emissions Summary				
(Metric Tons/Year)				
Year	CO ₂	CH ₄	N ₂ O	Total CO ₂ e
2016	819.23765.83	0.11	0.00	821.73768.32
2017	1,016.29900.11	0.23	0.00	1,021.18904.99
2018	1,462.39	0.22	0.00	1,467.17
2019	199.37	0.02	0.00	199.95
Total Construction CO₂e				3,510.043,340.44
SQAQMD Threshold (per year)				10,000
Significant Impact?				No
Source: CalEEMod Versions 2013.2. See Appendix A for detailed tables. Values shown represent the total unmitigated GHG emission projections for construction of the proposed project.				

Operational Greenhouse Gas Emissions

There are five emission source categories that contribute either directly or indirectly to operational GHG emissions, including energy/electricity usage, mobile sources, area emissions, off-road sources, and water pumping. Energy sources refer to direct and indirect use of fossil fuels for energy use, including electricity usage in buildings, lighting for parking structures and ventilation. Mobile sources refer to emissions associated with motor vehicle trips generated by the project, which is limited to employee commute and maintenance/delivery trips. Area sources refer to consumable products such as building maintenance and cleaning supplies, restroom supplies, and periodic reapplication of architectural coatings. Off-road sources refer to motor vehicle trip rates that may occur on un-paved roadways, such as disposal trips to wells sites. Water pumping refers to the GHG emissions associated with supplying and treating water and wastewater to the proposed treatment facilities.

As previously mentioned, CO₂e emissions from electricity demand were calculated based on the total project operational demand and the GHG intensity factors of the electricity utility provider. The following table provides the breakdown electricity demand used for GHG analysis.

Table 18		
Operational Electricity Demand Summary		
Chromium-6 Project Facility	Annual Demand	Utility Provider
SBA Well Sites (23 Sites)	3,350,280 kWh	IID
WBA Well Sites (6 Sites)	- 490,494 kWh	IID
ID8 Treatment Facility	7,061,000 kWh	SCE
LQ Treatment Facility	5,571,000 kWh	IID
CRRF: Evaporation Ponds	1,893,690 kWh	IID
CRRF: Crystallization	4,389,690 kWh	IID
TOTAL W/ Evaporation Ponds	17,385,467 kWh	IID/SCE
TOTAL W/ Crystallization	19,881,476 kWh	IID/SCE

Table 19 shows the projected operational annual emissions of greenhouse gases for the Cr6 project for both the CRRF evaporation pond process and the brine crystallization process. The five emission source categories that contribute either directly or indirectly to operational GHG emissions (energy/electricity usage, area emissions, mobile sources, off-road sources, and wastewater) are shown separately in the table. Per guidance from SCAQMD, construction-period GHG emissions were amortized over a 30-year period and the resulting average annual emissions were added to operational emissions and compared to the significance threshold.

Table 19						
Operational GHG Emissions Summary						
(Metric Tons/Year)						
CRRF Evaporation Pond Process	Source	CO₂	CH₄	N₂O	CO₂e	
	Area	0.002	0.000	0.000	0.002	
	Energy	5,952.05	0.135	0.028	5,963.62	
	Mobile	60.60	0.002	0.000	60.65	
	Off-Road	20.18	0.001	0.000	20.32	
	Water	186.90	0.782	0.019	209.30	
	Operational Emissions Total					6,253.90
	Emissions from ID8 Facility (SCE)					2,028.64
	Operation plus Amortized Construction GHG Emissions *					8,399.548,393.88
	SCAQMD Threshold (per year)					10,000
	Impact?					No
CRRF Brine Crystallization Process	Source	CO₂	CH₄	N₂O	CO₂e	
	Area	0.002	0.000	0.000	0.002	
	Energy	7,391.53	0.168	0.034	7,405.89	
	Mobile	60.60	0.002	0.000	60.65	
	Off Road	14.63	0.001	0.000	14.73	
	Water	186.90	0.782	0.019	209.30	
	Operational Emissions Total					7,690.57
	Emissions from ID8 Facility (SCE)					2,028.64
	Operation plus Amortized Construction GHG Emissions *					9,836.219,830.55
	SCAQMD Threshold (per year)					10,000
	Impact?					No
Source: CalEEMod Version 2013.2.2. See Appendix A for detailed tables. Values shown represent the total unmitigated GHG emission projections for operation of the proposed project. * The total construction GHG emissions, 3,510.04 3,340.44 metric tons, over 30 years equal 111,34117 metric tons per year.						