Permit Number: _____

COUNTY OF SAN DIEGO

LAND USE AND ENVIRONMENT GROUP

Department of Planning & Development Services

2024 Climate Action Plan Consistency Review Checklist

Introduction

The County of San Diego (County) 2024 Climate Action Plan (CAP) identifies strategies, measures, and actions to meet the County's targets to reduce greenhouse gas (GHG) emissions by 2030 and 2045, consistent with the State's 2022 Scoping Plan for Achieving Carbon Neutrality and legislative GHG reduction targets and demonstrates progress towards the State's 2045 net zero GHG emissions goal. The CAP's attainment of the County's GHG reduction targets is the result of (1) several initiatives to be directly implemented by the County and (2) incorporating GHG-reduction features into the construction and operation of development projects (including County-initiated and privately-initiated projects).

The CAP has been prepared in accordance with California Environmental Quality Act (CEQA) Guidelines Section 15183.5, which allows for public agencies to analyze and mitigate GHG emissions as part of a larger "plan for the reduction of greenhouse gases." The CAP, CAP Consistency Review Checklist (Checklist), and the Supplemental Environmental Impact Report (SEIR) for the CAP collectively include the required elements of "a plan for the reduction of greenhouse gas emissions" set forth in CEQA Guidelines Section 15183.5(b). Therefore, the CAP is a CEQA-qualified climate action plan.

The purpose of the Checklist is two-fold:

1. Incorporate applicable CAP measures and actions into projects when they are not otherwise binding and enforceable, and

2. Provide a streamlined environmental review process for GHG emissions analysis for projects that require and are not exempt from environmental review pursuant to CEQA and determined to be consistent with the CAP.

Refer to the County's Guidelines for Determining Significance for Climate Change (Guidelines) for discussion of the process County staff will follow to evaluate GHG emissions impacts for projects subject to CEQA. The Guidelines identify the County's adopted "threshold of significance" for GHG emissions impacts and explain the role of the Checklist in the streamlined environmental review process.

Checklist Applicability

The Checklist applies to discretionary projects that are subject to and not exempt from CEQA (referred to herein as projects). The Checklist is therefore a critical implementation tool for incorporating CAP measures and actions that are not otherwise binding and enforceable into development projects (including new development applications and expansions or renovations of existing development).

Implementation of measures that do not apply to projects will occur through the implementation mechanisms identified in Chapter 5 of the CAP. Implementation of applicable CAP measures and actions by projects will help the County achieve incremental reductions towards the CAP targets, with additional reductions occurring through County initiatives and measures related to existing development that are implemented outside of the Checklist process.

Checklist Overview

The Checklist establishes a two-step process that project proponents shall follow to determine if projects are consistent with the CAP and whether they may have a significant cumulative impact under the County's adopted GHG thresholds of significance.

Step 1 of the Checklist assesses a project's consistency with the growth projections used in the CAP to estimate future GHG emissions from activities occurring in the unincorporated area and County facilities and operations. Because the CAP uses growth projections based on implementation of the adopted General Plan, the first step in determining a project's consistency with the CAP is to demonstrate its consistency with the regional categories and land use designations of the General Plan. All projects must demonstrate consistency with existing General Plan regional categories, land use designations, and the uses and development density and intensity allowed under the Zoning Ordinance.

If a project is consistent with the General Plan, then Step 2 of the Checklist should be completed. If a project is not consistent with the regional categories or land use designations of the General Plan, then it shall not use the CAP Consistency Checklist for CEQA streamlining.

Step 2 of the Checklist sets forth CAP measures and actions in the form of "consistency requirements" that project proponents are required to incorporate into their projects to demonstrate compliance with the CAP. Project proponents are required to demonstrate project consistency with the CAP consistency requirements or demonstrate why the requirements are not applicable to their project.

Projects that are consistent with the CAP, as determined using Steps 1 and 2 in this Checklist, may rely on the CAP for the cumulative impacts analysis of GHG emissions under CEQA. Projects that are not consistent with the CAP as determined by Steps 1 or 2 of the Checklist, shall not use the CAP Consistency Checklist for CEQA streamlining.

Checklist Completion and Review Procedures

General procedures for Checklist completion and review are described below, with more specific directions provided in Steps 1 and 2 of the Checklist.

1. The County's Department of Planning & Development Services (PDS) reviews development applications and makes determinations regarding project environmental review requirements under CEQA. Procedures for CEQA can be found on the County's Process Guidance & Regulations/Statutes Homepage.

2. The project proponent shall complete the Checklist, and must provide substantial evidence to demonstrate project consistency with the CAP.

3. When completing Step 2 of the Checklist, the project proponent must provide substantial evidence demonstrating how each applicable CAP consistency requirement will be implemented by or incorporated into the project.

4. CAP consistency requirements determined to be applicable to the project in Step 2 of the Checklist shall be required as conditions of project approval.

5. Projects that cannot demonstrate consistency with the CAP using this Checklist are required to prepare a separate GHG analysis as part of the CEQA document prepared for the project and may be required to prepare an Environmental Impact Report (EIR). Refer to the County's Guidelines for Determining Significance for Climate Change (Guidelines) for a complete description of the County's procedural and content requirements for evaluating a project's GHG emissions under CEQA.

Checklist Updates

The Checklist may be administratively updated by the County from time to time to comply with amendments to State laws or court directives, or to remove measures that may become mandatory through future updates to State or local codes. Administrative revisions to the Checklist will be limited to changes that do not trigger a subsequent EIR or a supplement to the SEIR for the CAP pursuant to CEQA Guidelines Section 15162. Administrative revisions, as described above, will not require approval by the Board of Supervisors (Board). All other changes to the Checklist require Board approval.

Comprehensive updates to the Checklist will be coordinated with each CAP update and will require Board approval. Future updates to the CAP and Checklist shall comply with CEQA.

Application Information

Contact Information

Project No. and Name: Cottonwood Sand Mine Project

Property Address and APN: 3121 Willow Glen Drive, El Cajon, CA 92019; see Attachment 1 for the project APN list.

Applicant Name and Co.: Michael Schlesinger, Cottonwood Cajon ES LLC

Contact Phone: 310.275.4425 Contact Email: michael@cambrare.com

Was a consultant retained to complete this checklist? ☒ Yes ☐ No
If Yes, complete the following:

Consultant Name: Victor Ortiz Contact Phone: 619.462.1515

Company Name: HELIX Environmental Planning, Inc. Contact Email: victoro@helixepi.com

Project Information

1. What is the size of the project site (acres [gross and net])? 279.79 gross; 251.1 net

2. Identify all applicable proposed land uses (indicate square footage [gross and net]):

   ☐ Residential (indicate # of single-family dwelling units): _____

   ☐ Residential (indicate # of multi-family dwelling units): _____

   ☐ Commercial (indicate total square footage [gross and net]): _____

   ☐ Industrial (indicate total square footage [gross and net]): _____

   ☐ Agricultural (indicate total acreage [gross and net]): _____

   ☒ Other (describe): 279.79 gross; 251.1 net

3. Provide a description of the project. This description should match the project description used for the CEQA document. The description may be attached to the Checklist if there are space constraints.

See Attachment 2 for the project description.

Step 1: Demonstrate Consistency with the General Plan

The CAP uses growth projections based on implementation of the adopted General Plan to estimate future GHG emissions from activities occurring in the unincorporated area and County facilities and operations. Therefore, the first step in determining a project's consistency with the CAP is to demonstrate its consistency with the General Plan and Zoning Ordinance.

All projects must demonstrate consistency with existing General Plan regional categories, land use designations, and zoning designations. If a project is consistent with the General Plan and Zoning Ordinance, then Step 2 of the Checklist should be completed. If a project is not consistent with the regional categories and land use designations of the General Plan and zoning designations, then it shall not use the CAP Consistency Checklist for CEQA streamlining.

Step 1: Demonstrate Consistency with the General Plan		
CAP Consistency Requirement	Yes	No
1. Is the proposed project consistent with the existing General Plan regional category and land use designations and the uses and development density and intensity allowed under the Zoning Ordinance?	☒	☐

Provide substantial evidence supporting the project's General Plan consistency determination. Attach additional information as needed.

The project site is currently zoned as Open Space (S80, with 8-acre minimum lot sizes), Specific Planning Area (S88), and Holding Area (S90). Extractive use is allowed within the S80 and S90 classifications with the issuance of a Major Use Permit. The S88 zoning classification restricts extractive uses to site preparation, which allows the off-site removal of materials when it is secondary to the future use of the site. The parcels zoned as S88 are located in the southwestern corner of the Reclamation Plan boundary, within the Rancho San Diego Specific Plan Area; extraction would not occur in this area. Areas of extraction would be reclaimed to end uses consistent with the General Plan and zoning classifications.

If **"Yes,"** proceed to Step 2: Demonstrate Consistency with CAP Measures and Actions

If **"No,"** the project is not consistent with the CAP and shall not use the CAP Consistency Checklist for CEQA streamlining. Such projects are required to prepare preparation of a separate GHG analysis as part of the CEQA document prepared for the project and may be required to prepare an EIR. Refer to the County's Guidelines for Determining Significance for Climate Change (Guidelines) for a complete description of the County's procedural and content requirements for evaluating a project's GHG emissions under CEQA.

Step 2: Demonstrate Consistency with CAP Measures and Actions

The second step of the CAP consistency review is to demonstrate a project's consistency with applicable CAP measures and actions. Projects are required to demonstrate consistency with the CAP consistency requirements or demonstrate why the requirements are not applicable. For ease of reference, two sets of CAP consistency requirements are provided in this section: one set of requirements that applies to privately-initiated projects (Table 1), and a second set of requirements that applies to County-initiated projects (Table 2).

Table 1. CAP Consistency Requirements for Privately-Initiated Projects

CAP Consistency Requirement (Privately-Initiated Project)	Supporting CAP Measure (Action)	Project Consistency Determination		
		Consistent	Not Consistent	N/A
Built Environment and Transportation				
1. Electrify Loading Docks If the project includes cold storage or refrigerated warehouse facilities, it must comply with the County's Code of Regulatory Ordinances as amended to require electric truck loading docks must be equipped with adequate infrastructure to deliver electricity to electric-powered truck refrigeration units (e-TRUs). **Note:** The County will amend the Code of Regulatory Ordinances by 2030, pursuant to CAP Action T-3.1. This requirement does not apply to projects unless the Code of Regulatory Ordinances has been amended and the amendments have gone into effect. *Check "N/A" if the project is not a privately-initiated project, is not subject to the Code of Regulatory Ordinances as amended, or if the amendments are not in effect.*	T-3 (T-3.1)	☐	☐	☒

Provide substantial evidence supporting the project's consistency determination. Attach additional information as needed.

The project does not include cold storage or refrigerated warehouse facilities.

Table 1. CAP Consistency Requirements for Privately-Initiated Projects				
CAP Consistency Requirement (Privately-Initiated Project)	Supporting CAP Measure (Action)	Project Consistency Determination		
		Consistent	Not Consistent	N/A
2. Install Electric Vehicle Charging Infrastructure The project must comply with the County's Code of Regulatory Ordinances as amended to require (Tier 2) CALGreen or similar electric vehicle charging infrastructure installations and preferential parking for ZEVs for new multifamily residential and nonresidential construction. If the Code of Regulatory Ordinances has not yet been amended, the project shall achieve Tier 2 status as set forth in the 2022 California Green Building Standards Code, Title 24, Part 11 (CALGreen), Appendix A4 Residential Voluntary Measures, Division A4.6, Tier 1 and Tier 2, Section A4.601.5, Tier 2, and Appendix A5 Nonresidential Voluntary Measures, Division A5.6, Voluntary Tiers, Section A5.601.3 *CALGreen* Tier 2. **Note:** The County will amend the Code of Regulatory Ordinances by 2026, pursuant to CAP Action T-3.1. *Check "N/A" if the project is not a privately-initiated project or is not subject to CALGreen or the Code of Regulatory Ordinances as amended.*	T-3 (T-3.1)	☐	☐	☒

Provide substantial evidence supporting the project's consistency determination. Attach additional information as needed.

The project is not subject to CALGreen - it does not involve construction of any multifamily residential or nonresidential structures that would require parking.

3. Increase Active Transportation If both of the following conditions are met, the project must incorporate sidewalk and bikeway improvements from the County's Active Transportation Plan. 1. Intersection or roadway segment improvements are proposed and/or required as part of the project, AND 2. The County's Active Transportation Plan identifies sidewalks or on-road bikeway facilities at intersection(s) or on roadway segment(s) that would be improved as part of the project. *Check "N/A" if the project does not meet both conditions.*	T-5 (T-5.1)	☒	☐	☐

Provide substantial evidence supporting the project's consistency determination. Attach additional information as needed.

The project proposes roadway improvements along Willow Glen Drive, which is identified in the County's Active Transportation Plan for a Class II bike lane. The project proposes to restripe Willow Glen Drive between Steele Canyon Road and the project ingress driveway to provide Class II buffered bicycle lanes on both sides of the roadway. The project also proposes a public pathway along the northern property boundary easy of Steele Canyon Road to provide continuous pedestrian access along Willow Glen Drive. The project would provide improvements consistent with the County's Active Transportation Plan and would be therefore be consistent with this measure.

Table 1. CAP Consistency Requirements for Privately-Initiated Projects				
CAP Consistency Requirement (Privately-Initiated Project)	Supporting CAP Measure (Action)	Project Consistency Determination		
		Consistent	Not Consistent	N/A
4. Reduce Single Occupancy Vehicle Trips When the County has adopted the Transportation Demand Management (TDM) ordinance and it has gone into effect, the project must comply with the ordinance. **Note:** The County will adopt the TDM ordinance by 2028, pursuant to CAP Action T-6.2. This requirement does not apply to projects unless the TDM Ordinance has been adopted and has gone into effect. *Check "N/A" if the project is not a privately-initiated project, is not subject to the Code of Regulatory Ordinances as amended, or if the amendments are not in effect.*	T-6 (T-6.2)	☐	☐	☒
Provide substantial evidence supporting the project's consistency determination. Attach additional information as needed. The amendments are not in effect.				
Energy				
5. Electrify Buildings and Appliances The project must comply with the County's Code of Regulatory Ordinances as amended to incorporate all-electric appliances and equipment in new residential, commercial, and industrial construction or incorporate (Tier 2) CALGreen or similar energy efficiency requirements for existing development projects. If the Code of Regulatory Ordinances has not yet been amended, the project shall achieve Tier 2 status as set forth in the 2022 California Green Building Standards Code, Title 24, Part 11 (CALGreen), Appendix A4 Residential Voluntary Measures, Division A4.6, Tier 1 and Tier 2, Section A4.601.5, Tier 2, and Appendix A5 Nonresidential Voluntary Measures, Division A5.6, Voluntary Tiers, Section A5.601.3 *CALGreen* Tier 2. **Note:** The County will amend the Code of Regulatory Ordinances by 2026 to establish requirements for existing development projects, pursuant to CAP Actions E-2.1 and E-2.2. *Check "N/A" if the project is not a privately-initiated project or is not subject to CALGreen or the Code of Regulatory Ordinances as amended.*	E-2 (E-2.1, E-2.2)	☐	☐	☒
Provide substantial evidence supporting the project's consistency determination. Attach additional information as needed. The project is not subject to CALGreen - it does not involve construction of any structures.				

Table 1. CAP Consistency Requirements for Privately-Initiated Projects				
CAP Consistency Requirement (Privately-Initiated Project)	Supporting CAP Measure (Action)	Project Consistency Determination		
		Consistent	Not Consistent	N/A
6. Increase Renewable Energy The project must comply with the County's Code of Regulatory Ordinances as amended to incorporate (Tier 2) CALGreen or similar renewable energy requirements for new residential and nonresidential construction. If the Code of Regulatory Ordinances has not yet been amended, the project shall achieve Tier 2 status as set forth in the 2022 California Green Building Standards Code, Title 24, Part 11 (CALGreen), Appendix A4 Residential Voluntary Measures, Division A4.6, Tier 1 and Tier 2, Section A4.601.5, Tier 2, and Appendix A5 Nonresidential Voluntary Measures, Division A5.6, Voluntary Tiers, Section A5.601.3 CALGreen Tier 2. **Note:** The County will amend the Code of Regulatory Ordinances by 2026, pursuant to CAP Action E-3.1. *Check "N/A" if the project is not a privately-initiated project or is not subject to CALGreen or the Code of Regulatory Ordinances as amended.*	E-3 (E-3.1)	☐	☐	☒
Provide substantial evidence supporting the project's consistency determination. Attach additional information as needed. The project is not subject to CALGreen - it does not involve construction of any structures.				
Water and Wastewater				
7. Increase Water Efficiency The project must comply with the County's Code of Regulatory Ordinances as amended to require (Tier 2) CALGreen or similar water efficiency requirements and reduced outdoor water use for landscaping requirements. **Residential projects:** If the Code of Regulatory Ordinances has not yet been amended, residential projects must comply with the requirements of the 2022 California Green Building Standards Code, Title 24, Part 11 (CALGreen), Appendix A4 Voluntary Residential Measures by complying with at least three elective measures from Section A4.303, Section A4.304, and Section A4.305 Tier 2 Water Efficiency and Conservation Requirements. **Nonresidential projects:** If the Code of Regulatory Ordinances has not yet been amended, nonresidential projects must comply with the requirements of the 2022 California Green Building Standards Code, Title 24, Part 11 (CALGreen), Appendix A5 Voluntary Nonresidential Measures, Section A5.303.2.3.2 Tier 2 Water Efficiency and Conservation Requirements and three elective measures from Section A5.303, Section A5.304, and Section A5.305 Tier 2 Water Efficiency and Conservation Requirements.	W-2 (W-2.1, W-2.2)	☐	☐	☒

Table 1. CAP Consistency Requirements for Privately-Initiated Projects				
CAP Consistency Requirement (Privately-Initiated Project)	Supporting CAP Measure (Action)	Project Consistency Determination		
		Consistent	Not Consistent	N/A
Note: The County will amend the Code of Regulatory Ordinances by 2026, pursuant to CAP Action W-2.1 and W-2.2. *Check "N/A" if the project is not a privately-initiated project, is not subject to CALGreen or the Code of Regulatory Ordinances as amended.*				
Provide substantial evidence supporting the project's consistency determination. Attach additional information as needed. The project is not subject to CALGreen - it does not involve construction of any structures.				
Agriculture and Conservation				
8. Increase Tree Preservation If the County's program to preserve native trees is in effect, the project must comply. *Check "N/A" if the project is not a privately-initiated project, is not subject to the native tree preservation program, or if the program is not in effect.*	A-2 (A-2.1)	☐	☐	☒
Provide substantial evidence supporting the project's consistency determination. Attach additional information as needed. The native tree preservation program is not in effect.				
9. Increase Tree Planting Single family residential: The project must comply with the tree planting requirements of the County's Landscaping Ordinance. Each new single family residential project shall include two trees per dwelling unit. *Check "N/A" if the project is not subject to the Landscaping Ordinance.*	A-2 (A-2.2)	☐	☐	☒
Provide substantial evidence supporting the project's consistency determination. Attach additional information as needed. The project is not a single-family residential project.				

Table 2. CAP Consistency Requirements for County-Initiated Projects				
CAP Consistency Requirement (County-Initiated Project)	Supporting CAP Measure (Action)	Project Consistency Determination		
		Consistent	Not Consistent	N/A
Built Environment and Transportation				
1. Use Electric-Powered or Zero Emission Construction Vehicles and Equipment The project must use electric-powered or other zero emissions vehicles and equipment during construction activities. This requirement applies to medium- and heavy-duty vehicles and equipment (defined as equal to or greater than 50 horsepower). *Check "N/A" if the project is not a County-initiated project.* *Check "N/A" if the project does not require the use of medium- or heavy-duty construction vehicles or equipment.* *Check "N/A" if electric-powered or zero emission vehicles and equipment are not commercially available for the project's medium- and heavy-duty vehicle and equipment needs during construction. To support this "N/A" response, demonstrate that a minimum of three fleet owners/operators/fuel providers in San Diego County or adjacent counties were contacted and responded that electric-powered or other zero emission equipment and/or fuel options are not commercially available for the project's vehicle and equipment needs during construction.*	T-1 (T-1.1)	☐	☐	☒
Provide substantial evidence supporting the project's consistency determination. Attach additional information as needed. The project is not a County-initiated project.				
Energy				
2. Increase Energy Efficiency and Renewable Energy Use The project must comply with the County Facilities Zero Carbon Portfolio Plan by complying with the following: 1. Use electric appliances and equipment. Appliances and equipment powered by non-electric sources are not permitted. 2. Achieve Zero Net Energy (i.e., produce enough renewable energy to meet its own annual energy consumption requirements) *Check "N/A" if not a County-initiated project.*	E-1 (E-1.1)	☐	☐	☒
Provide substantial evidence supporting the project's consistency determination. Attach additional information as needed. The project is not a County-initiated project.				

Table 2. CAP Consistency Requirements for County-Initiated Projects				
CAP Consistency Requirement (County-Initiated Project)	Supporting CAP Measure (Action)	Project Consistency Determination		
		Consistent	Not Consistent	N/A
Water and Wastewater				
3. Increase Water Efficiency The project must incorporate applicable measures identified in the County's Water Efficiency Plan. *Check "N/A" if the project is privately initiated.*	W-1 (W-1.1)	☐	☐	☒

Provide substantial evidence supporting the project's consistency determination. Attach additional information as needed.

The project is privately initiated.

ATTACHMENT 1: ASSESSOR'S PARCELS

Assessor's Parcel Number	Total Acres (approx.)	Owner	Zoning[1]	Land Use Designation[2]
506-021-19-00	8.20	Cottonwood Cajon ES, LLC	S88	OS-R
506-020-52-00	4.01	Cottonwood Cajon ES, LLC	S80	OS-R
518-012-13-00	2.97	Cottonwood Cajon ES, LLC	S90	OS-R
518-012-14-00	46.61	Cottonwood Cajon ES, LLC	S90	OS-R
518-030-05-00	2.30	Cottonwood Cajon ES, LLC	S90	OS-R
518-030-06-00	5.58	Cottonwood Cajon ES, LLC	S90	OS-R
518-030-07-00	2.59	Cottonwood Cajon ES, LLC	S90	OS-R
518-030-08-00	0.69	Cottonwood Cajon ES, LLC	S90	OS-R
518-030-10-00	7.16	Cottonwood Cajon ES, LLC	S90	OS-R
518-030-12-00	6.88	Cottonwood Cajon ES, LLC	S90	OS-R
518-030-13-00	10.20	Cottonwood Cajon ES, LLC	S90	OS-R
518-030-15-00	4.04	Cottonwood Cajon ES, LLC	S90	OS-R
518-030-21-00	56.71	Cottonwood Cajon ES, LLC	S90	OS-R
518-030-22-00	19.43	Cottonwood Cajon ES, LLC	S90	OS-R
519-010-15-00	33.72	Cottonwood Cajon ES, LLC	S90	OS-R
519-010-17-00	14.59	Cottonwood Cajon ES, LLC	S90	OS-R
519-010-20-00	19.22	Cottonwood Cajon ES, LLC	S90	OS-R
519-010-21-00	1.10	Cottonwood Cajon ES, LLC	S90	OS-R
519-010-33-00	1.76	Cottonwood Cajon ES, LLC	S90	OS-R
519-010-34-00	7.17	Cottonwood Cajon ES, LLC	S90	OS-R
519-010-37-00	1.06	Cottonwood Cajon ES, LLC	S90	OS-R
519-011-03-00	23.80	Cottonwood Cajon ES, LLC	S88	OS-R
Totals:	**279.79**			

[1] S90 - Holding Area; S88 - Specific Planning Area; S80 - Open Space.
[2] General Plan Land Use Designation is OS-R - Open Space – Recreation.

ATTACHMENT 2: PROJECT DESCRIPTION

Project's Component Parts

The Project proposes sand mining activities on 251 acres of an approximately 280-acre site in the unincorporated community of Rancho San Diego in eastern San Diego County, north of State Route (SR) 94 and east of SR 54. The Project includes the following discretionary actions:

- A Major Use Permit (MUP) PDS2018-MUP-18-023 to allow mining activities on 251.1 acres of the 279.8-acre property; and

- A Reclamation Plan (RP) PDS2018-RP-18-001 to specify the standards to which the site must be reclaimed upon completion of mining activities in accordance with the California Surface Mining and Reclamation Act of 1975 (SMARA).

The Project site is currently zoned as Open Space (S80, with 8-acre minimum lot sizes), Specific Planning Area (S88), and Holding Area (S90). The S80 designation is used to provide appropriate controls for areas considered generally unsuitable for intensive development, including hazard or resource areas, public lands, recreation sites, or lands subject to open space easement or similar restrictions. The S90 zone is intended to prevent premature urban or non-urban development until more precise zoning regulations are prepared. Extractive use is allowed within the S80 and S90 classifications with the issuance of a MUP. The S88 zoning classification restricts extractive uses to site preparation, which allows the off-site removal of materials when it is secondary to the future use of the site. The parcels zoned as S88 are located in the southwestern corner of the Reclamation Plan boundary, within the Rancho San Diego Specific Plan area.

The Project proposes to convert the two golf courses within the Cottonwood Golf Club to a sand mining operation that would be conducted in three phases over 10 years. Approximately 214.4 acres of the approximately 280-acre site are proposed for extractive use. Surface areas included within the MUP boundary that are not disturbed by mining would be subject to removal of invasive species, as proposed within the river channel in the southwest portion of the site (refer to the discussion under "Revegetation and Erosion Control" below) or be left in their current condition. Specifically, the existing Sweetwater River channel and the majority of native habitat that currently exists on the site would be retained. Setbacks would be established from the property boundary at a minimum of 100 feet from residential properties and 50 feet from other uses and would be provided for safety and protection of existing public and private property in proximity to the Project. This distance was determined to be adequate in conjunction with proposed noise reduction barriers relative to the distance of proposed activities from nearby sensitive receptors, as well as existing site topography.

The extraction process would occur in three phases, with three to four subphases of less than 30 acres each in each phase, and a fourth phase for cleanup, equipment removal, and final reclamation. Extraction activities are proposed to begin on the Lakes Course west of the Steele Canyon Road bridge. The total duration of mining operations that would be authorized by the MUP would be 10 years, with reclamation anticipated to last two additional years.

Reclamation of the site would include: (1) removal of all artificial structures (with the exception of permanent erosion control features); (2) grading and backfilling to achieve final landforms; (3) incorporation of accumulated wash fines and salvaged topsoil (as applicable); and (4) revegetation and monitoring. Final grading would begin after mining and backfilling have been completed within a given area, and as extractive operations proceed to the east. Reclamation would be an ongoing process starting in the second year as mining proceeds to the east and would continue in each 20- to 30-acre subphase over an approximately 10-year period, concluding two years after the completion of mining. The final landform is proposed to be a relatively flat plain that gently slopes downward from east to west, with a widened river channel bisecting the length of the site. The reclaimed river channel is expected to average approximately 250 to 300 feet in width and would be slightly higher in elevation than the existing low-flow channel. This low-flow channel would accommodate annual water transfers from Loveland Reservoir to Sweetwater Reservoir. Areas of extraction would be reclaimed to end uses consistent with the General Plan and zoning classifications, in accordance with the Project objectives. Revegetation monitoring would continue for a minimum of five years or until revegetation standards are met after this final phase. Each Project component is described in further detail below.

Sand Mining and Processing Component

The Project's mining operations would extract, process, and transport aggregate using conventional earth moving and processing equipment. Aggregate material extracted from the site would consist primarily of washed sand suitable for Portland cement concrete (PCC), but may also include fill sand, gravel, and rock. Approximately 4.3 million cubic yards (cy) (6.40 million tons) of material are proposed to be extracted. Mining and extraction activities are expected to produce approximately 3.8 million cy (5.7 million tons) of sand and gravel for market use, with a 10 percent waste factor from the total amount extracted that includes wash fines and materials undesirable for processing (approximately 427,000 cy). These materials would be retained on site and utilized for backfilling. Extraction operations would be limited to a maximum production of 380,000 cy (570,000 tons) of construction grade aggregate per calendar year. Material extracted and processed at the site would be suitable for construction uses and would be available to customers in San Diego County.

The Project would be developed in three continuous phases with 20- to 30-acre subphases in each major phase. Prior to the initiation of Phase 1, pre-mining activities such as the restriping of Willow Glen Drive between Steele Canyon Road and the Project ingress driveway to provide Class II buffered bike lanes on both sides of the roadway, improvements to the access point from Willow Glen Drive to the Phase 1 excavation area, and installation of screening landscaping would be implemented. Phase 1 would begin with the placement of the processing plant and the conveyor line from the plant to the western portion of the property where excavation would begin. Processing facilities would be located near the center of the Project area, adjacent to Willow Glen Drive and west of the existing golf course parking lot. The plant site would consist of aggregate processing and washing facilities, three settling ponds, loadout area, and support structures and buildings (e.g., scale, office kiosk, and office trailer).

A portable conveyor line would be installed to transport excavated materials to the processing plant from the excavation areas where it would be washed. The conveyor line would be mobile to provide access within each phase and would be relocated as mining activity is concluded in each

phase. The mobile conveyor is proposed to minimize the use of on-site roads to transport excavated material between the plant and excavation areas. The conveyor line would cross the channel on one of the existing golf course bridges during all operations south of the channel. Portions of the conveyor system located within the 100-year floodplain would either be anchored to prevent displacement by flowing water or removed at least 24 hours prior to forecast of significant rain (i.e., 0.5 inch or greater). The conveyors would also be anchored, as needed, during scheduled water transfers.

Existing vegetation and infrastructure within the golf courses would be removed as mining operations proceed, with approximately 20 to 25 acres subject to mining at any one time. Approximately six inches of topsoil would be stripped from the surface and placed in stockpiles along the upper edges of extraction areas. The stockpiles may be utilized in the construction of temporary noise barriers—which can be constructed of soil, masonry, wood, plastic, fiberglass, steel, or a combination of those materials–until needed for reclamation activities. When feasible, topsoil would be stripped from the surface and directly re-applied to areas that have reached final grade to avoid storing soil. Topsoil stockpiles would be clearly identified with signage. They would not be disturbed until used for revegetation, if feasible, and would be covered or seeded with a recommended seed mix if not to be used within six months.

Excavation would average approximately 20 feet in depth below the existing ground surface (bgs) across the site; some areas would be excavated to a maximum depth of 40 feet bgs. Excavation would not occur within the bottom of the existing low-flow channel in order to retain existing hydrologic characteristics. Slopes in working cuts may be temporarily steeper that 3:1 ratio (horizontal:vertical) during operations. If these steeper slopes are to be inactive for a period of three or more weeks, they would be graded to a slope ratio of 3:1 or shallower.

Wheeled, front-end-loaders and an excavator would mine the materials to approximately one foot above the existing water table and load directly into a conveyor hopper (fitted with parallel bars to screen out large cobbles and rock). Groundwater will likely be encountered and the excavation pit would be limited to five acres in size. This would be accomplished by backfilling mined out areas of the pit with wash fines, overburden, and imported materials prior to expanding the pit size. Mined-out pit areas would be backfilled to an elevation above groundwater level as the mining phases advance. In areas where excavation extends below the water table, an excavator would be utilized for pit excavation; dewatering would not be required. The excavator would stack excavated material nearby and a loader would deliver and offload the material into the hopper.

An access point is proposed to be constructed directly across from Muirfield Drive consisting of a concrete apron that would convert to gravel surface for a short distance on the property for use during Phase 1. This access point and the existing access point on the northwest corner of the property would be used for mobilization/demobilization of heavy equipment for Phase 1. Equipment proposed to be used on site would include the front-end loaders and excavator noted above, as well as a water truck for dust suppression; dozer for rough grading, leveling, and ripping; motor grader for finish grading and maintenance; skid steer loader for a variety of cleanup activities; and a pickup for transportation for site supervisors. All equipment would be properly permitted in accordance with San Diego County Air Pollution Control District (SDAPCD) requirements. Heavy equipment would be delivered to the subphase 1A and 1A-1 areas south of the Sweetwater River Channel by crossing the existing channel during the dry season (generally

July through September) within a 16-foot-wide temporary crossing area. Once excavation activities within these subphase areas have been completed, the heavy equipment would be mobilized to the subphase 1B area using the same crossing. Once extraction activities have been completed within subphase 1C, heavy equipment would be mobilized for use within the Phase 2 and 3 areas south of the Sweetwater River channel from the Muirfield Drive access point, utilizing Willow Glen Drive, Steele Canyon Road, Jamul Drive, and Ivanhoe Ranch Road for one-time equipment delivery. Heavy equipment would be delivered through the existing golf course maintenance gate located off Ivanhoe Ranch Road at the subphase 2B area and then taken to subphase 2A. When equipment needs to be mobilized to subphase areas north of the channel, a 16-foot-wide temporary crossing would be utilized in the subphase 2C area. For equipment mobilization/demobilization, channel crossings would only be used when there is no water flow in the channel. Excavation and reclamation activities within each subphase area would be scheduled to avoid the need to cross the channel when water may be flowing. An operating procedure would be established to maintain communication with Sweetwater Authority prior to, and during, water transfers to ensure channel crossings during water flows are avoided.

Washed fines and materials undesirable for processing would be transported to backfill areas in one of three ways: (1) low-profile haul truck/tractor-trailer, (2) conveyor and haul truck, and (3) haul truck. For backfill areas north of the channel in Phase 1, the fill materials would be loaded onto a low-profile haul truck or tractor-trailer by an excavator at the processing plant and hauled along the conveyor access road to the backfill areas. Clearance under the Steele Canyon Road bridge is approximately 11 feet in height, which would allow the low-profile haul truck (approximately 9 feet in height with a capacity of 20 cy) or tractor-trailer (approximately 8 feet in height with a capacity of 16 cy) to pass beneath without requiring removal of soil material beneath the bridge. For the subphase 1A and 1A-1 and Phase 2 and 3 backfill areas south of the channel, fill material would be delivered from the processing plant area utilizing a conveyor line across existing golf course bridges. Only one conveyor line would be installed across each bridge at a time. A separate conveyor would be used to transport excavated material to the processing plant; transport of fill material to backfill areas would not interfere with transport of excavated material from active mining areas. The conveyor would transport backfill material from the processing area to Phase 2 or 3 where it would be offloaded for distribution to backfill areas with a haul truck. In order to allow for clearance below the Steele Canyon Road bridge, a tractor-trailer would be used to transport backfill material offloaded from a conveyor positioned within the Phase 2 area south of the channel, under the Steele Canyon Road bridge to the subphase 1A and 1A-1 backfill areas. For Phase 2 and 3 areas north of the channel (subphases 2A and 3D), fill material would be transported from the processing plant via haul truck. Off-road hauling of wash fines is expected to require approximately four to six round trips per day for all modes of transport to backfill areas.

It is conservatively estimated that approximately 10 percent (427,000 cy) of the excavated material would be considered not suitable for processing and thus would be retained on site and utilized for backfilling needs. It is possible that a greater percentage of excavated material would be unsuitable for sale and thus available for backfilling. In addition, approximately 2.5 million cy would be imported to the site to meet the site's overall backfill requirements. The maximum number of truck trips necessary for importing the maximum anticipated amount of backfill material is

conservatively estimated to be approximately 58 truck trips per day, over the 10-year operation of the project.[1]

The imported material would consist of inert debris only. Inert debris would consist of excavated soil material from development projects, clean demolition materials, and possibly concrete, asphalt and rock. The Project would be conditioned to only accept materials suitable for the end use of the site. Imported inert debris would be transported to backfill areas using the same approach described above for wash fines and materials undesirable for processing.

Mine Phases

The Project would be developed in three main mining phases, with subphases of less than 30 acres per phase and a fourth phase for cleanup, equipment removal, and final reclamation. Mineral extraction would generally proceed in a southwest-to-northeast direction.

Each phase would include three to four subphases. Site preparation activities would be conducted prior to initiation of extraction within a given subphase excavation area, including vegetation clearing, topsoil removal, and stockpile creation, as discussed above. Noise barriers would be constructed prior to initiation of extraction activities within 400 feet of noise sensitive land uses (NSLUs). Excavation in each subphase would be completed before moving the conveyor and excavation equipment to the next subphase and reclamation would begin in the completed subphase. During each of the phases, it may be necessary to re-locate existing power distribution poles that cross the golf course. Relocation or removal of power poles would be completed in accordance with San Diego Gas & Electric (SDG&E) requirements.

Phase 1

Phase 1 would include site development for construction of the internal access road and processing plant pad, as well as installation of screening vegetation, the conveyor line, and the processing plant. A loading area, truck scale, office/scale house, two storage containers, and three connected settling ponds would be installed in the processing area. An unused residential structure located adjacent to Willow Glen Drive west of the Steele Canyon Road would be demolished and all demolition waste removed from the property. Following initial site development activities, extractive operations would commence in the approximately 94-acre area west of Steele Canyon Road. Extractive operations would involve removal of materials from the surface to approximately 15 to 40 feet bgs, utilizing front end loaders and an excavator. Approximately 79 acres are proposed to be included in Phase 1, including approximately 10 acres located in the southwestern portion of the Project site within the Sweetwater River channel that are proposed for habitat improvement. The remaining approximately 15 acres of the Phase 1 area, which includes the Sweetwater River channel, sensitive habitat areas, and setback areas, would not be disturbed.

Excavation would begin following site preparation activities (i.e., vegetation clearing, topsoil removal, stockpile creation) in the subphase 1A-1 area south of the river channel. As noted above, materials and heavy equipment utilized during extraction activities for subphases 1A-1 and 1A

[1] The actual number of trucks may be less, where the same truck transporting material to the site would also transfer produced material away from the site ("deadhead trip"). However, to provide a conservative analysis, 58 additional truck trips per day is assumed.

would be transported across the low-flow channel during the dry season (generally July through September) when water is not present. Mining equipment would remain in the subphase area for the duration of mining activities within each subphase. Noise barriers would be required to be installed when extraction activities would occur within 400 feet of NSLUs for subphases 1A and 1C. Mineral excavation would then proceed to remove materials from the surface, generally in a southwest to northeast direction within each subphase. Excavation would extend approximately 20 to 25 feet bgs using an excavator and wheeled front-end loaders. During excavation of subphase 1-B and 1-C areas outside the existing channel, excavation may extend into the water table. Front-end loaders would transport the mined material to the loading bin connected to the conveyor line. Mined material would then be moved by conveyor to the processing plant where it would be washed, screened, stockpiled, and loaded for delivery. As described above, material extracted from the site that is not designated as saleable product would be utilized as backfill to construct the final landform. For Phase 1, wash fines and imported material would be returned to backfill areas by a tractor-trailer using the on-site conveyor line roads and/or over the existing golf course bridges by conveyor to areas south of the channel.

One existing distribution pole owned by SDG&E (#P675043) would be avoided during Phase 1-A excavation, leaving an "island" for the pole. An access ramp would be constructed on the western side of the island to connect to a 14-foot-wide access road. The proposed access road would connect to an additional access ramp leading to existing access to the southern Project boundary. The ramp and slopes surrounding the pole would be lined, as needed, for access and to prevent erosion. Maintenance of this access road/ramp would ensure that SDG&E maintenance crews are able to access the distribution pole during Project operations.

Reclamation and revegetation within each subphase area would be performed following mining, while mining would move to the next subphase area. The subphase 1A-1 areas would be reclaimed and revegetated first to support visual screening. Once excavation is complete in subphase 1A, the conveyor line and excavating equipment would move to the subphase 1B area on the western edge of the Project site. Reclamation in the subphase 1A area would then begin with final grading/establishment of final slopes and incorporation of wash fines and topsoil, installation of irrigation equipment, and revegetation. This process is proposed to continue in subphases 1B and 1C, with excavation occurring at depths up to 40 feet bgs in both of these subphases. These areas have been identified for mining up to 40 feet bgs. Subphase 1C is the largest of the subphases at approximately 30 acres and is identified as an over-excavation area. In addition to incorporation of wash fines, inert debris also would be utilized to achieve finished grades in this subphase.

Excavation in each subphase is expected to take approximately one year. Upon completion of mining activities in Phase 1, materials and equipment would be moved from the Phase 1 area via the access point at Muirfield Drive, trucked to the access point at Ivanhoe Ranch Road (existing maintenance entrance for golf course), and mobilized to the Phase 2 area. A permanent erosion control riprap structure would be installed on the west side of the Steele Canyon Road bridge following completion of excavation in Phase 1, in order to protect areas near the bridge from downstream erosion. The proposed erosion control riprap structure has been designed to withstand the 100-year design storm.

Phase 2

Prior to the initiation of extraction activities within the Phase 2 area, site preparation activities would be conducted, including vegetation clearing, topsoil removal, stockpile creation, and noise barrier construction (where extraction activities would occur within 400 feet of NSLUs for Phase 2). Extraction would occur in a west-to-east direction from subphase 2A to 2C within an approximately 48.2-acre area east of the Steele Canyon Road bridge. Mined material would be moved by conveyor to the processing plant where it would be washed, screened, stockpiled, and loaded for delivery. In order to excavate within the northern portion of subphase 2A, equipment may be mobilized across the channel (during the dry season) or from the processing plant area. The maximum depth of the excavation is expected to be 40 feet bgs, outside the low-flow channel in subphases 2B and 2C. The equipment would remain on site until excavation is completed for each subphase. Excavation in each subphase is expected to be completed in approximately one year; overall, Phase 2 is anticipated to last approximately three years. Upon conclusion of Phase 2, the conveyor line would be relocated to run from the processing plant to the eastern end of the Project site in preparation for Phase 3.

Reclamation of the Phase 2 subphases would begin as the final landforms are established in each subphase. As described above, both material extracted from the site that is not designated as saleable product as well as imported backfill (inert debris) would be utilized as backfill to construct the final landform. Reclamation would include establishment of all final slopes, incorporation of accumulated wash fines and topsoil, and revegetation. Three existing transmission towers owned by SDG&E would be avoided during Phase 2 excavation, leaving an "island" for the towers. An access ramp would be constructed on the western side of the island to connect to a 28-foot-wide access road within the existing SDG&E right-of-way easement that runs from the towers to the southern Project boundary. The ramp and slopes surrounding the towers would be lined, as needed, for access and to prevent erosion. Maintenance of this access road/ramp would ensure that SDG&E maintenance crews are able to access the towers during Project operations.

Phase 3

Excavation would continue for Phase 3 on approximately 78 acres east of the Phase 2 area. Phase 3 is anticipated to last approximately four years and would include four subphases. The same excavation and transportation procedures would be used as the two previous phases. Subphase 3A would be located at the northeast edge of the property. Excavation of each subphase would proceed westward. The maximum depth of excavation would be approximately 40 feet bgs in the eastern portion of subphase 3A.

Reclamation in each of the Phase 3 subphases would begin as the final landforms are established. Reclamation would include establishment of all final slopes; incorporation of inert debris (within over-excavation areas), accumulated wash fines, and topsoil; and revegetation.

Two existing distribution poles owned by SDG&E (#P75709 and #P75700) would be avoided during Phase 3A excavation, leaving access to the poles from the edge of the pit boundary. Two 14-foot-wide access roads would be left in place at elevation connecting the edge of the pit to the pad surrounding each distribution pole. The ramp and slopes surrounding the pole would be lined,

as needed, for access and to prevent erosion. Maintenance of this access road would ensure that SDG&E maintenance crews are able to access the distribution pole during Project operations.

Phase 4

Phase 4 would consist of removal of the processing plant, grading to final contours, final reclamation and revegetation efforts, cleanup, and equipment removal. This phase is expected to last approximately 8 to 10 months after the end of extraction activities in Phase 3. Revegetation monitoring would continue after this final phase for five years or until revegetation standards are met after this final phase.

Aggregate Processing

The Project would include a processing plant to wash and stockpile finished products. This would be located near the center of the Project area, adjacent to Willow Glen Drive and west of the existing golf course parking lot. The plant site would consist of aggregate processing and washing facilities, three settling ponds, and a loadout area, as well as support facilities. Vegetative screening/landscaping would reduce visual exposure. Where existing or proposed fencing is not screened by existing or proposed vegetation, green screening mesh would be installed on perimeter fencing along Willow Glen Drive to screen Project operations from public view.

The plant would screen and wash raw material into marketable PCC-grade construction aggregate material, including washed concrete sand, asphalt sand, pipe bedding, and some gravel. No crushing would be necessary to process the materials extracted from the site.

From the conveyor belt, material would be transferred to a blade mill, where material would be mixed with water to start the process of separating it into different sizes. Processing would occur through use of a screen deck plant capable of processing 400 tons per hour of raw material. The screen deck is a mechanical screening device that is used to separate granulated ore material into multiple grades by particle size. A screening machine consists of a drive that induces vibration, a screen media that causes particle separation, and a deck that holds the screen media and the drive. This drive is used to cause the vibration that moves material down the screen media. As material becomes too fine to separate by a screen, the material is moved to a fine material screw, or sand screw, for washing. These fine material washers utilize a water bath and inclined augers to separate the fines (clay and silt) from the fine and very fine sands that are used in mortar and plaster. Fine materials are then piped to the first in a series of three settling ponds where fines settle. Clean water would be recycled through the process, with additional water provided by on-site groundwater wells as needed.

Once the processed aggregates are separated into different sizes, radial stacker conveyors would be used to stockpile the materials, and wash fines would be transferred to the settling ponds. Stockpiles would be up to 25 feet in height and located near the plant. The two primary stockpiles would consist of washed concrete sand and gravel. Other smaller stockpiles may be located within the loadout area, depending on the material being processed at the time; these stockpiles are not expected to exceed 15 feet in height. Customer trucks would be loaded with finished products from stockpiles by a front-end-loader and transported off-site. The weight capacity of a standard heavy vehicle for outgoing loads is approximately 25 tons of material transported per truck. With a

maximum annual rate of production of 380,000 cy (570,000 tons), approximately 1,462 cy (2,192 tons) of materials would leave the site each day. A maximum day would include 88 one-way heavy vehicles accessing the Project site. As many as 15 over-the-highway trucks may be parked on site each day near the processing area and entrance to the site. Sand extraction operations would be conducted approximately 260 days per year, on weekdays, between the hours of 7:00 a.m. to 5:00 p.m. Trucking would occur from 9:00 am to 3:30 p.m. during the week. No activities would occur on weekends or major holidays.

Wash fines produced from the processing plant would be gathered in three settling ponds located near the plant that are 300 feet long, 50 feet wide, and 10 feet deep. The first pond, referred to as the "muck" pond, is where most of the sediment from the wash slurry settles and would be cleaned more frequently than the other ponds. These ponds would be used to protect surface water quality and to recycle the process water through the settling of silts and clays (wash fines). The ponds also would be used to collect local runoff that may be transporting earthen solids. These ponds would be cleaned occasionally by removing the sediment collected. Sediment would be stockpiled parallel to the prevailing wind direction for dewatering. When ponds are cleaned, the wash fines (silt, clay, and organic material) would be sold as a soil amendment or returned to excavation areas that have been completed to be used as backfill or incorporated into the surface of excavated areas as rough backfilling. Selling wash fines would be driven by market demand and would depend on orders for specific uses such as improving the texture of a planting mix, improving water retention, or for recreational uses. These orders are expected to be generally small in number and volume of material (estimated at approximately one haul truck load per month) and would be sold and transported directly from the processing area between the hours of 9:00 a.m. and 3:30 p.m. The quantity of backfill materials would depend on the quality and composition of the excavated material; a 10 percent "waste factor" is typically estimated in aggregate mining for wash fines and materials undesirable for processing (e.g., low in sand). Materials not selected for processing would be utilized as backfill. Wash fines would be returned to backfill areas north of the channel by an off-road haul truck or tractor-trailer using the on-site conveyor line roads. Off-road hauling is expected to require approximately four to six round trips per day. South of the channel washed fines would be transported over the existing golf course bridges by conveyor, then transported by haul truck or tractor-trailer to backfill areas. A tractor-trailer would access Phase 1 by going underneath the Steele Canyon Road bridge; no equipment would cross the channel for backfilling.

Support Facilities

Additional support facilities adjacent to the processing plant would include a modular office trailer/scale house, one 70-foot truck scale, two storage containers for tools, and a portable restroom.

On-site Personnel

A total of 9 employees and up to 4 vendor vehicles are expected to access the Project site on a typical day. The employees would be responsible for tasks associated with mining and processing activities, environmental compliance, safety, management, and administrative tasks. The vendors would conduct sales or provide supplies, fuel, and maintenance to the heavy equipment and facilities utilized during mining.

Storm Water and Erosion Control

A Storm Water Pollution Prevention Plan (SWPPP) would be prepared and submitted to the State Water Resources Control Board (SWRCB) prior to construction in accordance with the Industrial General Permit Order 2014-0057-DWQ, effective July 1, 2015. The SWPPP and erosion control plan would define best management practices (BMPs) to prevent erosion and the discharge of sediment to surface waters. If needed during mining, small desiltation basins may be temporarily constructed to capture runoff from existing culverts underneath Willow Glen Drive and to prevent sediment from leaving the site while allowing water to pass through to existing drainage features. Runoff would be directed from the disturbed mining and reclamation areas towards the basins, as necessary, to allow for desiltation and infiltration. Typical soil stabilization BMPs include mulch, hydroseeding, soil binders, geotextiles, lining of drainage ditches, and/or velocity control structures. At a minimum, erosion and sedimentation control measures would be designed for the 20-year, 1-hour storm event in accordance with SMARA guidelines. Silt fences would be installed five feet from the outer edge of each side of the existing Sweetwater River channel and may be installed in other areas. Other erosion control measures would include monitoring soil movement, arresting gullies or rills using straw mulch and hay bales, compacting soils with equipment, and re-grading as necessary. Vehicle track out and dust-related BMPs may include paved or stabilized roadway surfaces, tire washes, use of grates at vehicle entrances or exits, soil stabilizers, and water spray. Temporary erosion control measures would be retained until vegetation becomes sufficiently established to serve as an effective erosion control measure. Recommended erosion and sedimentation control measures would be described in detail in the Project SWPPP.

Water quality and hydromodification for permanent construction (e.g., Willow Glen Drive improvements) and impervious areas would be addressed with a Priority Development Project (PDP) Storm Water Quality Management Plan (SWQMP) and permanent post-construction BMPs. As noted in the SWQMP, stormwater runoff from the Willow Glen Drive improvements would be directed along the southerly curb of Willow Glen Drive. A proposed spillway would be installed along the westerly end of the roadway improvements to convey the runoff into tree wells just south of the street. Two tree wells with a 25-foot mature tree canopy diameter would be installed to satisfy the required treatment volume.

Equipment Maintenance

Mobile equipment utilized for project operations would be maintained by private vendors. Maintenance and repairs on the site's mobile mining equipment would be completed on a level area near the active excavation and away from drainage features. Ground protection and spill containment, which would include plastic sheeting to line a bermed sump and absorbent pads, would be placed in the work area prior to work being conducted on the equipment to contain leaks and prevent accidental spills from reaching the ground. Available clean up materials would include absorbent pads, pillows, dry absorbent, flat nosed shovel, a broom, and a waste container for any clean up materials used. All materials used to clean up a spill would be transported from the site and disposed of at a licensed facility in accordance with state and federal requirements.

Vector Control

The mining operator would control mosquito breeding using BMPs in accordance with requirements of the San Diego County Department of Environmental Health and Quality (DEHQ) and the Project-specific Vector Management Plan. An active management plan would be implemented to ensure that water collected in the mining areas, process settling ponds, and Sweetwater River does not propagate the breeding of vectors. Vector management would be implemented through monitoring and, where necessary, corrective measures. As wash water is pumped to the process settling ponds for use in material processing and dust control, excess water would be collected and allowed to infiltrate or return to process cycle after a short retention period. Two submersible pumps enclosed in a waterproof casing would feed and circulate the wash water. Water used in the washing operation would be continuously reused and recycled. During the wet season (generally October through March), the mining areas, process settling ponds, and the streambed would be visually inspected monthly by the operations staff for the presence of vectors. The mining areas, process settling ponds, and the streambed would be visually inspected monthly during the wet season and weekly during the dry season (generally July through September) by the operations staff for the presence of vectors. If necessary, corrective measures would be initiated.

Emergent vegetation would be removed when recommended by the County DEHQ Vector Control Program, or when emergent vegetation (e.g., cattails, sedges, etc.) is in excess of 50 percent of the surface area. Emergent vegetation would be controlled by hand labor, mechanical means, or by frequent clear cutting. Herbicides may be used as needed to control re-growth. Removal of vegetation by hand would be the preferred method in order to lessen the re-growth frequency and density. Floating vegetation conducive to mosquito production (i.e., water hyacinth [*Eichhornia* spp.], duckweed [*Lemna* and *Spirodela* spp.], and filamentous algal mats) would be removed. Foot pathways would be maintained for surveillance and abatement methods. Sizing of pathways would be a minimum of five feet wide to allow access to any ponded area.

Additionally, good housekeeping BMPs would be implemented to avoid attracting rodents to the buildings and structures at the Project site, including placement of all trash and debris in sealed bins, timely removal of refuse by a licensed disposal company, use of electric or snap traps to control rodents if observed, and proper training of all on-site staff.

Reclamation Component

In association with the MUP, a Reclamation Plan for mining activities would be required in compliance with SMARA and the County Grading Ordinance. Reclamation plans are developed to identify reclamation measures and establish performance standards for reclamation adequacy of mined lands. These measures include protection of wildlife habitat; revegetation; recontouring and erosion control; elimination or reduction of residual public health and safety hazards; and minimization of environmental impacts. A reclamation plan also addresses subsequent uses of the property and identifies schedules for reclamation activities.

Areas disturbed by resource extraction would be progressively reclaimed in an ongoing process that commences when mining operations have ceased within a given area and continues until all mining-related disturbance is reclaimed and all equipment involved in these operations has been

removed. Reclaimed areas would be restored to an end use of open space, multi-use trails, and land suitable for uses allowed by the General Plan and existing zoning classifications. Specifically, nearly 52 percent of the project site (142.8 acres) would be preserved in a biological open space easement to be held by the County. The reclamation plan for the riparian corridor is intended to stabilize the post-extraction landform and establish a productive native vegetative cover. For the areas outside the riparian corridor, the revegetation plan is intended to stabilize the surface and control erosion.

Reclamation of each area would begin as the final landforms are established. Reclamation would include establishment of all final slopes; incorporation of imported inert debris, accumulated wash fines, and topsoil (as applicable); revegetation of the channel using appropriate native species common to riparian habitat; establishment of upland vegetation on the upper slopes; weed control; and monitoring, as further detailed below.

All material extracted from the site, not designated as saleable product, would be utilized as backfill to construct the final landform. No tailings or waste piles would remain following conclusion of extractive operations.

Landform

The final landform of the site would be a relatively flat plain that gently slopes downward from east to west. Following extraction in areas where over-excavation deeper than the adjacent channel occurs, backfill would be placed to achieve the desired final elevation. Backfill is expected to be a combination of inert debris and overburden and wash fines produced at the wash plant. Fill material in the backfill areas would be spread in near-horizontal layers, approximately eight inches thick. Thicker lifts may be approved by the geotechnical engineer if testing indicates that the grading procedures are adequate to achieve the required compaction. Each lift would be spread evenly, thoroughly mixed during spreading to attain uniformity of the material and moisture in each layer, brought to near optimum moisture content and compacted to a minimum relative compaction of 85 percent in the floodway area and up to 90 percent in upland areas. In areas below the water table, the material would be placed at the edge of the pit and deposited to allow it to settle naturally. Once there is a working surface, compaction would occur. If necessary, over-compaction of the surface soil would be relieved by ripper, disc, and/or scarified to improve seed bed conditions for plant growth. Wash fines and inert debris would be used as backfill and blended with topsoil and used as a top dressing.

A widened river channel, more similar to pre-disturbance conditions, would bisect the length of the site. Banks of the river channel would slope up to the plain surface at a 3:1 ratio (horizontal:vertical) or shallower. The elevation difference between the bottom of the river channel and the top of the slope may be up to 25 feet. The reclaimed river channel would average approximately 250 to 300 feet in width. In some areas, benches may be constructed on the face of the riverbanks to accommodate varying vegetation types and/or multi-use trails. The riparian corridor would be re-established with native habitat and natural landforms consistent with the surrounding area. Reclaimed upland areas would be similar in elevation to Willow Glen Drive.

Portions of the Sweetwater River channel located along the southwest edge of the Lakes Course are heavily vegetated with a mixture of native and non-native plant species. This part of the channel

is currently a choke point for water as it exits the Project site. These areas would be incorporated into the reclamation plan by modifying the topography, removing invasive species, and replacing with native vegetation. Removal of invasive plants would occur manually and/or through herbicide use. Those treated with herbicide would either be manually removed after herbicide treatment or left to decompose. Herbicide use within the Project site would be conducted in accordance with all label instructions and local, state, and federal regulations, including application rates and methods, storage, transportation, mixing, and container disposal. In addition, only herbicides approved for aquatic use would be applied in areas within or adjacent to Sweetwater River and other waters, or areas with potential to drain into these areas. Invasive plant material would be removed from the site and disposed of off-site at a licensed landfill. To improve the channel and expand the riparian vegetation in this area, approximately 70,000 cy of material would be removed. Widening the floodplain at this location and revegetating the area would improve drainage and replace existing vegetation that is dominated by invasive plant species with more desired species. Work in this area, including planting native species, would be completed in the first phase of the Project.

Revegetation and Erosion Control

Plant species used in the revegetation effort would be capable of self-regeneration without continued dependence on irrigation, soil amendments, or fertilizer, and would include species representative of natural habitat. This would include riparian habitat within the river channel, coastal sage scrub on the channel slopes and upland areas with an end use of open space, and an erosion control seed mix for other areas outside the riparian corridor.

Revegetation would occur through a combination of planting and hydroseeding. Hydroseeding is the hydraulic application of a homogeneous slurry mixture consisting of water, seed mix, cellulose fiber, and a binding agent such as “M” Binder. Fertilizer can be added if the soil analysis shows the need for addition of amendments; however, this is not anticipated. The hydroseed mixture would consist of the following materials:

- 2,000 pounds per acre cellulose fiber
- 140 pounds per acre “M” Binder (gluing agent)
- 200 pounds per acre Milogranite (fertilizer if required)
- Seed mix as listed

Seeding and planting would occur at times when winds are relatively calm, between November and February to take advantage of the natural precipitation season for Southern California. This planting period may be extended due to the use of irrigation.

Where final landforms have been established, but are not yet available for final reclamation, erosion control would be provided through revegetation with the general erosion control seed mix. The application of the seed mix would be completed on an as-needed basis to control erosion and weed propagation.

Irrigation

As final landform areas are prepared for planting and seeding, temporary above-ground irrigation would be installed. An irrigation plan would be developed in accordance with the recommendations of the Project Landscape Architect and submitted to the County for approval prior to implementation. Supplemental irrigation of reclaimed lands may be used during the first two years after planting to augment natural precipitation and assist with the propagation of reclaimed vegetation. Watering would only occur to assist in initial establishment and/or in long periods of extended dryness. Irrigation would not be used continuously after seeding. Irrigation would be accomplished using sprinklers and would adhere to the Water Conservation in Landscaping Ordinance. Irrigation water would be provided by existing wells on site.

Monitoring

Vegetation monitoring would continue for five years or until the County and the State Division of Mine Reclamation acknowledge that performance standards have been met. Prior to release of the financial assurance, all revegetated areas must meet performance standards. A minimum of two revegetation test plots would be established in the Phase 1 area by the project biologist as reclamation commences to help ensure successful implementation of the revegetation plan. The first should be located at a lower elevation in an area of riparian plantings and second at a higher elevation that encompasses coastal sage scrub/upland plantings. The project biologist also would develop an evaluation plan that would be implemented after the test plots are planted. Success of these test plots would be judged based upon the effectiveness of the vegetation for the approved end use, and by comparing the quantified measures of vegetative cover, density, and species richness of the reclaimed mined lands to the surrounding area. Comparisons would be made by a qualified individual until performance standards have been met.

Since revegetation would occur concurrently with extractive operations, revegetation practices would be continually evaluated as revegetation is completed throughout the site. Records would be kept of soil preparation, including the addition of amendments as determined to be necessary, seeding techniques, and erosion control measures. Annual monitoring reports would be submitted to the County until the approved success criteria have been met and approved by the County. When the County agrees that revegetated areas meet success criteria for two consecutive years, no further monitoring would be required, and the operator may apply for release of financial assurances and SMARA closure.

Weed Control and Maintenance

Weed control is necessary to reduce or eliminate the occurrence of undesirable non-native species of plants that may invade the site where mining activities have removed the plant cover and where active and natural revegetation is taking place. Non-native invasive species (weeds) can compete with native plant species for available moisture and nutrients and consequently interfere with revegetation of the site after the completion of mining. Therefore, weed control and maintenance on the site would occur continuously during Project operation and the reclamation process, with a focus on control of invasive plant species.

The occurrence of weeds on the site would be monitored by quarterly visual inspection during active mining operations. The goal is to prevent weeds from becoming established and depositing seeds in areas to be revegetated in the future. If inspections reveal that weeds have become, or are becoming, established on the site then removal would be initiated. Weed removal would be accomplished through manual, mechanical, and/or chemical methods depending on the specific circumstances. Smaller plants (brome grasses, pepper weed) that cover more area may be sprayed, scraped with a tractor, or chopped by hand, depending upon the size of the area of infestation and the number of desired native plants in proximity to or mixed with the weeds. As discussed above, chemical (i.e., herbicide) use within the Project site would be conducted in accordance with all label instructions and local, state, and federal regulations, including application rates and methods, storage, transportation, mixing, and container disposal. In addition, only herbicides approved for aquatic use would be applied in areas within or adjacent to Sweetwater River and other waters, or areas with potential to drain into these areas.

Maintenance of the revegetation areas would consist of replanting and/or reseeding unsuccessful revegetation efforts. If revegetation efforts are not successful within four years following the initial seeding, seeded areas would be reevaluated to determine the measures necessary to improve revegetation success. If necessary, these areas would be reseeded with methods modified as needed. Prior to reseeding, the revegetation specialist would evaluate previous revegetation practices and test plot results to identify cultural methods to benefit the overall revegetation effort.

Access, Circulation, and Parking

The Project proposes to restripe Willow Glen Drive between Steele Canyon Road and the Project ingress driveway to provide Class II buffered bike lanes on both sides of the roadway per the County Roadway Standards as part of the pre-mining improvements. To facilitate deceleration of right-turning vehicles into the Project ingress driveway, a dedicated right-turn lane would also be constructed, which would serve as the primary access for mining operations, material sales, employees, and vendors. A new egress point would be established in the approximate center of the existing parking lot. The Project also proposes to construct a two-way left-turn lane between the ingress and egress driveways, which would serve as a refuge lane for trucks to complete their outbound maneuver. Willow Glen Drive between Steele Canyon Road and Hillsdale Road is classified in the County General Plan Mobility Element as a 4.1B: Major Road with Intermittent Turn lanes. The Project frontage along this stretch of roadway extends between Steele Canyon Road to approximately 1000 feet west of Hillsdale Road. In addition to the above improvements, the project proposes to provide an Irrevocable Offer of Dedication along the Project frontage as needed to accommodate the ultimate roadway classification of Willow Glen Drive.

A new access point to the property from Willow Glen Drive west of the Steele Canyon Road (Phase 1 area) would be necessary as the clearance height of the bridge that crosses the Sweetwater River on Steele Canyon Road would not allow most large trucks used by service vendors (e.g., to provide fuel and maintenance to the heavy equipment utilized during mining) to pass beneath the bridge. Current access from Willow Glen Drive to the western portion of the property is provided by a small driveway at the northwestern corner of the property. During the initial stages of the Project, this access point may be used briefly for equipment delivery. However, a more substantial access point for this area of the Project would be constructed at the intersection of Willow Glen Drive and Muirfield Drive as part of the pre-mining improvements, prior to initiation of Phase 1

activities. The access driveway would consist of a two-lane concrete apron that would transition to a gravel surface segment of road within the Project site and would be used primarily for mobilization/demobilization, servicing of heavy equipment, and reclamation for the Phase 1 area west of Steele Canyon Road. Both the Muirfield Drive access and existing driveways with gates would remain in place for the property owner after mining activities have been completed. This access point would not be used for transport of backfill materials to the Phase 1 area.

An access point to the property that is used by the golf course for maintenance exists from Ivanhoe Ranch Road, south of the river. This access point may be used for heavy equipment delivery and removal within Phase 2 and 3 areas south of the Sweetwater River channel but would not otherwise be used for mining purposes. The existing maintenance gate may also be used for reclamation maintenance and monitoring after mining in Phases 2 and 3 has ended.

Trucking operations for material sales would operate from 9:00 a.m. to 3:30 p.m. Monday through Friday to avoid peak traffic periods. There would be no trucking from the site or processing of materials on Saturdays, Sundays, and major holidays (as listed in Section 36.408 of the San Diego County Code of Regulatory Ordinances). As many as 15 over-the-highway trucks may be parked each day near the processing area and entrance to the site west of the existing golf course parking lot. A parking lot would be provided near the processing area that would accommodate the 9 employee and 14 vendor vehicles.

Trails and Pathways

A pedestrian pathway would be provided along the northern Project frontage/Willow Glen Drive east of Steele Canyon Road to provide pedestrian access within the Project vicinity where there are no existing sidewalks. The public pathway has been designed to avoid removal of existing mature screening vegetation. The pathway would range in width from eight feet wide just east of Steele Canyon Road, to five feet wide in the eastern portion of the Project site where the potential pathway alignment is constrained by existing topography and the Sweetwater River channel.

A publicly accessible community trail is also proposed to be constructed within the Project site. The multi-use trail would connect to the pathway described above. The trail would be constructed by the Project applicant in conjunction with final site reclamation activities. Specifically, trail construction would be completed in segments and would begin in a phase area when mining activities have been completed in the phase area and reclamation has begun in the final subphase of that area. For example, in Phase 1, construction of the trails in that segment of the Project area would begin during reclamation of subphase 1C, when no mining activities are occurring in Phase 1. This would then continue during Phases 2, 3, and 4. The County has identified a number of existing and proposed community pathway and trails located along public rights-of-way, over private property, and through County-owned land in the vicinity of the Project in the Valle De Oro Community Trails and Pathways Plan, which is a component of the County Trails Program Community Trails Master Plan (CTMP; 2005, as amended). The location and design of on-site trails would be coordinated with the County.

Landscaping

Existing landscape vegetation along Willow Glen Drive, which primarily consists of trees and shrubs such as acacia, Peruvian pepper trees, and oleander, would be maintained to the extent feasible during Project operation to provide a visual screen between Project activities and the public. A tree survey conducted along the northern Project boundary identified a total of 477 trees that currently provide landscape screening. Approximately 67 (14 percent) of the existing trees would be required to be removed to construct the Project entrance and Willow Glen Drive improvements, including eucalyptus (*Eucalyptus* spp.), palm (*Washingtonia robusta*), California pepper tree (*Schinus mole*), European olive (*Olea europaea*), and *Myoporum laetum* (no common name) species. Tree removal would be concentrated east of Steele Canyon Road and west of the existing golf course parking lot where the improvements to Willow Glen Drive and Project ingress driveway are proposed. An additional approximately 513 existing trees within the Project site would be incrementally removed during mining. The full extent of tree removal would be confirmed once improvement plans are prepared as a condition of the Project MUP. Replacement trees would be planted prior to initiation of Phase 1 to provide visual screening of mining activities from Willow Glen Drive and viewers to the north of the Project site. The landscaping would be installed along Willow Glen Drive, adjacent to the Project entrances, and to provide additional screening of the plant area and parking lot. Mature 36-inch box Mexican elderberry trees are proposed to be installed along the western and southern boundary of the processing plant footprint prior to the initiation of Phase 1. These trees would be installed in ground and would be maintained throughout the duration of mining operations on the Project site. Although it may be possible to salvage some existing vegetation within areas proposed for extraction, the existing native tree species are reaching the end of their life span and may not survive relocation. Due to the relative lack of native vegetation on the property, on-site seed collection would be minimal.

Trees planted for landscaping and screening would include coast live oak (*Quercus agrifolia*), Fremont cottonwood (*Populus fremontii*), and Western redbud (*Cercis occidentalis*). Additional plants to be employed include shrubs (California lilac [*Ceanothus* x 'Ray Hartman'], toyon [*Heteromeles arbutifolia*], lemonade berry [*Rhus integrifolia*]), groundcover (dwarf coyote bush [*Baccharis pilularis*]), and a coastal sage scrub seed mix. Trees would be spaced approximately 20 to 25 feet on center. Where feasible, trees would be grouped such that some trees would be located diagonally behind others.

Fences

During the Project's operational lifetime, public access would be controlled by fencing on the perimeter of the property and gates on the access roads within the Project boundaries. Lodge pole fencing would be installed on the south side of the proposed pathway along the northern Project frontage/Willow Glen Drive east of Steel Canyon Road. In addition, appropriate signage would be posted around the perimeter of the excavation area and Project boundary at 150-foot intervals; wayfinding/directional signage would be provided for the pathway. The majority of the site is already surrounded by chain link fencing, with fencing to be replaced/repaired where missing or damaged. Fencing along the San Diego National Wildlife Refuge (SDNWR) to the southwest of the Project site would consist of four-foot-high, three-strand smooth wire or similar fencing that allows for wildlife passage; along all other public areas a six-foot-high chain link fence would be installed where not currently present. Where the fencing is not screened by existing or proposed

vegetation, green screening mesh would be installed to screen Project operations from public view. The gates would be locked during non-operating hours. Security fencing would be removed after reclamation is complete, at the owner's request.

Lighting

Shielded night lighting would be installed around the processing plant for safety and security purposes. Lighting would be designed to minimize glare and reflection onto neighboring areas and is anticipated to include mounted sodium, metal halide, fluorescent, or light-emitting diode (LED) lighting. Lights would be directed downward and would have cut-offs installed to minimize spillover onto adjacent properties. Each light would provide the lowest light level necessary and would be limited to less than 4,050 lumens output, maintaining compliance with State and local regulations.

Utilities and Services

Electricity

Electrical power would be provided by SDG&E through an overhead distribution line that enters the site from the northwest. The Project would utilize temporary power poles for the plant location and conveyor system. Existing transmission lines across the site would be retained in their current locations and the area immediately surrounding the existing transmission towers would not be subject to excavation. SDG&E easements would remain in place after the Project is completed.

During each phase, it may be necessary to remove the existing power distribution poles that cross the golf course. Relocation or removal of power poles would be completed in accordance with SDG&E requirements. A number of power distribution poles and transmission towers would remain in place and be protected according to SDG&E encroachment guidelines and communications with SDG&E staff.

Water

Eight groundwater wells on the property currently provide irrigation water for the golf courses, and would be used for dust control, processing, and irrigation during Project operation. Wells not proposed to be used by the property owner or for groundwater monitoring after mining and reclamation have been completed would be properly abandoned. Sweetwater Authority has requested that two wells, Lakes #11 and Ivanhoe #11, remain in place after cessation of mining and reclamation activities so groundwater monitoring can be continued in this area of the river. It is the intent of the Project not to remove these two wells unless it is required.

Bottled drinking water for the mine staff would be provided by a private vendor. The estimated existing annual groundwater usage from well pump data provided by the course superintendent is 840 acre-feet. The annual water usage, including evaporation from course ponds, was estimated as 804 acre-feet using the evapotranspiration method described in the Groundwater Sustainability Plan for Borrego Valley (Borrego Valley Groundwater Sustainability Agency, 2019), as referenced in the project reclamation plan. Water use by the Project for all purposes has been calculated at 139.9 acre-feet per year, or a reduction of approximately 664.1 acre-feet or 82 percent per year relative to existing conditions.

Sand mines use water to wash the material for use off site and water roads and stockpiles for dust suppression. The total amount of water used in the mining and processing is "handled water;" water that is lost from the site during the mining and processing is "consumed water." A water truck would be used for dust suppression on all operating areas. This would include material stockpiles and unpaved areas within the mining area, the processing plant, and access road. Outgoing loads also would be surface-watered for dust suppression purposes. Dust suppression is estimated to require 20.3 acre-feet of water per year. Water usage for processing would depend on production volume. The Project's estimated water usage assumes the maximum annual production of 570,000 tons. Of the 203 gallons per minute (gpm) of water used in the washing operation, 87 percent would be continuously reused and recycled. Approximately 38 gpm of continuous water input on workdays would be required to make up for approximately 13 percent that is estimated to be lost through evaporation and retention on material. Water consumed for processing is estimated at 64 acre-feet annually based on the maximum annual production rate. This includes the 20.3 acre-feet per year noted above for dust control, 20.3 acre-feet per year attributed to evaporation from stockpiles, and 23.4 acre-feet per year of water retained on aggregate product that is taken off site within exported mining materials. An additional 20.3 acre-feet per year would be consumed in association with evaporation from mining pit areas where groundwater may be encountered. Irrigation of landscaping near the entrance and as supplemental water on revegetated areas is estimated to utilize approximately 55.6 acre-feet per year. Total water consumption for the Project is estimated at 139.9 acre-feet per year.

Wells not to be used by the property owner or for groundwater monitoring after mining and reclamation are complete would be properly abandoned. Wells in the mining footprint, or not to be used in the future, would be abandoned as each mining phase is completed in accordance with County requirements and standards. As noted above, Sweetwater Authority has requested that two wells, Lakes #11 and Ivanhoe #11, remain in place after cessation of mining and reclamation activities so that they can continue groundwater monitoring in this area of the river.

Sewer

The Project would utilize portable restroom(s); no sewer connections are proposed. One portable restroom would be placed in the plant area and the second would be placed near the active excavation area and moved as needed. They would be serviced at appropriate intervals by contract vendors.

Solid Waste Disposal

Domestic refuse would be collected in trash bins and removed by a licensed, refuse disposal company. Equipment would be maintained on site and all used oils, fuels, and solvents would be collected in accordance with the Department of Toxic Substances Control (DTSC) regulations and removed from the site by an approved hauler for materials recycling.

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Attachment 1

Assessor's Parcels

ATTACHMENT 1: ASSESSOR'S PARCELS

Assessor's Parcel Number	Total Acres (approx.)	Owner	Zoning[1]	Land Use Designation[2]
506-021-19-00	8.20	Cottonwood Cajon ES, LLC	S88	OS-R
506-020-52-00	4.01	Cottonwood Cajon ES, LLC	S80	OS-R
518-012-13-00	2.97	Cottonwood Cajon ES, LLC	S90	OS-R
518-012-14-00	46.61	Cottonwood Cajon ES, LLC	S90	OS-R
518-030-05-00	2.30	Cottonwood Cajon ES, LLC	S90	OS-R
518-030-06-00	5.58	Cottonwood Cajon ES, LLC	S90	OS-R
518-030-07-00	2.59	Cottonwood Cajon ES, LLC	S90	OS-R
518-030-08-00	0.69	Cottonwood Cajon ES, LLC	S90	OS-R
518-030-10-00	7.16	Cottonwood Cajon ES, LLC	S90	OS-R
518-030-12-00	6.88	Cottonwood Cajon ES, LLC	S90	OS-R
518-030-13-00	10.20	Cottonwood Cajon ES, LLC	S90	OS-R
518-030-15-00	4.04	Cottonwood Cajon ES, LLC	S90	OS-R
518-030-21-00	56.71	Cottonwood Cajon ES, LLC	S90	OS-R
518-030-22-00	19.43	Cottonwood Cajon ES, LLC	S90	OS-R
519-010-15-00	33.72	Cottonwood Cajon ES, LLC	S90	OS-R
519-010-17-00	14.59	Cottonwood Cajon ES, LLC	S90	OS-R
519-010-20-00	19.22	Cottonwood Cajon ES, LLC	S90	OS-R
519-010-21-00	1.10	Cottonwood Cajon ES, LLC	S90	OS-R
519-010-33-00	1.76	Cottonwood Cajon ES, LLC	S90	OS-R
519-010-34-00	7.17	Cottonwood Cajon ES, LLC	S90	OS-R
519-010-37-00	1.06	Cottonwood Cajon ES, LLC	S90	OS-R
519-011-03-00	23.80	Cottonwood Cajon ES, LLC	S88	OS-R
Totals:	**279.79**			

[1] S90 - Holding Area; S88 - Specific Planning Area; S80 - Open Space.
[2] General Plan Land Use Designation is OS-R - Open Space – Recreation.

Attachment 2

Project Description

ATTACHMENT 2 – PROJECT DESCRIPTION

Project's Component Parts

The Project proposes sand mining activities on 251 acres of an approximately 280-acre site in the unincorporated community of Rancho San Diego in eastern San Diego County, north of State Route (SR) 94 and east of SR 54. The Project includes the following discretionary actions:

- A Major Use Permit (MUP) PDS2018-MUP-18-023 to allow mining activities on 251.1 acres of the 279.8-acre property; and

- A Reclamation Plan (RP) PDS2018-RP-18-001 to specify the standards to which the site must be reclaimed upon completion of mining activities in accordance with the California Surface Mining and Reclamation Act of 1975 (SMARA).

The Project site is currently zoned as Open Space (S80, with 8-acre minimum lot sizes), Specific Planning Area (S88), and Holding Area (S90). The S80 designation is used to provide appropriate controls for areas considered generally unsuitable for intensive development, including hazard or resource areas, public lands, recreation sites, or lands subject to open space easement or similar restrictions. The S90 zone is intended to prevent premature urban or non-urban development until more precise zoning regulations are prepared. Extractive use is allowed within the S80 and S90 classifications with the issuance of a MUP. The S88 zoning classification restricts extractive uses to site preparation, which allows the off-site removal of materials when it is secondary to the future use of the site. The parcels zoned as S88 are located in the southwestern corner of the Reclamation Plan boundary, within the Rancho San Diego Specific Plan area.

The Project proposes to convert the two golf courses within the Cottonwood Golf Club to a sand mining operation that would be conducted in three phases over 10 years. Approximately 214.4 acres of the approximately 280-acre site are proposed for extractive use. Surface areas included within the MUP boundary that are not disturbed by mining would be subject to removal of invasive species, as proposed within the river channel in the southwest portion of the site (refer to the discussion under "Revegetation and Erosion Control" below) or be left in their current condition. Specifically, the existing Sweetwater River channel and the majority of native habitat that currently exists on the site would be retained. Setbacks would be established from the property boundary at a minimum of 100 feet from residential properties and 50 feet from other uses and would be provided for safety and protection of existing public and private property in proximity to the Project. This distance was determined to be adequate in conjunction with proposed noise reduction barriers relative to the distance of proposed activities from nearby sensitive receptors, as well as existing site topography.

The extraction process would occur in three phases, with three to four subphases of less than 30 acres each in each phase, and a fourth phase for cleanup, equipment removal, and final reclamation. Extraction activities are proposed to begin on the Lakes Course west of the Steele Canyon Road bridge. The total duration of mining operations that would be authorized by the MUP would be 10 years, with reclamation anticipated to last two additional years.

Reclamation of the site would include: (1) removal of all artificial structures (with the exception of permanent erosion control features); (2) grading and backfilling to achieve final landforms; (3) incorporation of accumulated wash fines and salvaged topsoil (as applicable); and (4) revegetation and monitoring. Final grading would begin after mining and backfilling have been completed within a given area, and as extractive operations proceed to the east. Reclamation would be an ongoing process starting in the second year as mining proceeds to the east and would continue in each 20- to 30-acre subphase over an approximately 10-year period, concluding two years after the completion of mining. The final landform is proposed to be a relatively flat plain that gently slopes downward from east to west, with a widened river channel bisecting the length of the site. The reclaimed river channel is expected to average approximately 250 to 300 feet in width and would be slightly higher in elevation than the existing low-flow channel. This low-flow channel would accommodate annual water transfers from Loveland Reservoir to Sweetwater Reservoir. Areas of extraction would be reclaimed to end uses consistent with the General Plan and zoning classifications, in accordance with the Project objectives. Revegetation monitoring would continue for a minimum of five years or until revegetation standards are met after this final phase. Each Project component is described in further detail below.

Sand Mining and Processing Component

The Project's mining operations would extract, process, and transport aggregate using conventional earth moving and processing equipment. Aggregate material extracted from the site would consist primarily of washed sand suitable for Portland cement concrete (PCC), but may also include fill sand, gravel, and rock. Approximately 4.3 million cubic yards (cy) (6.40 million tons) of material are proposed to be extracted. Mining and extraction activities are expected to produce approximately 3.8 million cy (5.7 million tons) of sand and gravel for market use, with a 10 percent waste factor from the total amount extracted that includes wash fines and materials undesirable for processing (approximately 427,000 cy). These materials would be retained on site and utilized for backfilling. Extraction operations would be limited to a maximum production of 380,000 cy (570,000 tons) of construction grade aggregate per calendar year. Material extracted and processed at the site would be suitable for construction uses and would be available to customers in San Diego County.

The Project would be developed in three continuous phases with 20- to 30-acre subphases in each major phase. Prior to the initiation of Phase 1, pre-mining activities such as the restriping of Willow Glen Drive between Steele Canyon Road and the Project ingress driveway to provide Class II buffered bike lanes on both sides of the roadway, improvements to the access point from Willow Glen Drive to the Phase 1 excavation area, and installation of screening landscaping would be implemented. Phase 1 would begin with the placement of the processing plant and the conveyor line from the plant to the western portion of the property where excavation would begin. Processing facilities would be located near the center of the Project area, adjacent to Willow Glen Drive and west of the existing golf course parking lot. The plant site would consist of aggregate processing and washing facilities, three settling ponds, loadout area, and support structures and buildings (e.g., scale, office kiosk, and office trailer).

A portable conveyor line would be installed to transport excavated materials to the processing plant from the excavation areas where it would be washed. The conveyor line would be mobile to provide access within each phase and would be relocated as mining activity is concluded in each

phase. The mobile conveyor is proposed to minimize the use of on-site roads to transport excavated material between the plant and excavation areas. The conveyor line would cross the channel on one of the existing golf course bridges during all operations south of the channel. Portions of the conveyor system located within the 100-year floodplain would either be anchored to prevent displacement by flowing water or removed at least 24 hours prior to forecast of significant rain (i.e., 0.5 inch or greater). The conveyors would also be anchored, as needed, during scheduled water transfers.

Existing vegetation and infrastructure within the golf courses would be removed as mining operations proceed, with approximately 20 to 25 acres subject to mining at any one time. Approximately six inches of topsoil would be stripped from the surface and placed in stockpiles along the upper edges of extraction areas. The stockpiles may be utilized in the construction of temporary noise barriers—which can be constructed of soil, masonry, wood, plastic, fiberglass, steel, or a combination of those materials–until needed for reclamation activities. When feasible, topsoil would be stripped from the surface and directly re-applied to areas that have reached final grade to avoid storing soil. Topsoil stockpiles would be clearly identified with signage. They would not be disturbed until used for revegetation, if feasible, and would be covered or seeded with a recommended seed mix if not to be used within six months.

Excavation would average approximately 20 feet in depth below the existing ground surface (bgs) across the site; some areas would be excavated to a maximum depth of 40 feet bgs. Excavation would not occur within the bottom of the existing low-flow channel in order to retain existing hydrologic characteristics. Slopes in working cuts may be temporarily steeper that 3:1 ratio (horizontal:vertical) during operations. If these steeper slopes are to be inactive for a period of three or more weeks, they would be graded to a slope ratio of 3:1 or shallower.

Wheeled, front-end-loaders and an excavator would mine the materials to approximately one foot above the existing water table and load directly into a conveyor hopper (fitted with parallel bars to screen out large cobbles and rock). Groundwater will likely be encountered and the excavation pit would be limited to five acres in size. This would be accomplished by backfilling mined out areas of the pit with wash fines, overburden, and imported materials prior to expanding the pit size. Mined-out pit areas would be backfilled to an elevation above groundwater level as the mining phases advance. In areas where excavation extends below the water table, an excavator would be utilized for pit excavation; dewatering would not be required. The excavator would stack excavated material nearby and a loader would deliver and offload the material into the hopper.

An access point is proposed to be constructed directly across from Muirfield Drive consisting of a concrete apron that would convert to gravel surface for a short distance on the property for use during Phase 1. This access point and the existing access point on the northwest corner of the property would be used for mobilization/demobilization of heavy equipment for Phase 1. Equipment proposed to be used on site would include the front-end loaders and excavator noted above, as well as a water truck for dust suppression; dozer for rough grading, leveling, and ripping; motor grader for finish grading and maintenance; skid steer loader for a variety of cleanup activities; and a pickup for transportation for site supervisors. All equipment would be properly permitted in accordance with San Diego County Air Pollution Control District (SDAPCD) requirements. Heavy equipment would be delivered to the subphase 1A and 1A-1 areas south of the Sweetwater River Channel by crossing the existing channel during the dry season (generally

July through September) within a 16-foot-wide temporary crossing area. Once excavation activities within these subphase areas have been completed, the heavy equipment would be mobilized to the subphase 1B area using the same crossing. Once extraction activities have been completed within subphase 1C, heavy equipment would be mobilized for use within the Phase 2 and 3 areas south of the Sweetwater River channel from the Muirfield Drive access point, utilizing Willow Glen Drive, Steele Canyon Road, Jamul Drive, and Ivanhoe Ranch Road for one-time equipment delivery. Heavy equipment would be delivered through the existing golf course maintenance gate located off Ivanhoe Ranch Road at the subphase 2B area and then taken to subphase 2A. When equipment needs to be mobilized to subphase areas north of the channel, a 16-foot-wide temporary crossing would be utilized in the subphase 2C area. For equipment mobilization/demobilization, channel crossings would only be used when there is no water flow in the channel. Excavation and reclamation activities within each subphase area would be scheduled to avoid the need to cross the channel when water may be flowing. An operating procedure would be established to maintain communication with Sweetwater Authority prior to, and during, water transfers to ensure channel crossings during water flows are avoided.

Washed fines and materials undesirable for processing would be transported to backfill areas in one of three ways: (1) low-profile haul truck/tractor-trailer, (2) conveyor and haul truck, and (3) haul truck. For backfill areas north of the channel in Phase 1, the fill materials would be loaded onto a low-profile haul truck or tractor-trailer by an excavator at the processing plant and hauled along the conveyor access road to the backfill areas. Clearance under the Steele Canyon Road bridge is approximately 11 feet in height, which would allow the low-profile haul truck (approximately 9 feet in height with a capacity of 20 cy) or tractor-trailer (approximately 8 feet in height with a capacity of 16 cy) to pass beneath without requiring removal of soil material beneath the bridge. For the subphase 1A and 1A-1 and Phase 2 and 3 backfill areas south of the channel, fill material would be delivered from the processing plant area utilizing a conveyor line across existing golf course bridges. Only one conveyor line would be installed across each bridge at a time. A separate conveyor would be used to transport excavated material to the processing plant; transport of fill material to backfill areas would not interfere with transport of excavated material from active mining areas. The conveyor would transport backfill material from the processing area to Phase 2 or 3 where it would be offloaded for distribution to backfill areas with a haul truck. In order to allow for clearance below the Steele Canyon Road bridge, a tractor-trailer would be used to transport backfill material offloaded from a conveyor positioned within the Phase 2 area south of the channel, under the Steele Canyon Road bridge to the subphase 1A and 1A-1 backfill areas. For Phase 2 and 3 areas north of the channel (subphases 2A and 3D), fill material would be transported from the processing plant via haul truck. Off-road hauling of wash fines is expected to require approximately four to six round trips per day for all modes of transport to backfill areas.

It is conservatively estimated that approximately 10 percent (427,000 cy) of the excavated material would be considered not suitable for processing and thus would be retained on site and utilized for backfilling needs. It is possible that a greater percentage of excavated material would be unsuitable for sale and thus available for backfilling. In addition, approximately 2.5 million cy would be imported to the site to meet the site's overall backfill requirements. The maximum number of truck trips necessary for importing the maximum anticipated amount of backfill material is

conservatively estimated to be approximately 58 truck trips per day, over the 10-year operation of the project.[1]

The imported material would consist of inert debris only. Inert debris would consist of excavated soil material from development projects, clean demolition materials, and possibly concrete, asphalt and rock. The Project would be conditioned to only accept materials suitable for the end use of the site. Imported inert debris would be transported to backfill areas using the same approach described above for wash fines and materials undesirable for processing.

Mine Phases

The Project would be developed in three main mining phases, with subphases of less than 30 acres per phase and a fourth phase for cleanup, equipment removal, and final reclamation. Mineral extraction would generally proceed in a southwest-to-northeast direction.

Each phase would include three to four subphases. Site preparation activities would be conducted prior to initiation of extraction within a given subphase excavation area, including vegetation clearing, topsoil removal, and stockpile creation, as discussed above. Noise barriers would be constructed prior to initiation of extraction activities within 400 feet of noise sensitive land uses (NSLUs). Excavation in each subphase would be completed before moving the conveyor and excavation equipment to the next subphase and reclamation would begin in the completed subphase. During each of the phases, it may be necessary to re-locate existing power distribution poles that cross the golf course. Relocation or removal of power poles would be completed in accordance with San Diego Gas & Electric (SDG&E) requirements.

Phase 1

Phase 1 would include site development for construction of the internal access road and processing plant pad, as well as installation of screening vegetation, the conveyor line, and the processing plant. A loading area, truck scale, office/scale house, two storage containers, and three connected settling ponds would be installed in the processing area. An unused residential structure located adjacent to Willow Glen Drive west of the Steele Canyon Road would be demolished and all demolition waste removed from the property. Following initial site development activities, extractive operations would commence in the approximately 94-acre area west of Steele Canyon Road. Extractive operations would involve removal of materials from the surface to approximately 15 to 40 feet bgs, utilizing front end loaders and an excavator. Approximately 79 acres are proposed to be included in Phase 1, including approximately 10 acres located in the southwestern portion of the Project site within the Sweetwater River channel that are proposed for habitat improvement. The remaining approximately 15 acres of the Phase 1 area, which includes the Sweetwater River channel, sensitive habitat areas, and setback areas, would not be disturbed.

Excavation would begin following site preparation activities (i.e., vegetation clearing, topsoil removal, stockpile creation) in the subphase 1A-1 area south of the river channel. As noted above, materials and heavy equipment utilized during extraction activities for subphases 1A-1 and 1A

[1] The actual number of trucks may be less, where the same truck transporting material to the site would also transfer produced material away from the site ("deadhead trip"). However, to provide a conservative analysis, 58 additional truck trips per day is assumed.

would be transported across the low-flow channel during the dry season (generally July through September) when water is not present. Mining equipment would remain in the subphase area for the duration of mining activities within each subphase. Noise barriers would be required to be installed when extraction activities would occur within 400 feet of NSLUs for subphases 1A and 1C. Mineral excavation would then proceed to remove materials from the surface, generally in a southwest to northeast direction within each subphase. Excavation would extend approximately 20 to 25 feet bgs using an excavator and wheeled front-end loaders. During excavation of subphase 1-B and 1-C areas outside the existing channel, excavation may extend into the water table. Front-end loaders would transport the mined material to the loading bin connected to the conveyor line. Mined material would then be moved by conveyor to the processing plant where it would be washed, screened, stockpiled, and loaded for delivery. As described above, material extracted from the site that is not designated as saleable product would be utilized as backfill to construct the final landform. For Phase 1, wash fines and imported material would be returned to backfill areas by a tractor-trailer using the on-site conveyor line roads and/or over the existing golf course bridges by conveyor to areas south of the channel.

One existing distribution pole owned by SDG&E (#P675043) would be avoided during Phase 1-A excavation, leaving an "island" for the pole. An access ramp would be constructed on the western side of the island to connect to a 14-foot-wide access road. The proposed access road would connect to an additional access ramp leading to existing access to the southern Project boundary. The ramp and slopes surrounding the pole would be lined, as needed, for access and to prevent erosion. Maintenance of this access road/ramp would ensure that SDG&E maintenance crews are able to access the distribution pole during Project operations.

Reclamation and revegetation within each subphase area would be performed following mining, while mining would move to the next subphase area. The subphase 1A-1 areas would be reclaimed and revegetated first to support visual screening. Once excavation is complete in subphase 1A, the conveyor line and excavating equipment would move to the subphase 1B area on the western edge of the Project site. Reclamation in the subphase 1A area would then begin with final grading/establishment of final slopes and incorporation of wash fines and topsoil, installation of irrigation equipment, and revegetation. This process is proposed to continue in subphases 1B and 1C, with excavation occurring at depths up to 40 feet bgs in both of these subphases. These areas have been identified for mining up to 40 feet bgs. Subphase 1C is the largest of the subphases at approximately 30 acres and is identified as an over-excavation area. In addition to incorporation of wash fines, inert debris also would be utilized to achieve finished grades in this subphase.

Excavation in each subphase is expected to take approximately one year. Upon completion of mining activities in Phase 1, materials and equipment would be moved from the Phase 1 area via the access point at Muirfield Drive, trucked to the access point at Ivanhoe Ranch Road (existing maintenance entrance for golf course), and mobilized to the Phase 2 area. A permanent erosion control riprap structure would be installed on the west side of the Steele Canyon Road bridge following completion of excavation in Phase 1, in order to protect areas near the bridge from downstream erosion. The proposed erosion control riprap structure has been designed to withstand the 100-year design storm.

Phase 2

Prior to the initiation of extraction activities within the Phase 2 area, site preparation activities would be conducted, including vegetation clearing, topsoil removal, stockpile creation, and noise barrier construction (where extraction activities would occur within 400 feet of NSLUs for Phase 2). Extraction would occur in a west-to-east direction from subphase 2A to 2C within an approximately 48.2-acre area east of the Steele Canyon Road bridge. Mined material would be moved by conveyor to the processing plant where it would be washed, screened, stockpiled, and loaded for delivery. In order to excavate within the northern portion of subphase 2A, equipment may be mobilized across the channel (during the dry season) or from the processing plant area. The maximum depth of the excavation is expected to be 40 feet bgs, outside the low-flow channel in subphases 2B and 2C. The equipment would remain on site until excavation is completed for each subphase. Excavation in each subphase is expected to be completed in approximately one year; overall, Phase 2 is anticipated to last approximately three years. Upon conclusion of Phase 2, the conveyor line would be relocated to run from the processing plant to the eastern end of the Project site in preparation for Phase 3.

Reclamation of the Phase 2 subphases would begin as the final landforms are established in each subphase. As described above, both material extracted from the site that is not designated as saleable product as well as imported backfill (inert debris) would be utilized as backfill to construct the final landform. Reclamation would include establishment of all final slopes, incorporation of accumulated wash fines and topsoil, and revegetation. Three existing transmission towers owned by SDG&E would be avoided during Phase 2 excavation, leaving an "island" for the towers. An access ramp would be constructed on the western side of the island to connect to a 28-foot-wide access road within the existing SDG&E right-of-way easement that runs from the towers to the southern Project boundary. The ramp and slopes surrounding the towers would be lined, as needed, for access and to prevent erosion. Maintenance of this access road/ramp would ensure that SDG&E maintenance crews are able to access the towers during Project operations.

Phase 3

Excavation would continue for Phase 3 on approximately 78 acres east of the Phase 2 area. Phase 3 is anticipated to last approximately four years and would include four subphases. The same excavation and transportation procedures would be used as the two previous phases. Subphase 3A would be located at the northeast edge of the property. Excavation of each subphase would proceed westward. The maximum depth of excavation would be approximately 40 feet bgs in the eastern portion of subphase 3A.

Reclamation in each of the Phase 3 subphases would begin as the final landforms are established. Reclamation would include establishment of all final slopes; incorporation of inert debris (within over-excavation areas), accumulated wash fines, and topsoil; and revegetation.

Two existing distribution poles owned by SDG&E (#P75709 and #P75700) would be avoided during Phase 3A excavation, leaving access to the poles from the edge of the pit boundary. Two 14-foot-wide access roads would be left in place at elevation connecting the edge of the pit to the pad surrounding each distribution pole. The ramp and slopes surrounding the pole would be lined,

as needed, for access and to prevent erosion. Maintenance of this access road would ensure that SDG&E maintenance crews are able to access the distribution pole during Project operations.

Phase 4

Phase 4 would consist of removal of the processing plant, grading to final contours, final reclamation and revegetation efforts, cleanup, and equipment removal. This phase is expected to last approximately 8 to 10 months after the end of extraction activities in Phase 3. Revegetation monitoring would continue after this final phase for five years or until revegetation standards are met after this final phase.

Aggregate Processing

The Project would include a processing plant to wash and stockpile finished products. This would be located near the center of the Project area, adjacent to Willow Glen Drive and west of the existing golf course parking lot. The plant site would consist of aggregate processing and washing facilities, three settling ponds, and a loadout area, as well as support facilities. Vegetative screening/landscaping would reduce visual exposure. Where existing or proposed fencing is not screened by existing or proposed vegetation, green screening mesh would be installed on perimeter fencing along Willow Glen Drive to screen Project operations from public view.

The plant would screen and wash raw material into marketable PCC-grade construction aggregate material, including washed concrete sand, asphalt sand, pipe bedding, and some gravel. No crushing would be necessary to process the materials extracted from the site.

From the conveyor belt, material would be transferred to a blade mill, where material would be mixed with water to start the process of separating it into different sizes. Processing would occur through use of a screen deck plant capable of processing 400 tons per hour of raw material. The screen deck is a mechanical screening device that is used to separate granulated ore material into multiple grades by particle size. A screening machine consists of a drive that induces vibration, a screen media that causes particle separation, and a deck that holds the screen media and the drive. This drive is used to cause the vibration that moves material down the screen media. As material becomes too fine to separate by a screen, the material is moved to a fine material screw, or sand screw, for washing. These fine material washers utilize a water bath and inclined augers to separate the fines (clay and silt) from the fine and very fine sands that are used in mortar and plaster. Fine materials are then piped to the first in a series of three settling ponds where fines settle. Clean water would be recycled through the process, with additional water provided by on-site groundwater wells as needed.

Once the processed aggregates are separated into different sizes, radial stacker conveyors would be used to stockpile the materials, and wash fines would be transferred to the settling ponds. Stockpiles would be up to 25 feet in height and located near the plant. The two primary stockpiles would consist of washed concrete sand and gravel. Other smaller stockpiles may be located within the loadout area, depending on the material being processed at the time; these stockpiles are not expected to exceed 15 feet in height. Customer trucks would be loaded with finished products from stockpiles by a front-end-loader and transported off-site. The weight capacity of a standard heavy vehicle for outgoing loads is approximately 25 tons of material transported per truck. With a

maximum annual rate of production of 380,000 cy (570,000 tons), approximately 1,462 cy (2,192 tons) of materials would leave the site each day. A maximum day would include 88 one-way heavy vehicles accessing the Project site. As many as 15 over-the-highway trucks may be parked on site each day near the processing area and entrance to the site. Sand extraction operations would be conducted approximately 260 days per year, on weekdays, between the hours of 7:00 a.m. to 5:00 p.m. Trucking would occur from 9:00 am to 3:30 p.m. during the week. No activities would occur on weekends or major holidays.

Wash fines produced from the processing plant would be gathered in three settling ponds located near the plant that are 300 feet long, 50 feet wide, and 10 feet deep. The first pond, referred to as the "muck" pond, is where most of the sediment from the wash slurry settles and would be cleaned more frequently than the other ponds. These ponds would be used to protect surface water quality and to recycle the process water through the settling of silts and clays (wash fines). The ponds also would be used to collect local runoff that may be transporting earthen solids. These ponds would be cleaned occasionally by removing the sediment collected. Sediment would be stockpiled parallel to the prevailing wind direction for dewatering. When ponds are cleaned, the wash fines (silt, clay, and organic material) would be sold as a soil amendment or returned to excavation areas that have been completed to be used as backfill or incorporated into the surface of excavated areas as rough backfilling. Selling wash fines would be driven by market demand and would depend on orders for specific uses such as improving the texture of a planting mix, improving water retention, or for recreational uses. These orders are expected to be generally small in number and volume of material (estimated at approximately one haul truck load per month) and would be sold and transported directly from the processing area between the hours of 9:00 a.m. and 3:30 p.m. The quantity of backfill materials would depend on the quality and composition of the excavated material; a 10 percent "waste factor" is typically estimated in aggregate mining for wash fines and materials undesirable for processing (e.g., low in sand). Materials not selected for processing would be utilized as backfill. Wash fines would be returned to backfill areas north of the channel by an off-road haul truck or tractor-trailer using the on-site conveyor line roads. Off-road hauling is expected to require approximately four to six round trips per day. South of the channel washed fines would be transported over the existing golf course bridges by conveyor, then transported by haul truck or tractor-trailer to backfill areas. A tractor-trailer would access Phase 1 by going underneath the Steele Canyon Road bridge; no equipment would cross the channel for backfilling.

Support Facilities

Additional support facilities adjacent to the processing plant would include a modular office trailer/scale house, one 70-foot truck scale, two storage containers for tools, and a portable restroom.

On-site Personnel

A total of 9 employees and up to 4 vendor vehicles are expected to access the Project site on a typical day. The employees would be responsible for tasks associated with mining and processing activities, environmental compliance, safety, management, and administrative tasks. The vendors would conduct sales or provide supplies, fuel, and maintenance to the heavy equipment and facilities utilized during mining.

Storm Water and Erosion Control

A Storm Water Pollution Prevention Plan (SWPPP) would be prepared and submitted to the State Water Resources Control Board (SWRCB) prior to construction in accordance with the Industrial General Permit Order 2014-0057-DWQ, effective July 1, 2015. The SWPPP and erosion control plan would define best management practices (BMPs) to prevent erosion and the discharge of sediment to surface waters. If needed during mining, small desiltation basins may be temporarily constructed to capture runoff from existing culverts underneath Willow Glen Drive and to prevent sediment from leaving the site while allowing water to pass through to existing drainage features. Runoff would be directed from the disturbed mining and reclamation areas towards the basins, as necessary, to allow for desiltation and infiltration. Typical soil stabilization BMPs include mulch, hydroseeding, soil binders, geotextiles, lining of drainage ditches, and/or velocity control structures. At a minimum, erosion and sedimentation control measures would be designed for the 20-year, 1-hour storm event in accordance with SMARA guidelines. Silt fences would be installed five feet from the outer edge of each side of the existing Sweetwater River channel and may be installed in other areas. Other erosion control measures would include monitoring soil movement, arresting gullies or rills using straw mulch and hay bales, compacting soils with equipment, and re-grading as necessary. Vehicle track out and dust-related BMPs may include paved or stabilized roadway surfaces, tire washes, use of grates at vehicle entrances or exits, soil stabilizers, and water spray. Temporary erosion control measures would be retained until vegetation becomes sufficiently established to serve as an effective erosion control measure. Recommended erosion and sedimentation control measures would be described in detail in the Project SWPPP.

Water quality and hydromodification for permanent construction (e.g., Willow Glen Drive improvements) and impervious areas would be addressed with a Priority Development Project (PDP) Storm Water Quality Management Plan (SWQMP) and permanent post-construction BMPs. As noted in the SWQMP, stormwater runoff from the Willow Glen Drive improvements would be directed along the southerly curb of Willow Glen Drive. A proposed spillway would be installed along the westerly end of the roadway improvements to convey the runoff into tree wells just south of the street. Two tree wells with a 25-foot mature tree canopy diameter would be installed to satisfy the required treatment volume.

Equipment Maintenance

Mobile equipment utilized for project operations would be maintained by private vendors. Maintenance and repairs on the site's mobile mining equipment would be completed on a level area near the active excavation and away from drainage features. Ground protection and spill containment, which would include plastic sheeting to line a bermed sump and absorbent pads, would be placed in the work area prior to work being conducted on the equipment to contain leaks and prevent accidental spills from reaching the ground. Available clean up materials would include absorbent pads, pillows, dry absorbent, flat nosed shovel, a broom, and a waste container for any clean up materials used. All materials used to clean up a spill would be transported from the site and disposed of at a licensed facility in accordance with state and federal requirements.

Vector Control

The mining operator would control mosquito breeding using BMPs in accordance with requirements of the San Diego County Department of Environmental Health and Quality (DEHQ) and the Project-specific Vector Management Plan. An active management plan would be implemented to ensure that water collected in the mining areas, process settling ponds, and Sweetwater River does not propagate the breeding of vectors. Vector management would be implemented through monitoring and, where necessary, corrective measures. As wash water is pumped to the process settling ponds for use in material processing and dust control, excess water would be collected and allowed to infiltrate or return to process cycle after a short retention period. Two submersible pumps enclosed in a waterproof casing would feed and circulate the wash water. Water used in the washing operation would be continuously reused and recycled. During the wet season (generally October through March), the mining areas, process settling ponds, and the streambed would be visually inspected monthly by the operations staff for the presence of vectors. The mining areas, process settling ponds, and the streambed would be visually inspected monthly during the wet season and weekly during the dry season (generally July through September) by the operations staff for the presence of vectors. If necessary, corrective measures would be initiated.

Emergent vegetation would be removed when recommended by the County DEHQ Vector Control Program, or when emergent vegetation (e.g., cattails, sedges, etc.) is in excess of 50 percent of the surface area. Emergent vegetation would be controlled by hand labor, mechanical means, or by frequent clear cutting. Herbicides may be used as needed to control re-growth. Removal of vegetation by hand would be the preferred method in order to lessen the re-growth frequency and density. Floating vegetation conducive to mosquito production (i.e., water hyacinth [*Eichhornia* spp.], duckweed [*Lemna* and *Spirodela* spp.], and filamentous algal mats) would be removed. Foot pathways would be maintained for surveillance and abatement methods. Sizing of pathways would be a minimum of five feet wide to allow access to any ponded area.

Additionally, good housekeeping BMPs would be implemented to avoid attracting rodents to the buildings and structures at the Project site, including placement of all trash and debris in sealed bins, timely removal of refuse by a licensed disposal company, use of electric or snap traps to control rodents if observed, and proper training of all on-site staff.

Reclamation Component

In association with the MUP, a Reclamation Plan for mining activities would be required in compliance with SMARA and the County Grading Ordinance. Reclamation plans are developed to identify reclamation measures and establish performance standards for reclamation adequacy of mined lands. These measures include protection of wildlife habitat; revegetation; recontouring and erosion control; elimination or reduction of residual public health and safety hazards; and minimization of environmental impacts. A reclamation plan also addresses subsequent uses of the property and identifies schedules for reclamation activities.

Areas disturbed by resource extraction would be progressively reclaimed in an ongoing process that commences when mining operations have ceased within a given area and continues until all mining-related disturbance is reclaimed and all equipment involved in these operations has been

removed. Reclaimed areas would be restored to an end use of open space, multi-use trails, and land suitable for uses allowed by the General Plan and existing zoning classifications. Specifically, nearly 52 percent of the project site (142.8 acres) would be preserved in a biological open space easement to be held by the County. The reclamation plan for the riparian corridor is intended to stabilize the post-extraction landform and establish a productive native vegetative cover. For the areas outside the riparian corridor, the revegetation plan is intended to stabilize the surface and control erosion.

Reclamation of each area would begin as the final landforms are established. Reclamation would include establishment of all final slopes; incorporation of imported inert debris, accumulated wash fines, and topsoil (as applicable); revegetation of the channel using appropriate native species common to riparian habitat; establishment of upland vegetation on the upper slopes; weed control; and monitoring, as further detailed below.

All material extracted from the site, not designated as saleable product, would be utilized as backfill to construct the final landform. No tailings or waste piles would remain following conclusion of extractive operations.

Landform

The final landform of the site would be a relatively flat plain that gently slopes downward from east to west. Following extraction in areas where over-excavation deeper than the adjacent channel occurs, backfill would be placed to achieve the desired final elevation. Backfill is expected to be a combination of inert debris and overburden and wash fines produced at the wash plant. Fill material in the backfill areas would be spread in near-horizontal layers, approximately eight inches thick. Thicker lifts may be approved by the geotechnical engineer if testing indicates that the grading procedures are adequate to achieve the required compaction. Each lift would be spread evenly, thoroughly mixed during spreading to attain uniformity of the material and moisture in each layer, brought to near optimum moisture content and compacted to a minimum relative compaction of 85 percent in the floodway area and up to 90 percent in upland areas. In areas below the water table, the material would be placed at the edge of the pit and deposited to allow it to settle naturally. Once there is a working surface, compaction would occur. If necessary, over-compaction of the surface soil would be relieved by ripper, disc, and/or scarified to improve seed bed conditions for plant growth. Wash fines and inert debris would be used as backfill and blended with topsoil and used as a top dressing.

A widened river channel, more similar to pre-disturbance conditions, would bisect the length of the site. Banks of the river channel would slope up to the plain surface at a 3:1 ratio (horizontal:vertical) or shallower. The elevation difference between the bottom of the river channel and the top of the slope may be up to 25 feet. The reclaimed river channel would average approximately 250 to 300 feet in width. In some areas, benches may be constructed on the face of the riverbanks to accommodate varying vegetation types and/or multi-use trails. The riparian corridor would be re-established with native habitat and natural landforms consistent with the surrounding area. Reclaimed upland areas would be similar in elevation to Willow Glen Drive.

Portions of the Sweetwater River channel located along the southwest edge of the Lakes Course are heavily vegetated with a mixture of native and non-native plant species. This part of the channel

is currently a choke point for water as it exits the Project site. These areas would be incorporated into the reclamation plan by modifying the topography, removing invasive species, and replacing with native vegetation. Removal of invasive plants would occur manually and/or through herbicide use. Those treated with herbicide would either be manually removed after herbicide treatment or left to decompose. Herbicide use within the Project site would be conducted in accordance with all label instructions and local, state, and federal regulations, including application rates and methods, storage, transportation, mixing, and container disposal. In addition, only herbicides approved for aquatic use would be applied in areas within or adjacent to Sweetwater River and other waters, or areas with potential to drain into these areas. Invasive plant material would be removed from the site and disposed of off-site at a licensed landfill. To improve the channel and expand the riparian vegetation in this area, approximately 70,000 cy of material would be removed. Widening the floodplain at this location and revegetating the area would improve drainage and replace existing vegetation that is dominated by invasive plant species with more desired species. Work in this area, including planting native species, would be completed in the first phase of the Project.

Revegetation and Erosion Control

Plant species used in the revegetation effort would be capable of self-regeneration without continued dependence on irrigation, soil amendments, or fertilizer, and would include species representative of natural habitat. This would include riparian habitat within the river channel, coastal sage scrub on the channel slopes and upland areas with an end use of open space, and an erosion control seed mix for other areas outside the riparian corridor.

Revegetation would occur through a combination of planting and hydroseeding. Hydroseeding is the hydraulic application of a homogeneous slurry mixture consisting of water, seed mix, cellulose fiber, and a binding agent such as “M” Binder. Fertilizer can be added if the soil analysis shows the need for addition of amendments; however, this is not anticipated. The hydroseed mixture would consist of the following materials:

- 2,000 pounds per acre cellulose fiber
- 140 pounds per acre “M” Binder (gluing agent)
- 200 pounds per acre Milogranite (fertilizer if required)
- Seed mix as listed

Seeding and planting would occur at times when winds are relatively calm, between November and February to take advantage of the natural precipitation season for Southern California. This planting period may be extended due to the use of irrigation.

Where final landforms have been established, but are not yet available for final reclamation, erosion control would be provided through revegetation with the general erosion control seed mix. The application of the seed mix would be completed on an as-needed basis to control erosion and weed propagation.

Irrigation

As final landform areas are prepared for planting and seeding, temporary above-ground irrigation would be installed. An irrigation plan would be developed in accordance with the recommendations of the Project Landscape Architect and submitted to the County for approval prior to implementation. Supplemental irrigation of reclaimed lands may be used during the first two years after planting to augment natural precipitation and assist with the propagation of reclaimed vegetation. Watering would only occur to assist in initial establishment and/or in long periods of extended dryness. Irrigation would not be used continuously after seeding. Irrigation would be accomplished using sprinklers and would adhere to the Water Conservation in Landscaping Ordinance. Irrigation water would be provided by existing wells on site.

Monitoring

Vegetation monitoring would continue for five years or until the County and the State Division of Mine Reclamation acknowledge that performance standards have been met. Prior to release of the financial assurance, all revegetated areas must meet performance standards. A minimum of two revegetation test plots would be established in the Phase 1 area by the project biologist as reclamation commences to help ensure successful implementation of the revegetation plan. The first should be located at a lower elevation in an area of riparian plantings and second at a higher elevation that encompasses coastal sage scrub/upland plantings. The project biologist also would develop an evaluation plan that would be implemented after the test plots are planted. Success of these test plots would be judged based upon the effectiveness of the vegetation for the approved end use, and by comparing the quantified measures of vegetative cover, density, and species richness of the reclaimed mined lands to the surrounding area. Comparisons would be made by a qualified individual until performance standards have been met.

Since revegetation would occur concurrently with extractive operations, revegetation practices would be continually evaluated as revegetation is completed throughout the site. Records would be kept of soil preparation, including the addition of amendments as determined to be necessary, seeding techniques, and erosion control measures. Annual monitoring reports would be submitted to the County until the approved success criteria have been met and approved by the County. When the County agrees that revegetated areas meet success criteria for two consecutive years, no further monitoring would be required, and the operator may apply for release of financial assurances and SMARA closure.

Weed Control and Maintenance

Weed control is necessary to reduce or eliminate the occurrence of undesirable non-native species of plants that may invade the site where mining activities have removed the plant cover and where active and natural revegetation is taking place. Non-native invasive species (weeds) can compete with native plant species for available moisture and nutrients and consequently interfere with revegetation of the site after the completion of mining. Therefore, weed control and maintenance on the site would occur continuously during Project operation and the reclamation process, with a focus on control of invasive plant species.

The occurrence of weeds on the site would be monitored by quarterly visual inspection during active mining operations. The goal is to prevent weeds from becoming established and depositing seeds in areas to be revegetated in the future. If inspections reveal that weeds have become, or are becoming, established on the site then removal would be initiated. Weed removal would be accomplished through manual, mechanical, and/or chemical methods depending on the specific circumstances. Smaller plants (brome grasses, pepper weed) that cover more area may be sprayed, scraped with a tractor, or chopped by hand, depending upon the size of the area of infestation and the number of desired native plants in proximity to or mixed with the weeds. As discussed above, chemical (i.e., herbicide) use within the Project site would be conducted in accordance with all label instructions and local, state, and federal regulations, including application rates and methods, storage, transportation, mixing, and container disposal. In addition, only herbicides approved for aquatic use would be applied in areas within or adjacent to Sweetwater River and other waters, or areas with potential to drain into these areas.

Maintenance of the revegetation areas would consist of replanting and/or reseeding unsuccessful revegetation efforts. If revegetation efforts are not successful within four years following the initial seeding, seeded areas would be reevaluated to determine the measures necessary to improve revegetation success. If necessary, these areas would be reseeded with methods modified as needed. Prior to reseeding, the revegetation specialist would evaluate previous revegetation practices and test plot results to identify cultural methods to benefit the overall revegetation effort.

Access, Circulation, and Parking

The Project proposes to restripe Willow Glen Drive between Steele Canyon Road and the Project ingress driveway to provide Class II buffered bike lanes on both sides of the roadway per the County Roadway Standards as part of the pre-mining improvements. To facilitate deceleration of right-turning vehicles into the Project ingress driveway, a dedicated right-turn lane would also be constructed, which would serve as the primary access for mining operations, material sales, employees, and vendors. A new egress point would be established in the approximate center of the existing parking lot. The Project also proposes to construct a two-way left-turn lane between the ingress and egress driveways, which would serve as a refuge lane for trucks to complete their outbound maneuver. Willow Glen Drive between Steele Canyon Road and Hillsdale Road is classified in the County General Plan Mobility Element as a 4.1B: Major Road with Intermittent Turn lanes. The Project frontage along this stretch of roadway extends between Steele Canyon Road to approximately 1000 feet west of Hillsdale Road. In addition to the above improvements, the project proposes to provide an Irrevocable Offer of Dedication along the Project frontage as needed to accommodate the ultimate roadway classification of Willow Glen Drive.

A new access point to the property from Willow Glen Drive west of the Steele Canyon Road (Phase 1 area) would be necessary as the clearance height of the bridge that crosses the Sweetwater River on Steele Canyon Road would not allow most large trucks used by service vendors (e.g., to provide fuel and maintenance to the heavy equipment utilized during mining) to pass beneath the bridge. Current access from Willow Glen Drive to the western portion of the property is provided by a small driveway at the northwestern corner of the property. During the initial stages of the Project, this access point may be used briefly for equipment delivery. However, a more substantial access point for this area of the Project would be constructed at the intersection of Willow Glen Drive and Muirfield Drive as part of the pre-mining improvements, prior to initiation of Phase 1

activities. The access driveway would consist of a two-lane concrete apron that would transition to a gravel surface segment of road within the Project site and would be used primarily for mobilization/demobilization, servicing of heavy equipment, and reclamation for the Phase 1 area west of Steele Canyon Road. Both the Muirfield Drive access and existing driveways with gates would remain in place for the property owner after mining activities have been completed. This access point would not be used for transport of backfill materials to the Phase 1 area.

An access point to the property that is used by the golf course for maintenance exists from Ivanhoe Ranch Road, south of the river. This access point may be used for heavy equipment delivery and removal within Phase 2 and 3 areas south of the Sweetwater River channel but would not otherwise be used for mining purposes. The existing maintenance gate may also be used for reclamation maintenance and monitoring after mining in Phases 2 and 3 has ended.

Trucking operations for material sales would operate from 9:00 a.m. to 3:30 p.m. Monday through Friday to avoid peak traffic periods. There would be no trucking from the site or processing of materials on Saturdays, Sundays, and major holidays (as listed in Section 36.408 of the San Diego County Code of Regulatory Ordinances). As many as 15 over-the-highway trucks may be parked each day near the processing area and entrance to the site west of the existing golf course parking lot. A parking lot would be provided near the processing area that would accommodate the 9 employee and 14 vendor vehicles.

Trails and Pathways

A pedestrian pathway would be provided along the northern Project frontage/Willow Glen Drive east of Steele Canyon Road to provide pedestrian access within the Project vicinity where there are no existing sidewalks. The public pathway has been designed to avoid removal of existing mature screening vegetation. The pathway would range in width from eight feet wide just east of Steele Canyon Road, to five feet wide in the eastern portion of the Project site where the potential pathway alignment is constrained by existing topography and the Sweetwater River channel.

A publicly accessible community trail is also proposed to be constructed within the Project site. The multi-use trail would connect to the pathway described above. The trail would be constructed by the Project applicant in conjunction with final site reclamation activities. Specifically, trail construction would be completed in segments and would begin in a phase area when mining activities have been completed in the phase area and reclamation has begun in the final subphase of that area. For example, in Phase 1, construction of the trails in that segment of the Project area would begin during reclamation of subphase 1C, when no mining activities are occurring in Phase 1. This would then continue during Phases 2, 3, and 4. The County has identified a number of existing and proposed community pathway and trails located along public rights-of-way, over private property, and through County-owned land in the vicinity of the Project in the Valle De Oro Community Trails and Pathways Plan, which is a component of the County Trails Program Community Trails Master Plan (CTMP; 2005, as amended). The location and design of on-site trails would be coordinated with the County.

Landscaping

Existing landscape vegetation along Willow Glen Drive, which primarily consists of trees and shrubs such as acacia, Peruvian pepper trees, and oleander, would be maintained to the extent feasible during Project operation to provide a visual screen between Project activities and the public. A tree survey conducted along the northern Project boundary identified a total of 477 trees that currently provide landscape screening. Approximately 67 (14 percent) of the existing trees would be required to be removed to construct the Project entrance and Willow Glen Drive improvements, including eucalyptus (*Eucalyptus* spp.), palm (*Washingtonia robusta*), California pepper tree (*Schinus mole*), European olive (*Olea europaea*), and *Myoporum laetum* (no common name) species. Tree removal would be concentrated east of Steele Canyon Road and west of the existing golf course parking lot where the improvements to Willow Glen Drive and Project ingress driveway are proposed. An additional approximately 513 existing trees within the Project site would be incrementally removed during mining. The full extent of tree removal would be confirmed once improvement plans are prepared as a condition of the Project MUP. Replacement trees would be planted prior to initiation of Phase 1 to provide visual screening of mining activities from Willow Glen Drive and viewers to the north of the Project site. The landscaping would be installed along Willow Glen Drive, adjacent to the Project entrances, and to provide additional screening of the plant area and parking lot. Mature 36-inch box Mexican elderberry trees are proposed to be installed along the western and southern boundary of the processing plant footprint prior to the initiation of Phase 1. These trees would be installed in ground and would be maintained throughout the duration of mining operations on the Project site. Although it may be possible to salvage some existing vegetation within areas proposed for extraction, the existing native tree species are reaching the end of their life span and may not survive relocation. Due to the relative lack of native vegetation on the property, on-site seed collection would be minimal.

Trees planted for landscaping and screening would include coast live oak (*Quercus agrifolia*), Fremont cottonwood (*Populus fremontii*), and Western redbud (*Cercis occidentalis*). Additional plants to be employed include shrubs (California lilac [*Ceanothus* x 'Ray Hartman'], toyon [*Heteromeles arbutifolia*], lemonade berry [*Rhus integrifolia*]), groundcover (dwarf coyote bush [*Baccharis pilularis*]), and a coastal sage scrub seed mix. Trees would be spaced approximately 20 to 25 feet on center. Where feasible, trees would be grouped such that some trees would be located diagonally behind others.

Fences

During the Project's operational lifetime, public access would be controlled by fencing on the perimeter of the property and gates on the access roads within the Project boundaries. Lodge pole fencing would be installed on the south side of the proposed pathway along the northern Project frontage/Willow Glen Drive east of Steel Canyon Road. In addition, appropriate signage would be posted around the perimeter of the excavation area and Project boundary at 150-foot intervals; wayfinding/directional signage would be provided for the pathway. The majority of the site is already surrounded by chain link fencing, with fencing to be replaced/repaired where missing or damaged. Fencing along the San Diego National Wildlife Refuge (SDNWR) to the southwest of the Project site would consist of four-foot-high, three-strand smooth wire or similar fencing that allows for wildlife passage; along all other public areas a six-foot-high chain link fence would be installed where not currently present. Where the fencing is not screened by existing or proposed

vegetation, green screening mesh would be installed to screen Project operations from public view. The gates would be locked during non-operating hours. Security fencing would be removed after reclamation is complete, at the owner's request.

Lighting

Shielded night lighting would be installed around the processing plant for safety and security purposes. Lighting would be designed to minimize glare and reflection onto neighboring areas and is anticipated to include mounted sodium, metal halide, fluorescent, or light-emitting diode (LED) lighting. Lights would be directed downward and would have cut-offs installed to minimize spillover onto adjacent properties. Each light would provide the lowest light level necessary and would be limited to less than 4,050 lumens output, maintaining compliance with State and local regulations.

Utilities and Services

Electricity

Electrical power would be provided by SDG&E through an overhead distribution line that enters the site from the northwest. The Project would utilize temporary power poles for the plant location and conveyor system. Existing transmission lines across the site would be retained in their current locations and the area immediately surrounding the existing transmission towers would not be subject to excavation. SDG&E easements would remain in place after the Project is completed.

During each phase, it may be necessary to remove the existing power distribution poles that cross the golf course. Relocation or removal of power poles would be completed in accordance with SDG&E requirements. A number of power distribution poles and transmission towers would remain in place and be protected according to SDG&E encroachment guidelines and communications with SDG&E staff.

Water

Eight groundwater wells on the property currently provide irrigation water for the golf courses, and would be used for dust control, processing, and irrigation during Project operation. Wells not proposed to be used by the property owner or for groundwater monitoring after mining and reclamation have been completed would be properly abandoned. Sweetwater Authority has requested that two wells, Lakes #11 and Ivanhoe #11, remain in place after cessation of mining and reclamation activities so groundwater monitoring can be continued in this area of the river. It is the intent of the Project not to remove these two wells unless it is required.

Bottled drinking water for the mine staff would be provided by a private vendor. The estimated existing annual groundwater usage from well pump data provided by the course superintendent is 840 acre-feet. The annual water usage, including evaporation from course ponds, was estimated as 804 acre-feet using the evapotranspiration method described in the Groundwater Sustainability Plan for Borrego Valley (Borrego Valley Groundwater Sustainability Agency, 2019), as referenced in the project reclamation plan. Water use by the Project for all purposes has been calculated at 139.9 acre-feet per year, or a reduction of approximately 664.1 acre-feet or 82 percent per year relative to existing conditions.

Sand mines use water to wash the material for use off site and water roads and stockpiles for dust suppression. The total amount of water used in the mining and processing is "handled water;" water that is lost from the site during the mining and processing is "consumed water." A water truck would be used for dust suppression on all operating areas. This would include material stockpiles and unpaved areas within the mining area, the processing plant, and access road. Outgoing loads also would be surface-watered for dust suppression purposes. Dust suppression is estimated to require 20.3 acre-feet of water per year. Water usage for processing would depend on production volume. The Project's estimated water usage assumes the maximum annual production of 570,000 tons. Of the 203 gallons per minute (gpm) of water used in the washing operation, 87 percent would be continuously reused and recycled. Approximately 38 gpm of continuous water input on workdays would be required to make up for approximately 13 percent that is estimated to be lost through evaporation and retention on material. Water consumed for processing is estimated at 64 acre-feet annually based on the maximum annual production rate. This includes the 20.3 acre-feet per year noted above for dust control, 20.3 acre-feet per year attributed to evaporation from stockpiles, and 23.4 acre-feet per year of water retained on aggregate product that is taken off site within exported mining materials. An additional 20.3 acre-feet per year would be consumed in association with evaporation from mining pit areas where groundwater may be encountered. Irrigation of landscaping near the entrance and as supplemental water on revegetated areas is estimated to utilize approximately 55.6 acre-feet per year. Total water consumption for the Project is estimated at 139.9 acre-feet per year.

Wells not to be used by the property owner or for groundwater monitoring after mining and reclamation are complete would be properly abandoned. Wells in the mining footprint, or not to be used in the future, would be abandoned as each mining phase is completed in accordance with County requirements and standards. As noted above, Sweetwater Authority has requested that two wells, Lakes #11 and Ivanhoe #11, remain in place after cessation of mining and reclamation activities so that they can continue groundwater monitoring in this area of the river.

Sewer

The Project would utilize portable restroom(s); no sewer connections are proposed. One portable restroom would be placed in the plant area and the second would be placed near the active excavation area and moved as needed. They would be serviced at appropriate intervals by contract vendors.

Solid Waste Disposal

Domestic refuse would be collected in trash bins and removed by a licensed, refuse disposal company. Equipment would be maintained on site and all used oils, fuels, and solvents would be collected in accordance with the Department of Toxic Substances Control (DTSC) regulations and removed from the site by an approved hauler for materials recycling.

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