



COUNTY OF SANTA BARBARA

Planning and Development

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Draft Initial Study/ Mitigated Negative Declaration

**Gordon Sand Company Reclamation Plan
17RPP-00000-00001 & 17CDP-00000-00057
September 11, 2020**



Owner/Applicant

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1.0 REQUEST/PROJECT DESCRIPTION

1.1 REQUEST

Gordon Sand Company (Applicant) is requesting approval of a Reclamation Plan Amendment and Coastal Development Permit to extend existing mining operations at the Guadalupe sand mine 100 years to March 1, 2115. The extended end date serves to reflect the average annual production rate and Applicant/Operator estimates for the rate of natural sand replenishment at the site. Other proposed changes to the Reclamation Plan include implementing active revegetation in certain areas only if natural revegetation is not evident within the first three years following cessation of mining, which is a change from the previous Reclamation Plan for the site.

The total excavation volume approved under the site's existing Conditional Use Permit No. 77-CP-66 (CZ) is 60,000 tons annually. The current average annual production rate of extraction is approximately 25,000 – 30,000 tons of sand per year. The proposal to extend the life of the mining operation by 100 years would not increase the mining area or the volume of excavation over the original approval. Daily operations at the sand mine would continue with no substantial change over the current conditions.

1.2 BACKGROUND

The Guadalupe sand mine is an existing mining facility owned and operated by the Gordon Sand Company, which produces sand through the excavation of a sand pit within the Guadalupe Sand Dunes, located west of the community of Guadalupe in northern Santa Barbara County. All support structures, access roads, and other necessary facilities for the mining operations are in-place and currently in use. These facilities include a sand wash plant, dry plant, turf plant, bulk bag system, sacking system, pump house, power room, scale and scale house, work shop, office, fuel tanks, a water tank, silt pond, and equipment storage areas.

The County of Santa Barbara (County) approved Conditional Use Permit 77-CP-66 (CZ) (originally 72-CP-114) for the excavation, harvesting, quarrying, mining, extraction, processing, storage, packaging, loading, and related activities of sand removal at the site on March 31, 1973. The environmental effects of the sand mine operations were evaluated in the project's Environmental Impact Study No. 73-EIS-4.

In 1975, the California Surface Mining and Reclamation Act (SMARA 1975) required all surfacing mining operations to file and obtain approval of a reclamation plan by July 1, 1990. Mine reclamation is the process of restoring land that has been mined to a usable condition which is readily adaptable for alternative land uses. The Gordon Sand Company submitted a reclamation plan (Case No. 90-RP-002) to the County for review and approval in April of 1990. The environmental effects of the reclamation plan were evaluated in Negative Declaration No. 90-ND-64, which determined that there were no significant adverse impacts associated with reclamation of the site. The County approved Reclamation Plan 90-RP-002 on June 16, 1993, which remained in effect until March 1, 2015, when it expired.

As stated in Condition of Approval *Condition M* of Reclamation Plan 90-RP-02: "*in the event the applicant anticipates mining operations to continue beyond March 1, 2015, the applicant shall apply...to extend the reclamation plan*". The applicant did not apply to extend the Reclamation Plan prior to March 1, 2015; therefore the Plan expired, and a new Reclamation Plan and an associated Coastal Development Permit are required by the County. To date, the mine has continued to operate under the approved Conditional Use Permit 77-CP-66 (CZ).

The Applicant submitted a proposed Reclamation Plan Amendment (Case No. 17RPP-00000-00001) and associated Coastal Development Permit application (Case No. 17CDP-0000-00057) to the County in August of 2017. Planning and Development (P&D) determined that the application was complete for

further environmental review on March 8, 2019. Approval of a Reclamation Plan and Coastal Development Permit constitutes a discretionary action subject to the requirements of the California Environmental Quality Act (CEQA); therefore, the potential environmental impacts of the Reclamation Plan are evaluated herein.

1.3 PROJECT DESCRIPTION

The project is for approval of a Reclamation Plan Amendment and Coastal Development Permit that identifies an estimated mining end date 100 years from the expiration of Reclamation Plan 90-RP-02 (March 1, 2115), based on the Applicant/Operator's estimated reserve volume of 569,900 cubic yards (approximately 769,365 tons) of sand. The Applicant determined that it would take about 25 years to extract all the existing reserves, assuming annual production remains the same with a rate of approximately 25,000 – 30,000 tons. However, the Applicant states that the total reserve will likely increase due to replenishment from wind-blown sand, and therefore, the Applicant estimates that mining could occur for another 100 years. There are no proposed changes to the existing mining operation, which would continue to extract up to 60,000 tons annually.

The Guadalupe sand mine has three major components including an excavation site (sand pit), a 3,200 foot long haul road (sand road), and a processing/packaging plant. Cessation of mining would occur when the mine has exhausted its major sand budget and it is not feasible to continue operations based upon sand redistribution, estimated for the year 2115. In general, reclamation of these areas would consist of the following:

- **Sand Pit:** reclamation activities would consist of re-contouring the sand pit at a 2:1 slope. The sand pit would then resume the natural process of wind-blown sand movement. Permanent flag markers on the perimeter of the pit would be left in place.
- **Access Road:** the road would be decompacted (disked), and any base material such as clay, silt, or rock materials removed from the access road would be placed into the sand pit for disposal. The access road would then resume the natural process of wind-blown sand movement, and would be revegetated per the project's Restoration Plan, if needed.
- **Processing Plant:** the processing plant area would be cleared of all structures and equipment, and stockpiles would be leveled. Silt from the existing onsite siltation pond would be removed and spread over the operations area. The siltation pond would remain in place to collect sediment and would not be maintained after the initial removal of silt. The onsite water well and appurtenant tanks and equipment would remain, as well as the onsite power pole and transformer, unless the County determines they need to be removed. The area would be revegetated per the project's Restoration Plan, if needed.

The following changes from the previously approved Reclamation Plan 90-RP-02, as outlined in the proposed project's Reclamation Plan Amendment, are summarized as follows:

- Extend the operational end date of the mine to 100 years from present (March 1, 2115).
- Implement active revegetation on areas immediately adjacent to vegetated clusters along the access road and processing plant area using plant species capable of self-regeneration, only if natural revegetation is not evident within the first three (3) years following cessation of mining.

This restoration strategy replaces that identified in the previous Reclamation Plan 90-RP-02 which stated that approximately one (1) year prior to mining cessation, Gordon Sand Company and the County would meet to determine if revegetation is feasible along the sand road and processing area. If revegetation were determined to be feasible, a qualified biologist would select

types of plants to be grown, and installation methods would be a function of the technology of the time.

1.3.1 RECLAMATION PLAN AMENDMENT

The description information contained in the applicant's Reclamation Plan Amendment dated October 29, 2018 is incorporated into this project description by reference and is detailed below.

I.A. Purpose

The purpose of the Reclamation Plan is to provide for end of life standards after an additional 100 years of continued sand mining and processing operations. There would be no change to the existing mining operation, which would continue to extract up to 60,000 tons annually from the 31.4-acre mining area (APN 113-020-09). The Reclamation Plan would not include an increase to the intensity of sand processing at the existing plant (APN 113-020-13) covered under the existing CUP No. 77-CP-66 (CZ).

The Reclamation Plan has been prepared in conformance with applicable County and State Guidelines.

Under the California Surface Mining and Reclamation Act of 1975 (SMARA) (Public Resources Code Section 2719 *et seq.*), all extractive operations are required to have a Reclamation Plan approved by the Lead Agency. A reclamation plan defines the activities to be carried out when extraction has been completed at a particular site. The extracted land must be returned to a useful, approved alternative purpose.

I.B. Scope of Content

According to the Surface Mining and Reclamation Act of 1975 (SMARA), a reclamation plan is required to propose a subsequent use for the site after the site's mining operation is terminated. The proposed subsequent use should:

- a) Create no danger to public health & safety;
- b) Give consideration to values relating to recreation, watershed, wildlife, range, and forage, and aesthetic enjoyment; and
- c) Represent a legal agreement between the mine operator, hers/his heirs or successors, and the lead agency who has been determined by the state of California to be the County of Santa Barbara.

The Reclamation Plan, consisting of written document, exhibits, maps, tables and plan, etc., provides a description of the manner in which reclamation would be accomplished at the termination of the mining operation.

I.C. Ownership of Gordon Sand Company – Guadalupe Division

Gordon Sand Company - Guadalupe Division (A.P.N. 113-020-09) is currently owned by:

GORDON SAND COMPANY, a California Corporation
P.O. Box 4157
Hayward, CA 94540
Attn: Salud Arellano-Gordon

I.D. Preparation of the Report

The Reclamation Plan was originally prepared by:

SID GOLSTIEN - CIVIL ENGINEER.
650 ALAMO PINTADO ROAD SUITE 302
SOLVANG, CALIF. 91463
1-805-688-1526
contact: Sid Goldstein RCE 33042 or
Michael (Mike) Manus

and was updated by:

EnviroMINE, Inc.
3511 Camino Del Rio South, Suite 403
San Diego, CA 92108
(619) 284-8515

II. Current and Historical Data

II.A. Project Description

II.A.1. Project Location and Description

The site is located within the area known as the "Guadalupe Sand Dunes" approximately 3.75 miles west of the town of Guadalupe. Access to the site is westerly via Main Street. The sand mining area is identified as Assessor's Parcel Number 113-020-09 and consists of approximately 31.42 acres± owned by Gordon Sand Company. The sand processing plant is located on a portion of Assessor's Parcel 113-020-13, currently owned by the County of Santa Barbara and leased to the Gordon Sand Company. The sand road connects the sand mining area to the processing area by an approximately 3,200 foot long private roadway which traverses Assessor's Parcels 113-020-20 and -21.

II.A.2. Legal Description

A portion of LOT 161 of the Subdivision of the Rancho Guadalupe recorded in Book "B" of Miscellaneous Maps at Page 420 filed in the Office of the County Recorder, County of Santa Barbara, State of California. Being more precisely shown in Record of Survey Book 83, at Page 75 per said records.

II.A.3. Lease Area

The sand processing plant is located on an unrecorded lease agreement area of approximately 7 acres of A.P.N. 113-020-13. NOTE: An area of approximately 1.05 acres lies 340 feet, more or less, north of the sand pit. This area was leased by SHELL OIL CO. and is "NOT-A-PART" of this project.

II.B. Project Characteristics

II.B.1. Components

A.P.N. 113-020-09 is a 300 foot wide parcel of land extending east from the mean high tide line 4,600 feet. The sand removal area (sand pit) is located within this parcel only. The sand processing plant is located on an unrecorded lease agreement area of approximately 7 acres of A.P.N. 113-020-13. These two areas comprise Gordon Sand Company - Guadalupe Division.

II.B.2. Current Zoning

A.P.N. 113-020-09 (31.42 ACRES±) is currently zoned RES-30 (Resource Management).
A.P.N. 113-020-013 (18.53 ACRES±) is currently zoned REC (Recreation).
A.P.N. 113-020-020 (79.50 ACRES±) is currently zoned RES-30 (Resource Management).
A.P.N. 113-020-021 (488 ACRES±) is currently zoned RES-30 (Resource Management).

II.B.3. Comprehensive Plan

A.P.N. 113-020-09 (31.42 ACRES±) is currently designated “mining”.
A.P.N. 113-020-013 (18.53 ACRES±) is currently designated “parks”.
A.P.N. 113-020-020 (79.50 ACRES±) is currently designated “beaches, sand dunes”.
A.P.N. 113-020-021 (488 ACRES±) is currently designated “beaches, sand dunes”.

II.B.4. History of Site

II.B.4.A. General Information

A.P.N. 113-020-09 (sand pit) consists of two visually distinct areas. The most easterly 500 feet of the 300 feet wide by 4,600 foot long parcel contains vegetation indigenous to these coastal dunes. The remaining 4,100 feet of the parcel to the mean high tide line contains sand. The sand pit area is surrounded on the east, west, and south perimeters by permanent markers at 50-foot intervals, or less, and outside the area within 3,000 feet of the mean high tide line.

The sand processing plant is located on an unrecorded lease agreement area of approximately 7 acres of A.P.N. 113-020-13. The processing plant consists of the following: sand wash plant, dry plant, turf plant, bulk bag system, sacking system, pump house, power room, scale and scale house, work shop, office, diesel fuel pump and 500 gallon diesel tank, 8,000 gallon water tank, 2,500 gallon liquid propane tank, 300 gallon waste oil tank, two 966 front-end loaders, two forklifts, an equipment storage area, two storage containers of parts and tools, and two storage containers of packaging materials (one container of miscellaneous and one container for quality control).

The actual sand pit area is connected to the processing area by an approximately 3,200 foot long private roadway which traverses Assessor's Parcels 113-020-20 and -21. A majority of the road width was installed by Shell Oil Company and would be reclaimed by that company. Gordon Sand Company would continue to use the “sand road” until the pit budget is exhausted and the Reclamation Plan has been completed.

The sites, as noted above, outside the vegetated area and the uses of excavation, harvesting, quarrying, mining, extraction, processing, storage, packaging, loading, and related activities of sand removal, were first established in 1967 and has continued to the present under a succession of amended permits issued by the County of Santa Barbara. The current permit 77-CP-66 (CZ) was updated June 11, 1985, and is monitored yearly by the County of Santa Barbara for compliance with conditions as set forth in said permit.

II.B.4.B. Permit Information

In the permit processes that the County of Santa Barbara required for allowing Gordon Sand Company rights to related activities of sand removal, certain conditions were imposed and required to be monitored yearly. Of these conditions, the following directly affect the implementation of the Reclamation Plan:

1. The removal of sand shall be limited to that portion of property described as Assessor's Parcel #113-020-09 on Exhibit 1 to the applicant's application of their Conditional Use Permit. The Exhibit is further identified as Planning Commission Exhibit No.1, February 15, 1978, 77-CP-66.
2. Within each year of this permit, no more than 60,000 tons of sand shall be removed from the premises. At the end of each year of operation, under this permit, permittee shall furnish to the County of Santa Barbara an annual report of tonnage excavated and removed from the premises.
3. A single archaeological site is located at the southwestern edge of the sand excavation site, about 700 feet inland from the beach at the north edge of a dune depression. Protection shall be provided to such site when excavating near such area.
4. The depths of the excavation pits shall not be excavated below elevation 52 feet above sea level. All elevations to be based upon existing bench mark monuments on the property with the identical datum used for preparing Exhibit #4 (topographic map).

II.B.4.C. Environmental Impact Study

An adopted Environmental Impact Study (73-EIS-4) was prepared for 72-CP-114 (the original case number) in January 1973. The study is entitled:

ENVIRONMENTAL IMPACT STUDY GUADALUPE DUNES SAND FACILITY

No. 73-EIS-4, January 15, 1973

Prepared by: M.B. Johnson Associates, Inc.,
Economics and Environmental Consultants
115 East Victoria Street
Santa Barbara, Ca. 93101

II.B.4.D. Project Plant Operations

In general, the sand processing operations at Guadalupe consist of the following:

Mining Sand:

An articulated dump truck and/or a front-end loader takes a load of unprocessed damp sand from the Mine to the Upper Wet Plant.

Washing Sand:

At the Upper Wet Plant, a front-end loader feeds a sand hopper above the wash plant. The sand is slurried with well water, through the Upper Wash Plant where less than 1 percent (%) clay is separated from the sand. The wet sand is sent, as a slurry of sand with attached clay and water, by gravity pipeline to the Lower Wet Plant.

At the Lower Wet Plant, the slurry discharges into a Sand Separator where the water and clay are separated from the sand. The sand "Unders" continue to a Stacker for drainage and storage. The water and clay Unders discharge by gravity to a Split Chamber Slurry Pump Tank, to the Slurry Pump, onto a Hydro Cone wherein most of the remaining sand is separated from the water and deposited back into the discharge chute of the sand Unders from the Sand Separator. Clay and water are returned to the Slurry Pump Tank Second Chamber and discharged by gravity to the Feed Chamber of the siltation pond.

At the siltation pond (a two chamber, four feet-deep open-bottom enclosure), the water and clay are separated by gravity. Over hours of stability, the water percolates out of the slurry water by gravity, back into the ground. No chemicals, foreign to the area, are used in this process.

The washed sand is left to allow a majority of the water in the sand to drain. An amount, visually estimated by the Plant Forman to be a six to eight-week supply, is maintained in this area. The washed sand is drained down to between 1.5% and 2.5% moisture (water) to minimize energy costs. Washed and drained sand may be sold "wet" in bulk quantities.

Drying & Grading Sand:

Washed and drained sand is transported by front end loader from the Lower Wash Plant storage to the Dry Plant Feed Hopper. Wet sand is mechanically fed into a Rotary Kiln at a measured rate where it is, in a continuous process, brought to $\leq 0.25\%$ moisture content (water).

This dried sand is discharged into an Elevator (Vertical Conveyor) which elevates the dry sand to a "Scalping" (Screening) Machine at the top of the Grading Silo where any oversize material is removed from the dry sand.

A group of three multi-grade high frequency electronic screens, mounted around the belt of the Silo, produce the finished grades and grade components into seven covered bulk sand storage bunkers.

From the bunkers, Bulk Sand and Blended Bulk Sand is weighed and shipped bulk, or transferred to onsite packaging facilities for palletized 50# and 100# paper sacks and for 3,000# bulk bags.

The silo separates the "grades" of sand into bins under a roof-covered ground storage area. The sand can be placed into enclosed sand transportation trucks or into sacks to be placed on pallets for transport. All shipments are weighed, all Bulk Shipments are "covered vehicles", and all shipments are documented on consecutive numbered Weigh Master documents.

II.B.4.E. Monitored Sand Removal

For the past few decades, the site has experienced average annual production of approximately 25,000 - 30,000 tons of sand per year. Actual production volumes, for each year, are on file with the County of Santa Barbara.

II.B.4.E. Sand Budget Remaining

Based upon information provided by Gordon Sand Company, 1.35 tons of this sand is equal to 1 cubic yard. The Reclamation Plan estimates a total reserve volume of 569,900 cubic yards (approximately 769,365 tons). Therefore, assuming annual production remains the same, it would take about 25 years to extract all existing reserves. However, the Applicant states that the total reserve would likely increase due to natural replenishment from wind-blown sand and therefore, the Applicant estimates that mining could occur for another 100 years.

As discussed previously in section II.B.4.B(5) Permit Information, the bottom of the sand pit shall not be deeper than 52 feet above mean sea level (m.s.l.). The amount of sand available is dependent upon 2 criteria: a.) not to encroach into the vegetation area from 0 feet to 500 feet west of the east property line & b.) not to be deeper than elevation 52 feet m.s.l.

The 52 foot contour is generally running due north and south across APN 113-020-09 approximately 1,000 feet east from the mean high tide line. The property is 4,600 feet long by 300 feet wide, so the available area for sand removal would therefore be:

$$4,600 - 500 - 1,000 = 3,100 \text{ lineal feet} \times 300 \text{ ft.} = 930,000 \text{ S.F.}$$

Topo maps on file with the County of Santa Barbara for this property indicate that in previous years, an area of approximately 1,000 lineal feet (from the easterly 500 foot line) by 300 feet wide equaling 300,000 square feet have been removed to an approximate depth of 52 feet above m.s.l. However, over time, sand has been redeposited in the pit by natural processes.

Based upon recent topographic data, the Applicant estimates that the amount of sand remaining as of Reclamation Plan preparation is 569,900 cubic yards or (x 1.35) 769,365 tons.

Annual production would be:

Under 5,000 cu. yards/year	_____
5,000 - 50,000 cu. yards/year	_____X_____
50,000 - 250,000 cu. yards/year	_____
250,000 - 1,000,000 cu. yards/year	_____
Over 1,000,000 cu. yards/year	_____

Total Anticipated Production:

Mineral commodities to be removed:	<u>569,900 cu. yards, sand</u>
Waste retained on site:	<u>0</u>
Water disposed off site:	<u>0</u>

Starting Date of Operations: Currently Active

Estimated Life of Operation: Until depletion, operations expected to last until 2115 or longer dependent upon market demand and sand replenishment. The anticipated end date of mining is March 1, 2115.

II.B.4.G. Sand Movement

"Quantitative" evidence demonstrating the feasibility of relying completely on natural processes for reclamation of the mine and access road would be very difficult to attempt, much less derive. However, Gordon Sand Company does maintain a pictorial record of the site which shows that the dynamics of dune movement does "claim" any existing intrusion and would eventually "mold" this intrusion into the dunes.

II.B.4.H. Archaeology

A single archaeology site is located on APN 113-020-09 and is described in Environmental Impact Report 73-EIS-4. A 200 foot by 75 foot portion of the archaeological site located within the property, and is situated approximately 700 east of the mean high tide line. The sand pit, is restricted to the 52 foot m.s.l. elevation, and begins approximately 1,000 feet from the mean high tide line, offering a buffer of 200 feet from the site.

A condition of the current CUP 77-CP-66 (CZ) states:

"A single archaeological site is located at the southwestern edge of the sand excavation site, about 700 feet inland from the beach at the north edge of a dune depression. Protection shall be provided to such site when excavating near such area."

The word "protection" is not defined by the condition, however, as it is noted above, the sand pit would probably come no closer than 200 feet to the archaeological site. When the operation is within the area of 1,000 feet from the beach, it would be necessary for the mine operator and the County to examine the archaeological site during annual monitoring processes. A more detailed description of cultural resources is discussed in Section 4.5.

II.B.4.I. Hazardous Materials

The facility does not store, use, or handle any EPA Extremely Hazardous Substances or any mixture containing an EPA Extremely Hazardous Substance in any amount. A Hazardous Materials Chemical Inventory is on file with the County of Santa Barbara for this site.

II.B.4.J. Environmental: Flora/Fauna

The active sand dune habitat is considered sensitive because these areas contain specific animal communities adapted to living in a harsh, highly fluctuating environment. The major constituents of the animal communities are invertebrates which provide an important food supply for many birds and mammals. Vegetation within the active coastal dunes consist of low-growing, succulent, mat-forming perennial herbs with extensive root systems. There are also special-status botanical species common within the dune complex. All vegetation within the dune complex is considered important as it plays an important role in the stabilization of the dunes, subsequently allowing for greater diversity of plant and animal species. A more detailed description of the flora and fauna onsite and in the surrounding vicinity is discussed in Section 4.4.

Excavation is only permitted outside of the existing vegetated areas of the property within the dunes; however, a portion of the access road to the pit has traversed through a portion of the vegetated area. Potential impacts of reclamation on biological resources and revegetation of vegetated portions of the sand are discussed in Section 4.4.

II.B.4.K. Drainage and Erosion Control

Existing drainage in the dune areas percolates into the sand. Drainage in the mine plant area mainly percolates into the sand; however, the water from the wash plant is directed to the onsite siltation pond which minimizes any siltation intrusion into the slough area that exits across the asphalt/concrete main-road from the sand operations area. The site is also subject to a State Water Resources Control Board General Industrial Permit.

III. RECLAMATION PLAN

III.A. Termination Date of the Reclamation Plan

Based on the Applicant's best opinion of material budget and regional growth trends as derived from monitoring removal over a 40-year period, the termination of the "fulltime" mining operation would be in 100 years, or March 1, 2115.

Three scenarios are possible for total fulfillment of the Reclamation Plan:

- a. The site's material is totally extracted prior to the above time frame.
- b. The site's material is totally extracted at or near the above time frame.
- c. The site's material continues to be available past the above date.

SCENARIO "A"

The site's material is totally extracted prior to the above timeframe and the continuation of the operation strictly on the basis of redeposition is not feasible. The Reclamation Plan would be fully completed within 12 months after cessation of operations, or additional time may be granted by the Lead Agency to fulfill all requirements.

It may be feasible to continue operation based on redeposition of the sand on the site. The Reclamation Plan would then be fully completed within 12 months after cessation of operations. Cessation of operations would therefore be directly related to non-renewal of the Conditional Use Permit.

SCENARIO "B"

The site's material is totally extracted at or near the above timeframe and the continuation of the operation strictly on the basis of redeposition is not feasible. The Reclamation Plan would be fully completed within 12 months cessation of operations, or additional time may be granted by the Lead Agency to fulfill all requirements.

It may be feasible to continue operation based on redeposition of the sand on the site. The Reclamation Plan would then be fully completed within 12 months after cessation of operations. Cessation of operations would therefore be directly related to non-renewal of the Conditional Use Permit.

SCENARIO "C"

The site's material continues to be available past the above date. This scenario is the reason the Applicant is submitting an amended reclamation plan at this time. Renewal of the Reclamation Plan would be applied for to the Lead Agency no later than 6 months prior to the termination date of the Reclamation Plan (March 1, 2115).

A new termination date would be assigned for the Reclamation Plan Amendment by the Lead Agency. Should the mining operation fail to amend the Reclamation Plan by the initial termination date, mining operations would cease until a Reclamation Plan is approved by the Lead Agency. If the mining operation chooses to terminate its operations as of that initial termination date, then the Reclamation Plan would be fully completed within 12 months after cessation of operations.

The Reclamation Plan would not preclude future extraction activities on this property or within the surrounding area. It may be feasible to continue operation based on redeposition of the sand on the site. The Reclamation Plan would then be fully completed within 12 months after cessation of operations. Cessation of operations would therefore be directly related to non-renewal of the Conditional Use Permit.

Monitoring of the future degradation is a yearly function under the Conditional Use Permit. Said monitoring would allow both the Applicant/Owners and the Lead Agency a method to coordinate the "life" of the mining operation and provide a more accurate timetable within which to implement the Reclamation Plan.

III.B. Future Degradation Monitoring

The surface supply of sand to the site is expected to fluctuate in any given year. During years of little wind-blown replenishment from the surrounding dunes, the termination date of the Reclamation Plan could be accelerated based on the supply that is available with respect to an increase in contract demands. The opposite could be true in years that wind-blown sand replenish the lower areas of the site that are surrounded by dunes. In an effort to evaluate the effective "life" of the operation, yearly degradation monitoring is and has been a condition of the Conditional Use Permit.

III.C. Reclamation Plan Implementation

As noted in SCENARIO'S "A", "B" & "C" of TERMINATION DATE OF THE RECLAMATION PLAN, the Reclamation Plan would be fully completed 12 months after permanent cessation or operations. The following is a list of the sections with the appropriate items that constitute the Reclamation Plan.

1. Assumed Site Characteristics At Time Of Mining Cessation.
2. Removal of sand processing operation and Proposed Use.
3. Revegetation.
4. Re-establishment of Wildlife Value within portions of the site.

III.C.1 Assumed Site Characteristics at Time of Mining Cessation

It is assumed, for the implementation of the Reclamation Plan, that the sand mining operations have ceased, the mine has exhausted its major sand budget and it is not feasible to continue operations based upon sand redeposition. The buildings and equipment would be in place, fuel, propane and waste-oil tanks still onsite, areas where materials are stockpiled, and the extraction site to its maximum depth. Each item above would be addressed in the following sections to detail the implementation and completion of the Reclamation Plan.

III.C.2 Removal of Sand Processing Operation and Proposed End Use

A.) SAND PIT AREA

A.P.N. 113-020-09 contains the sand pit area. The maximums for the 300 foot wide property could be as follows:

1. The highest elevation would probably be around 110 feet with the bottom of the pit being not less than elevation 52 feet, a difference of 58 vertical feet.
2. The limits of the top edge of slope would be at the 300 foot property lines.
3. The side-slopes would be initially constructed on the order of 2 feet horizontal to 1 foot vertical (2:1).
4. The bottom of the pit would range from 300 feet wide at the 52 contour to 141 feet wide at the 110 contour.

SMARA's reclamation standards provide that reclaimed slopes shall not exceed 2H:1V except when based on a site-specific engineering and geologic analysis showing that the proposed final slope would have a minimum slope stability factor of safety ("FOS") that is suitable for the proposed end use. The final slopes within the mine area are designed to be consistent with these standards and no backfilling is proposed.

The sand pit, once the daily operations have ceased, would resume the natural processes of wind-blown sand movement. These processes would eliminate the evidences of the operations in the sand removal area by eroding, depositing and generally, smoothing the contours of the sand, estimated by the Applicant to occur within one to two years (Refer to discussion in Section II.B.4.G. Sand Movement).

The Environmental Impact Study No. 73-EIS-4, GUADALUPE DUNES SAND FACILITY by M.B. Johnson Associates dated January 15, 1973 concludes the following:

"A deeper than normal depression in the dunes might well remain a decade or more, but it would, at casual inspection, appear to be a normal dune feature. In this connection, it should be emphasized that active dune tracts, such as this one, are constantly changing and man-made features are often either buried or undermined."

The existing permanent markers surrounding the perimeter of the pit would remain in place and not be removed, however, they would not be maintained by Gordon Sand Company beyond the time that the Reclamation Plan is fully implemented.

The County of Santa Barbara governs allowable land uses on the site. The post-extraction land use would be required to conform to the site's underlying zoning at that time; however, the site would likely remain undeveloped sand dunes.

B.) ACCESS ROAD

The access road connecting the processing plant with the sand pit area consists of an approximately 15- to 20-foot-wide compacted clay base over dune sand. Clay and silt from the desilting basin has also been spread on the sand road as a stabilizer. A substantial portion of the road is buried under several feet or more of friable sand.

Upon reclamation, the sand road would be decompact to aid in establishment of native vegetation. Any base materials placed on the road by Gordon Sand would be removed and placed in the sand pit. The Applicant estimates that the natural surface would be restored in a very short time after the operation ceases, and that blowing sand would eventually remove all traces of the roadway.

A majority of the road width was installed by Shell Oil Company and would be reclaimed by that company as a separate project. The sand road, used by Gordon Sand Company, that traverses the section of existing vegetation, would be revegetated by Gordon Sand Company per Section III.C.3.

C.) THE PROCESSING PLANT

The processing plant area consists of the following:

Sand wash plant, dry plant, turf plant, bulk bag system, sacking system, pump house, power room, scale, scale house, work shop, office, diesel fuel pump and 500 gallon diesel tank, 8,000 gallon water tank, 2,500 gallon liquid propane tank, 300 gallon waste oil tank, two 966 front-end loaders, two forklifts, and an equipment storage area.

1. The processing plant, equipment, storage tanks, and structures (listed above), and refuse or remaining materials, would be completely removed per any County or State guidelines that are in effect at the time of removal. Stockpiles would be leveled and the site left in a clean and orderly state.
2. A decision would be made, at the time of implementation of the Reclamation Plan, by the mine operator and the owners of APN # 113-020-13, if the water well and appurtenant tanks and equipment can remain for use by APN 113-020-13, that is allowed under the zoning in effect at the time of reclamation for 113-020-13. Should it not be possible to leave said well and equipment in place, then, the well pump-house, water tank and underground water lines, would be

removed under any County & State guidelines in effect at the time of operations cessation and disposed of in a manner approved by the County and/or State. The water well would be "abandoned" in a manner approved and monitored by the County of Santa Barbara Environmental Health Department.

3. Should the water well not be able to remain for use by APN 113-020-13, Gordon Sand Company shall contact PGE to remove the onsite power pole with transformer and any appurtenances.
4. All front-end loaders or motorized equipment, owned and operated by the mine operator, would be removed from the site.
5. Silt from the siltation pond, adjacent to the screw lift, would be removed and spread back over the operations site and blended into the terrain. The siltation pond would remain in place to collect sediment from any drainage from the site that does not seep into the sand. However, raw sand that is found onsite drains very easily. Over a period of time, this pond would fill in with silt and blend in with the natural terrain. It would not be maintained by the mine operator after the initial removal of the silt.
6. The owner would endeavor to work jointly with the appropriate agencies in returning the site to as natural a state as possible. As stated in the above referenced EIS, wind-blown sand should, over a period of time, eliminate any visual effects of the facilities past presence.

III.C.3 Revegetation

1.0 Introduction

This Revegetation Plan was prepared to comply with the Reclamation Standards identified in the Public Resources Code, Article 9, Section 3705. The purpose of the plan is to identify the following:

- Goals of the revegetation program;
- Cultural methods;
- Seed mixes;
- Success criteria; and
- Monitoring objectives.

The objective of the revegetation plan is to provide vegetative cover for final reclaimed surfaces if natural revegetation is not evident within the first three years following cessation of mining. However, not all surfaces impacted by mining activities would require revegetation. A majority of the site is located on an active sand dune and vegetation is limited to relatively small clusters. Active revegetation, if necessary, would focus only on areas immediately adjacent to these vegetated clusters. These areas include portions of the access road and the processing plant area. Plant materials should be capable of self-regeneration without continued dependence on irrigation, soil amendments or fertilizer. Revegetation would be sufficient to stabilize the surface against the effects of long-term erosion and is designed to meet the post extractive land use objectives of the site.

2.0 Physical Features Important to Revegetation

2.1 Soils

The site consists of sand dunes that are constantly reconfigured by wind. Therefore, there is no topsoil available for use with revegetation efforts.

2.2 Climatic Considerations

The climate in the Santa Maria and Guadalupe area is typically mild year-round and influenced by the Pacific Ocean. Precipitation falls during late autumn, through the winter, and into the early spring. The majority of rainfall usually occurs from December until March. Total annual average rainfall is approximately 12.7 inches.

2.3 Vegetation

Natural vegetative communities found in the vicinity of the project footprint consist of two vegetation alliances, in addition to bare sand and disturbed/developed areas: Shining (or Pacific) willow groves and silver dune lupine-mock heather scrub of varying density.

3.0 Revegetation Objectives

The objective of the revegetation plan is to provide vegetative cover for final reclaimed surfaces if natural revegetation is not evident within the first three years following cessation of mining. This would be accomplished by using plant species capable of self-regeneration without continued dependence on irrigation, soil amendments or fertilizer. Revegetation would be sufficient to stabilize the surface against the effects of long-term erosion and is designed to meet the post extractive land use objectives of the site. The revegetation plan sets forth planting and verifiable monitoring standards to assure vegetative success.

3.1 Seeding

If active revegetation is required, the seed mixture that would be used to revegetate the site would likely be collected from areas within the project vicinity. Due to the relatively small areas that may require seeding, these areas would be seeded by hand or by means of a tractor pulling a seed imprinter.

3.1.1. Seed Mix

Where seeding is required, the following seed mixture would be used:

Seed Species	Common Name	Lbs./Acre
<i>Ambrosia chamissonis</i>	Silver beachweed	7.5
<i>Achillea millefolium</i>	Yarrow	3
<i>Corethrogyne filaginifolia</i>	Common sandaster	3
<i>Lupinus chamissonis</i>	Beach blue lupine	7.5
<i>Eriophyllum staechnadifolium</i>	Lizard tail	3
<i>Ericameria ericoides</i>	Mock heather	3
<i>Senecio blochmaniae</i>	Dune ragwort	3
Total		30

* Seed mix was developed in coordination with a botanist at WRA, Inc.

3.2 Timing

All seeding would be performed and completed between October 15 and January 15. All efforts would be made to plant during this time period since beneficial temperatures and anticipated rainfall would aid in germination, establishment, and growth of seeds.

3.3 Ripping of Soil

If active revegetation is required, for areas where project operations result in compaction of the soil, these areas would be ripped to eliminate compaction and to establish a suitable root zone in preparation for planting.

3.4 Test Plots

Test plot areas would be conducted to determine the most appropriate seeding procedures to be followed in order to ensure successful implementation of the revegetation plan. This may result in making revisions to the seed mix provided. Success of these revegetation areas 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 similar to that of the surrounding area. Comparisons would be made by a qualified individual until performance standards have been met.

4.0 Monitoring

4.1 Performance Standards for Vegetation

Following seeding, the site would be monitored periodically until performance criteria have been met. Performance criteria are based on vegetative cover and species-richness. These standards are provided for guidance purposes.

Species Richness	3 species of native perennials per 5 x 5 meter plot
Cover	40% of area covered per 5 x 5 meter plot
Density	20 native perennials per 5 x 5 meter plot

4.2 Vegetation Monitoring and Maintenance

Monitoring would be performed to document revegetation success. Following seeding, the site would be monitored periodically (at least annually until success criteria have been met) by means of visual observation. Monitoring would be performed to document that the revegetation areas achieve, or are on track to achieving, the success standards for vegetative cover. Sample sizes would be sufficient to produce at least an 80% confidence level.

Maintenance of the revegetation areas would consist of reseeding unsuccessful revegetation efforts and weed eradication to limit and control invasive noxious weeds.

III.C.4 Topsoil Salvage, Maintenance, and Redistribution

The site consists of sand dunes that are constantly reconfigured by wind. Therefore, there is no topsoil available for use with revegetation efforts.

III.C.5 Tailing and Mine Waste Management

Due to the high demand for all sand produced at the site, no mine waste materials would be generated.

III.C.6 Re-Establishment of Wildlife Values Within the Site

The re-establishment of wildlife within the property containing the sand pit and processing area is a function of the success of revegetating these areas, if attempted. Whether revegetation is performed by

hand or left to natural processes, and once the daily operations cease and the site is brought back to a natural appearance, wildlife would be free to migrate across these areas unhampered.

III.C.7 Public Safety

The existing permanent type markers surrounding the perimeter of the pit would remain in place and not be removed. The markers would not be maintained by Gordon Sand Company beyond the time that the Reclamation Plan is fully implemented.

III.C.8 Financial Assurances

In addition to annual monitoring, all SMARA-regulated sites are required to provide financial assurances that reclamation of the site would be conducted in accordance with the approved Reclamation Plan. The financial assurance may be in the form of surety bonds, irrevocable letter of credit, trust funds, or other forms of financial assurances approved by the Lead Agency.

The financial assurance is reviewed annually by the operator and Lead Agency to determine if operations or reclamation during the past year and planned operations during the upcoming year would require adjustments to the amount of the estimate.

III.E. Statement of Responsibility

Gordon Sand Company accepts responsibility for reclamation of the Guadalupe sand mine and processing plant as set forth in the Reclamation Plan.

2.0 PROJECT LOCATION

Gordon Sand Company's Guadalupe sand mine and processing plant is located within the area known as the "Guadalupe Sand Dunes," approximately 3.75 miles west of the town of Guadalupe and 0.5 to 1.0 miles from the Pacific Ocean just south of the Santa Maria River. Access to the site is westerly via W Main Street through the town of Guadalupe.

The project site is zoned Recreational (REC) and Resource Management (RES)-320, totaling 40 acres on Assessor's Parcel Numbers 113-020-009, -013, -020, and -021, located at 6150 West Main Street in Guadalupe, CA, Third Supervisorial District. The mine pit site (APN 113-020-009) is located on property owned by Gordon Sand Company and the access road and sand processing area is located on property owned by the County of Santa Barbara (APN 113-020-013, -020, -021). Of this area:

- APN 113-020-009: 31.4 acres are being used for sand extraction;
- APN 113-020-013: 7 acres are used for sand processing; and
- APN 113-020-020 and 113-020-021: 1.6 acres used for a 3,200-foot long sand roadway.

2.1 Site Information	
Comprehensive Plan Designation	APN 113-020-013 (Sand Processing): Parks APN 113-020-020 (Sand Road): Beaches and Sand Dunes APN 113-020-021 (Sand Road): Beaches and Sand Dunes APN 113-020-009 (Sand Pit): Mining
Zoning District, Ordinance	APN 113-020-013 (Sand Processing): REC, Article II APN 113-020-020 (Sand Road): RES-320, Article II APN 113-020-021 (Sand Road): RES-320, Article II APN 113-020-009 (Sand Pit): RES-320, Article II
Site Size	APN 113-020-013 18.53 acres gross, 7 acres net APN 113-020-020 79.50 acres gross APN 113-020-021 488 acres gross, 1.6 acres net <u>APN 113-020-009 31.42 acres gross, 31.4 acres net</u> Total Site Size: 40 acres
Present Use & Development	31.4 acres are being used for sand extraction (APN 113-020-009) and 7 acres are used for sand processing (APN 113-020-013). The sand mine pit is connected to the processing area by a 3,200-foot long sand track roadway consisting of 1.6 acres (APN 113-020-020 and -021).
Surrounding Uses/Zoning	North: Open Space (sand dunes), Santa Maria River, and Guadalupe Dunes Preserve (Santa Barbara County park) (RES-320) South: Open space (sand dunes) (RES-320) East: Open space (sand dunes) and agricultural production (RES-320) West: Pacific Ocean
Access	Driveway at 6150 West Main Street in Guadalupe, CA. West Main Street in the area of the project site is controlled via a kiosk operated by the County of Santa Barbara Parks Division for access to the nearby Rancho Guadalupe Dunes Preserve. At times the road can become flooded and closed due to seasonal rain. Within the site, access to the mine pit is via a sand access road connecting the processing plant with the sand pit area. The road ranges in width from 15 feet to 20 feet wide.
Public Services	Water Supply: Private onsite well Sewage: N/A Fire: Guadalupe Fire Department, Station 2, 918 Obispo St, Guadalupe, CA 93434 Police: County of Santa Barbara Sheriff's Department Other: Guadalupe Union School District, 4465 9 th St, Guadalupe CA

3.0 ENVIRONMENTAL SETTING

3.1 PHYSICAL SETTING

The Project is situated in the Guadalupe-Nipomo Dunes, an extensive dune complex extending approximately 18 miles from southern San Luis Obispo County to northern Santa Barbara County. The project area is immediately south of the Santa Maria River mouth and east of the Pacific Ocean.

The processing plant area consists of a primary processing plant with outbuildings, processing equipment, and parking and storage areas adjacent to W Main Street. A large landing for machinery and other equipment storage is located upslope and southeast of the main processing area. A small landing for initial sand processing is located above the main processing area to the southwest. Few structures exist within the project area, with the exception of minor infrastructure in the processing area. The active mining area (pit) is located southwest of the processing plant, at the leading edge of a large mobile sand sheet. The access road consists of an approximately 15- to 20-foot-wide compacted clay base over dune sand. Clay and silt from the desilting basin has also been spread on the sand road as a stabilizer. A substantial portion of the road is buried under several feet or more of friable sand.

Climate. The climate in the Santa Maria and Guadalupe area is typically mild year-round and influenced by the Pacific Ocean. Precipitation falls during late autumn, through the winter, and into the early spring. The majority of rainfall usually occurs from December until March. Total annual average rainfall is approximately 12.7 inches.

Soil and Hydrology. There are two mapped soil units present in and adjacent to the project area: dune land and marsh. The marsh soil map unit is limited to the riparian habitat around the concrete wash station and on the east side of the entrance to the facility. The remainder of the project area is comprised of active dunes. There are no waters or wetland features within the project area. The Santa Maria River is located outside of the project area on the north side of West Main Street, approximately 50 feet to the north. An ephemeral drainage east of the facility entrance conveys flow from adjacent agricultural fields to the Santa Maria River (Storrer Environmental 2019).

Natural Resources. Vegetation and habitat descriptions are presented in Section 4.4. Cultural resource descriptions are presented in Section 4.5.

3.2 ENVIRONMENTAL BASELINE

The environmental baseline from which the project's impacts are measured consists of the existing physical environmental conditions near the project. Mining activities are existing and in operation under Conditional Use Permit 77-CP-66 (CZ). While mining activities would not require a new Conditional Use Permit, the potential impacts of mining, as well as the impacts associated with the proposed reclamation activities, are analyzed in this document.

4.0 POTENTIALLY SIGNIFICANT EFFECTS CHECKLIST

The following checklist indicates the potential level of impact and is defined as follows:

Potentially Significant Impact: A fair argument can be made, based on the substantial evidence in the file, that an effect may be significant.

Less Than Significant Impact with Mitigation: Incorporation of mitigation measures has reduced an effect from a Potentially Significant Impact to a Less Than Significant Impact.

Less Than Significant Impact: An impact is considered adverse but does not trigger a significance threshold.

No Impact: There is adequate support that the referenced information sources show that the impact simply does not apply to the subject project.

Reviewed Under Previous Document: The analysis contained in a previously adopted/certified environmental document addresses this issue adequately for use in the current case and is summarized in the discussion below.

4.1 AESTHETICS/VISUAL RESOURCES

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. The obstruction of any scenic vista or view open to the public or the creation of an aesthetically offensive site open to public view?			X		
b. Change to the visual character of an area?			X		
c. Glare or night lighting which may affect adjoining areas?				X	
d. Visually incompatible structures?		X			

Existing Setting: The project site is an existing sand mine situated in the Guadalupe-Nipomo Dunes, an extensive dune complex extending approximately 18 miles from southern San Luis Obispo County to northern Santa Barbara County. The project site is immediately south of the Santa Maria River mouth, and east of the Pacific Ocean. The mine itself is in a rural area bounded by West Main Street to the north and the Guadalupe-Nipomo Dunes Preserve (a public park/nature preserve) in all other directions. Public views in this area are dominated by open space, agricultural fields, the sand dunes complex, the Santa Maria River, and the Pacific Ocean.

As shown in the photos below, the sand processing area of the site is visible from West Main Street. Traveling west on Main Street, the site comes into view approximately 2.5 miles west of the intersection of West Main Street and Calle Ceaser Chavez Court, which is the closest residential neighborhood to the site, in the town of Guadalupe. Views of the site are limited to travelers along West Main Street, which dead ends at the Rancho Guadalupe Dunes Preserve. A portion of the sand processing area can be seen from West Main Street; however the sand access road and sand pit are concealed from the public view.



The existing sand processing area as seen from West Main Street near the site entrance. Photo taken by County staff during a June 18, 2019 site visit.



The existing sand processing area at the site entrance off W Main Street. Photo taken by County staff during a June 18, 2019 site visit.

County Environmental Thresholds: The County's Visual Aesthetics Impact Guidelines classify coastal and mountainous areas, the urban fringe, and travel corridors as "especially important" visual resources. A project may have the potential to create a significantly adverse aesthetic impact if (among other potential effects) it would impact important visual resources, obstruct public views, remove significant amounts of vegetation, substantially alter the natural character of the landscape, or involve extensive grading visible from public areas. The guidelines address public, not private views.

The project site lies within the California coastal zone. Policies of the Coastal Act require the scenic and visual qualities of coastal areas to be considered and protected as a resource of public importance. The County has adopted a Local Coastal Program (LCP) which contains the County's View Corridor Overlay District. This District is intended to protect significant coastal view corridors from U.S. 101 to the ocean. The project area does not fall into the View Corridor Overlay.

Impact Discussion: The proposed project is within the coastal area, which is classified as an "especially important" visual resource per the County's Environmental Thresholds, as is surrounded by a public park/nature preserve. Existing mining and future reclamation activities within the plant area of the site are in the viewshed of travelers on West Main Street, a public road that leads to the Rancho Guadalupe Dunes Preserve and the Pacific Ocean.

At the cessation of mining, the processing plant, equipment, storage tanks, structures, and refuse or remaining materials within the visible plant area would be completely removed within 12 months. Stockpiles would be leveled and the site left in a clean and orderly state. If needed, the well pump-house, water tanks, underground water lines, and onsite power pole with transformer and appurtenances would be abandoned/removed. There are no proposed additional structures, or changes to the existing structures on-site, nor is there any significant amount of vegetation to be removed, or extensive grading to be

conducted from areas of public view. The proposed project would not operate at night and no reflective structures would be associated with the reclamation operation. As such, there would be no glare impacts.

The sand pit area and the access road are out of the public viewshed. Reclamation in these areas do not require the removal of any equipment or structures. The sand pit area and access road would resume the natural processes of wind-blown sand movement that would generally smooth the contours of the sand over time. The existing semi-permanent markers surrounding the perimeter of the sand pit would remain in place and not be removed; however they are outside of the public viewshed and would likely become buried over time due to sand accumulation through natural processes.

Reclamation activities are temporary in nature (over the course of 12 months), and would not constitute a substantial or adverse change in the visual aspects of the site. Further, reclamation activities are beneficial and would constitute as mitigation for the visual impact of the existing mining operation through the removal of structures and equipment, returning the site back to naturally occurring sand dunes. The project's visual impacts are less than significant with mitigation.

Mitigation and Residual Impact: The following mitigation measures would reduce the project's aesthetic impacts to a less than significant level:

Aes-01 Equipment Removal. All equipment involved in the mining operation shall be removed within 12 months of the cessation of operations (Applicant proposed). The water well and associated tanks are a possible exception to this measure. They may remain to the end of reclamation efforts if used during those efforts or permanently if pumped for a County-permitted use. To ensure compliance, the applicant shall provide photo-documentation every three months illustrating the progress made in removal of the mining equipment.

PLAN REQUIREMENTS: This condition shall be printed on the Final Reclamation Plan submitted for Zoning Clearance.

MONITORING: Permit Compliance and P&D staff shall review the photo-documentation report(s) for compliance with this condition. P&D compliance staff may spot check in the field. If the water well and tanks are to remain, County approval must be obtained. Permit Compliance staff shall verify that all site features are removed prior to release of the applicant's SMARA reclamation bond.

4.2 AGRICULTURAL RESOURCES

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. Convert prime agricultural land to non-agricultural use, impair agricultural land productivity (whether prime or non-prime) or conflict with agricultural preserve programs?				X	
b. An effect upon any unique or other farmland of State or Local Importance?				X	

Existing Setting: The project site is comprised of dune sand and marsh, and does not include any agriculture. The California Important Farmland Finder designates the project site and adjacent parcels as "Other Land", which includes strip mines and borrow pits and consists of areas not suitable for livestock grazing (California Department of Conservation 2020). The nearest agricultural land uses consisting of

unique and prime farmland are located to the east of the project area and are separated from the project site by W Main Street.

County Environmental Thresholds: The County’s Environmental Thresholds and Guidelines Manual (County of Santa Barbara 2018) Section 4 “Agricultural Resource Guidelines” provides a methodology for evaluating agricultural resources. No agricultural activities or soils suitable for agricultural production exist within the project site; therefore, the guidelines and methodology do not apply.

Impact Discussion: The project site does not contain a combination of acreage and/or soils which render the site an important agricultural resource. The site does not adjoin and/or would not impact any neighboring agricultural operations. The project site is not used for agriculture and does not include soils suitable for agriculture. Therefore, the proposed project does not have the potential to convert prime agricultural land, impair agricultural land productivity, or conflict with agricultural preserve programs.

Cumulative Impacts: As the proposed project would not have any impacts on agricultural resources, the project combined with other similar projects would not result in any cumulatively considerable impacts on agricultural resources.

Mitigation and Residual Impact: No impacts are identified. No mitigations are necessary and no residual impacts would occur.

References:

California Department of Conservation 2020. California Important Farmland Finder. Available at: <https://maps.conservation.ca.gov/DLRP/CIFF/>. Accessed September 2020.

4.3a AIR QUALITY

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. The violation of any ambient air quality standard, a substantial contribution to an existing or projected air quality violation, or exposure of sensitive receptors to substantial pollutant concentrations (emissions from direct, indirect, mobile and stationary sources)?			X		
b. The creation of objectionable smoke, ash or odors?			X		
c. Extensive dust generation?		X			

Existing Setting: Santa Barbara County is part of the Central South Coast Air Basin, which also includes Ventura and San Luis Obispo Counties. Ambient air quality within the basin is generally good. However, the basin periodically experiences atmospheric temperature inversion layers, generally between May and October, which tend to prevent the rapid dispersion of pollutants. Presently, Santa Barbara County is in attainment of the California Ambient Air Quality Standards (CAAQS) for NO₂, SO₂, CO, sulphates (SO_{4,2}), hydrogen sulfide (H₂S), and lead (Pb) and in nonattainment of the CAAQS for O₃ (8-hour) and PM₁₀ and is unclassified for PM_{2.5}. The major sources of ozone precursor emissions in the County are motor vehicles and marine vessels, the petroleum industry, and solvent use. Sources of PM₁₀ include mineral quarries, grading, demolition, agriculture tilling, road dust, and vehicle exhaust (PM_{2.5}). The Santa Barbara County Air Pollution Control District (APCD) provides oversight on compliance with air quality standards and preparation of the County Clean Air Plan.

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. The California Air Resources Board (CARB) has identified the following typical groups who are most likely to be affected by air pollution: children under 14 years of age; elderly over 65 years of age; athletes; and people with cardiovascular and chronic respiratory diseases. Land uses typically associated with sensitive receptors include schools, parks, playgrounds, childcare centers, retirement homes, convalescent homes, hospitals, and clinics. The sensitive receptors nearest to the project site include the Rancho Guadalupe Dunes Preserve (a public park) approximately 1 mile west of reclamation activities, as well as single-family residences approximately 2.5 miles east from reclamation activities.

The project site is an existing sand mine operation that produces operational emissions. In addition, vehicles traveling along W Main Street adjacent to the project area produce emissions.

County Environmental Thresholds: Chapter 5 of the *Environmental Thresholds and Guidelines Manual* (County of Santa Barbara 2018) addresses air quality. The thresholds provide that a proposed project will not have a significant impact on air quality if operation of the project will:

- Emit (from all project sources, mobile and stationary), less than the daily trigger for offsets for any pollutant (currently 55 pounds per day for NO_x and ROC, and 80 pounds per day for PM₁₀);
- Emit less than 25 pounds per day of oxides of nitrogen (NO_x) or reactive organic compounds (ROC) from motor vehicle trips only;
- Not cause or contribute to a violation of any California or National Ambient Air Quality Standard (except ozone);
- Not exceed the APCD health risk public notification thresholds adopted by the APCD Board; and
- Be consistent with the adopted federal and state Air Quality Plans.

No thresholds have been established for short-term impacts associated with construction activities. However, the County's Grading Ordinance (Santa Barbara County Code Chapter 14) requires standard dust control conditions for all projects involving grading activities. Long-term/operational emissions thresholds have been established to address mobile emissions (i.e., motor vehicle emissions) and stationary source emissions (i.e., stationary boilers, engines, and chemical or industrial processing operations that release pollutants).

Impact Discussion: The reclamation project would not alter the method of mining, nor does it propose to increase the annual average rate of production, and no changes in the operation, equipment, or personnel are proposed. It would not involve new stationary sources (i.e., equipment, machinery, hazardous materials storage, industrial or chemical processing, etc.) that would increase the amount of pollutants released into the atmosphere. The project would also not generate additional smoke, ash, odors, or long term dust after reclamation.

The Applicant estimates that construction activities for reclamation and revegetation would require approximately 500 hours of equipment use and labor over 12 months, and that approximately 15 acres would be finish graded. Project-related construction activities would consist of the following, which would emit ozone precursors NO_x and ROC, as well as CO, SO_x, PM₁₀, and PM_{2.5}:

- Support structure removal using an excavator, semi-truck, end dump semi-truck, wheel loader and welding truck.
- Foundation demolition, and removal of concrete slabs and retaining walls using an excavator with a rockbreaker attachment, excavator with a bucket, and an end dump semi-truck.
- Mobile equipment, miscellaneous equipment, and rubbish removal using a wheel loader, and two semi-trucks.
- Site grading and ripping using a bulldozer for finish grading, a bulldozer with a ripper attachment, a wheel loader, and a semi-truck.

- Revegetation using a bulldozer with a seed drill attachment.

The majority of construction-related emissions would result from grading due to the use of heavy-duty construction equipment. Other emissions would result from support structure and equipment removal, foundation demolition, and revegetation.

Emissions were estimated using Appendix D, Tables 3.3 and 3.4 of the California Emissions Estimator Model (CalEEMod) version 2016.3.2 (Attachment 5). For estimating purposes, it was assumed that construction would commence in 2040, which is the last available construction year available in the tables. The estimates are conservative, as construction equipment is anticipated to become more efficient and generate fewer air pollutant emissions over time. Therefore, assuming the use of 2040 equipment results in reasonable worst-case construction emissions.

The table below summarizes the estimated construction emissions from the proposed project. As shown therein, the project would generate approximately 12.62 pounds per day (lb/day) of NO_x emissions, 6.10 lb/day of ROC emissions, and 0.45 lb/day of PM₁₀ emissions. Emissions would not exceed the County's thresholds of 25 lb/day for NO_x and ROC from mobile sources, and 55 lbs/day for total emissions.

Summary of Estimated Project Construction Emissions

<u>Emissions Source</u>	<u>Criteria Pollutants (lb/day)</u>					
	<u>NO_x</u>	<u>ROC</u>	<u>CO</u>	<u>SO_x</u>	<u>PM₁₀</u>	<u>PM_{2.5}</u>
Support Structure Removal	3.55	1.69	12.55	0.04	0.10	0.10
Foundation demolition Removal of concrete slabs/retaining walls	1.48	0.96	10.10	0.03	0.06	0.06
Equipment and rubbish removal	2.09	1.34	7.41	0.03	0.08	0.08
Site Grading and Ripping	4.09	1.67	8.70	0.04	0.16	0.16
Revegetation	1.41	0.44	2.13	0.01	0.05	0.05
Total Estimated Project Emissions	12.62	6.10	40.89	0.16	0.45	0.45
County Significance Threshold (<i>Mobile Sources Only</i>)	25	25	-	-	-	-
Significant Impact?	No	No	-	-	-	-
County Significance Threshold (<i>Total Operational Emissions</i>)	55	55	-	-	80	-
Significant Impact?	No	No	-	-	No	-

Earth moving operations at the project site would not have the potential to result in significant project-specific short-term emissions of fugitive dust and PM₁₀, with the implementation of standard dust control measures. Emissions of ozone precursors (NO_x and ROC) during project construction would result primarily from the on-site use of heavy earthmoving equipment. Due to the limited period of time that reclamation and grading activities would occur on the project site, construction-related emissions of NO_x and ROC would not be significant on a project-specific or cumulative basis. Further, the County of Santa Barbara considers short-term construction emissions of NO_x to be less than significant because countywide emissions of NO_x from construction equipment is insignificant compared to regional NO_x emissions from other sources, such as

vehicles. However, due to the non-attainment status of the air basin for ozone, the project should implement measures recommended by the APCD to reduce construction-related emissions of ozone precursors to the extent feasible.

Cumulative Impacts: The County's Environmental Thresholds were developed, in part, to define the point at which a project's contribution to a regionally significant impact constitutes a significant effect at the project level. In this instance, the project has been found not to exceed the significance criteria for air quality. Therefore, the project's contribution to regionally significant air pollutant emissions is not cumulatively considerable, and its cumulative effect is less than significant (Class III).

Mitigation and Residual Impact: The following mitigation measures would reduce the project's air quality impacts to a less than significant level:

Air-01 Dust Control. The Owner/Applicant shall comply with the following dust control components at all times including weekends and holidays:

- a. Dust generated by the development activities shall be kept to a minimum with a goal of retaining dust on the site.
- b. During clearing, grading, earth moving, excavation, or transportation of cut or fill materials, use water trucks or sprinkler systems to prevent dust from leaving the site and to create a crust after each day's activities cease.
- c. During construction, use water trucks or sprinkler systems to keep all areas of vehicle movement damp enough to prevent dust from leaving the site.
- d. Wet down the construction area after work is completed for the day and whenever wind exceeds 15 mph.
- e. When wind exceeds 15 mph, have site watered at least once each day including weekends and/or holidays.
- f. Order increased watering as necessary to prevent transport of dust off-site.
- g. Cover soil stockpiled for more than two days or treat with soil binders to prevent dust generation. Reapply as needed.
- h. If the site is graded and left undeveloped for over four weeks, the Owner/Applicant shall immediately: (i) Seed and water to re-vegetate graded areas; and/or (ii) Spread soil binders; and/or; (iii) Employ any other method(s) deemed appropriate by P&D or APCD.

PLAN REQUIREMENTS: These dust control requirements shall be noted on the Final Reclamation Plan.

PRE-CONSTRUCTION REQUIREMENTS: The contractor or builder shall provide P&D monitoring staff and APCD with the name and contact information for an assigned onsite dust control monitor(s) who has the responsibility to:

- a. Assure all dust control requirements are complied with including those covering weekends and holidays.
- b. Order increased watering as necessary to prevent transport of dust offsite.
- c. Attend the pre-construction meeting.

TIMING: The dust monitor shall be designated prior to Zoning Clearance. The dust control components apply from the beginning of any grading or construction throughout reclamation activities until reclamation is deemed by the County to be successfully completed and the financial assurances for reclamation have been released by the County.

MONITORING: P&D processing planner shall ensure measures are on plans. P&D compliance staff and APCD staff may spot check. In addition, annual SMARA inspections shall be performed. APCD inspectors shall respond to nuisance complaints.

4.3b AIR QUALITY - GREENHOUSE GAS EMISSIONS

Greenhouse Gas Emissions - Will the project:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X		
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X		

Existing Setting: Greenhouse gases include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF₆), and nitrogen trifluoride (NF₃). The largest source of GHG emissions from human activities in the United States is from fossil fuel combustion for electricity, heat, and transportation. Specifically, the Inventory of U.S. Greenhouse Gas Emissions and Sinks (EPA 2018) states that the primary sources of GHG emissions in 2018 included transportation (27.9 %), electricity production (26.9%), industry (22.2%), agriculture (9.9%) commercial (6.8%) and residential (12%). This release of GHGs creates a blanket around the earth that allows light to pass through, but traps heat at the surface, thereby preventing its escape into space. While this is a naturally occurring process known as “the greenhouse effect,” there is strong evidence to support that human activities have accelerated the generation of GHGs beyond natural levels. The overabundance of GHGs in the atmosphere has led to a warming of the earth and has the potential to severely impact the earth’s climate system. For instance, the County is projected to experience, a rise in sea level, an increase in the number of wildfires, land vulnerable to 100-year flood events, and temperature increases, even under a low-emissions scenario. Increases in flood events and wildfires can in turn contribute to increased sedimentation in California’s watersheds (CNRA 2018).

Climate change results from GHG emissions “generated globally over many decades by a vast number of different sources” rather than from GHG emissions generated by any one project (County of Santa Barbara 2018). As defined in California Environmental Quality Act (CEQA) Guidelines Section 15355 and discussed in Section 15130, “a cumulative impact consists of an impact which is created as a result of the combination of the [proposed] project...evaluated...together with other projects causing related impacts.” Therefore, by definition, climate change under CEQA is a cumulative impact.

County Environmental Thresholds: CEQA Guidelines Section 15064.4(a) states, “A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of GHG emissions resulting from a project.” CEQA Guidelines Section 15064.4(b), further states:

A lead agency should consider the following factors, among others, when assessing the significance of impacts from greenhouse gas emissions on the environment:

- (1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting.
- (2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project [...]

CEQA Guidelines Section 15183.5(a) states, “Lead agencies may analyze and mitigate the significant effects of greenhouse gas emissions at a programmatic level, such as in...a separate plan to reduce greenhouse gas emissions. Later project-specific environmental documents may tier from...that existing programmatic review...a lead agency may determine that a project’s incremental contribution to a

cumulative effect is not cumulatively considerable if the project complies with the requirements in a previously adopted plan.”

In 2015, the County adopted the *Energy and Climate Action Plan* (ECAP) and certified the accompanying *Final Environmental Impact Report for the Energy and Climate Action Plan* (EIR). The purpose of the ECAP was to reduce GHG emissions from land use development in the County through selected emission reduction measures. The ECAP sets a GHG reduction target of 15 percent below 2007 (baseline) emissions by 2020, consistent with the State’s target established by Assembly Bill 32 and the related Climate Change Scoping Plan (Scoping Plan; CARB 2017). It contains goals, policies, and emission reduction measures to achieve this target. In this regard, the ECAP was adopted as the County’s plan to reduce greenhouse gas emissions in accordance with CEQA Guidelines Section 15183.5. A project that was included in the ECAP’s emissions forecast may tier from the ECAP’s certified EIR for its impact analysis of GHG emissions. A project that tiers from the ECAP’s EIR is considered in compliance with the requirements in the ECAP and would be considered less than significant. However, the proposed project cannot tier from the ECAP’s EIR because the ECAP used a 2020 GHG emission reduction target year, and reclamation would occur after 2020. In December 2018, the County’s Board of Supervisors adopted a GHG emissions reduction goal of 40% below 1990 levels by 2030. The County is currently preparing GHG emissions CEQA threshold guidance to ensure this goal is met to but no threshold has been formally adopted at this time.

In the absence of an adopted numeric threshold, the significance of the project’s GHG emissions will be evaluated consistent with CEQA Guidelines Section 15064.7(c), which states “[w]hen adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies ... provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence.”

The Sacramento Metropolitan Air Quality Management District (District) has adopted a numeric threshold of significance for GHG emissions for the construction and operation of residential, commercial, industrial, and public land uses and facilities. Projects with annual construction emissions that exceed 1,100 metric tons of carbon dioxide equivalent per year (MTCO_{2e}/year) would result in a cumulatively considerable contribution of GHG emissions and would have a cumulatively significant impact to global climate change. In contrast, a project’s incremental contribution to climate change would not be cumulatively considerable (i.e., less than significant cumulative impact) if its emissions would be less than 1,100 MTCO_{2e}/year.

The County is using the District’s 1,100 MTCO_{2e}/year GHG emission threshold of significance to determine the significance of the proposed project’s GHG construction emissions. The District’s threshold of significance is appropriate for the proposed project for the following reasons:

- Adopted for the purpose of environmental protection and review under CEQA, and, in particular, for determining the significance of impacts from a specific project’s GHG emissions;
- Developed consistent with plans, policies, and regulations adopted for the purpose of reducing the emissions of greenhouse gases;
- Considers a specific project’s incremental contribution to climate change, and whether its incremental contribution would be cumulatively considerable;
- Considers GHG emissions comprehensively by measuring in annual metric tons of carbon dioxide equivalent;

- Applies to GHG emissions from industrial land uses and facilities, such as the proposed project. Includes emissions from project construction activities; and
- Applies to the proposed project land use type.

Impact Discussion: Temporary project-related GHG emissions would primarily be generated by project reclamation activities. The majority of emissions would result from the use of heavy-duty construction equipment. Upon reclamation, the project would not generate GHG emissions. Emissions were estimated using Appendix D, Tables 3.3 and 3.4 of the California Emissions Estimator Model (CalEEMod) version 2016.3.2 (see Attachment 5). Based on the emission estimates, reclamation would generate approximately 566.48 MTCO_{2e}/year, which is below the District threshold of 1,100 MTCO_{2e}/year. Construction GHG emissions would not exceed the District's threshold of 1,100 MTCO_{2e}/year; therefore, impacts from GHG emissions would be less than significant.

Summary of Estimated GHG Emissions

<u>Emissions Source</u>	<u>GHG Emissions (Metric Tons/Year)</u>			
	<u>CO₂</u>	<u>CH₄</u>	<u>N₂O</u>	<u>CO_{2e}</u>
Support Structure Removal	129.49	0.00	0.10	159.33
Foundation demolition Removal of concrete slabs/retaining walls	76.91	0.00	0.04	89.38
Equipment and rubbish removal	106.73	0.00	0.06	124.32
Site Grading and Ripping	119.37	0.00	0.12	153.75
Revegetation	27.85	0.00	0.04	39.71
Total Estimated Project Emissions	460.34	0.02	0.35	566.48

Cumulative Impacts: The District's 1,100 MTCO_{2e}/year GHG emission threshold of significance considers a project's incremental contribution to climate change, and whether or not it is cumulatively considerable. As discussed above, the project is below the threshold of 1,100 MTCO_{2e}/year. Therefore, the project's incremental contribution to a cumulative effect is not cumulatively considerable, and the project's GHG emissions will not have a significant impact on the environment.

Mitigation and Residual Impact: No significant impacts were identified; therefore, mitigation is not required.

References:

BREEZE Software, A Division of Trinity Consultants, *California Emissions Estimator Model (CalEEMod2016.3.2), Appendix D Default Data Tables*, October 2017.

California Air Resources Board, *Climate Change Scoping Plan*, November 2017.

CNRA (California Natural Resources Agency), *Assessing and Communicating the Impacts of Climate Change on the Southern California Coast California's Fourth Climate Change Assessment*, 2018.

County of Santa Barbara Long Range Planning Division, *Energy and Climate Action Plan*, May 2015.

County of Santa Barbara Long Range Planning Division, *Final Environmental Impact Report for the Energy and Climate Action Plan*, May 2015.

County of Santa Barbara Planning and Development, *Environmental Thresholds and Guidelines Manual*, March 2018.

Sacramento Metropolitan Air Quality Management District, *CEQA Guide, Chapter 6 Greenhouse Gas Emissions*, April 2020

U.S. Environmental Protection Agency, *Inventory of U.S. Greenhouse Gasses and Sinks: 1990-2011*, April 2018.

4.4 BIOLOGICAL RESOURCES

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
Flora					
a. A loss or disturbance to a unique, rare or threatened plant community?		X			
b. A reduction in the numbers or restriction in the range of any unique, rare or threatened species of plants?		X			
c. A reduction in the extent, diversity, or quality of native vegetation (including brush removal for fire prevention and flood control improvements)?		X			
d. An impact on non-native vegetation whether naturalized or horticultural if of habitat value?			X		
e. The loss of healthy native specimen trees?				X	
f. Introduction of herbicides, pesticides, animal life, human habitation, non-native plants or other factors that would change or hamper the existing habitat?			X		
Fauna					
g. A reduction in the numbers, a restriction in the range, or an impact to the critical habitat of any unique, rare, threatened or endangered species of animals?			X		
h. A reduction in the diversity or numbers of animals onsite (including mammals, birds, reptiles, amphibians, fish or invertebrates)?			X		
i. A deterioration of existing fish or wildlife habitat (for foraging, breeding, roosting, nesting, etc.)?		X			
j. Introduction of barriers to movement of any resident or migratory fish or wildlife species?			X		
k. Introduction of any factors (light, fencing, noise, human presence and/or domestic animals) which could hinder the normal activities of wildlife?		X			

Existing Conditions: Santa Barbara County has a wide diversity of habitat types, including chaparral, oak woodlands, wetlands and beach dunes. These are complex ecosystems and many factors are involved in assessing the value of the resources and the significance of project impacts. For this project, site visits were conducted on November 28, 2017, January 11, 2019, and June 18, 2019, and associated biological reports

were prepared by WRA Environmental Consultants (applicant's agent), and Storrer Environmental Services (County's consultant). The following analysis is based on this information.

Vegetation

The majority of the project area consists of bare sand and dune scrub habitats. Much of the site is vegetated, varying from large trees and non-native vegetation in the processing area to scrub/shrub habitat and open sand in the dune areas. Habitat surrounding the processing plant is largely vegetated, consisting of a mix of willows and dune vegetation. The plant itself contains disturbed and developed areas sitting on compacted earth and gravel. Habitat surrounding the processing plant contains a higher concentration of non-native and invasive plants relative to the pit or access road. Habitats along the road to the pit consist of a combination of bare ground and silver dune lupine-mock heather scrub of varying density. The pit itself is devoid of vegetation. In general, areas without vegetation throughout the site are composed of loose or compacted sand, with some areas of compacted soil in the processing area. No aquatic habitats are identified within the project area, although there are riparian zones both directly adjacent to the processing plant and directly across the road to the north. The riparian zone directly adjacent to the processing plant is heavily grazed, with very little understory present (WRA 2019). The following vegetation communities present within the Project area are described below.

Pacific Willow Groves (*Salix lasiandra* var. *lasiandra* Woodland Alliance) (ESH, G4, S3) vegetation community is present around the concrete wash basin, near the entrance to the facility and in association with the riparian corridor of the Santa Maria River (across West Main Street). This habitat is co-dominated by Pacific willow and arroyo willow (*Salix lasiolepis*), with understory species consisting primarily of spreading gooseberry (*Ribes divaricatum* var. *pubiflorum*) and California blackberry (*Rubus ursinus*). A small stand of arroyo willows is present in the facility adjacent to the concrete wash basin near West Main Street. The wash station also contains other hydrophytic plant species including bristly ox-tongue (*Helminthotheca echioides*), dock (*Rumex crispus*, *R. conglomeratus*), and common horsetail (*Equisetum arvense*). The Santa Maria River and associate riparian corridor are designated ESH by the County and are under California Department of Fish and Wildlife (CDFW) jurisdiction.

Silver Dune Lupine-Mock Heather Scrub (*Lupinus chamissonis* - *Ericameria ericoides* Shrubland Alliance) (ESH, G3, S3) vegetation community is widespread in the project area and is variously dominated by silver dune lupine (*Lupinus chamissonis*) and mock heather (*Ericameria ericoides*). Other native shrubs such as seaside woolly sunflower (*Eriophyllum staechadifolium*), beach-bur (*Ambrosia chamissonis*), Blochman's ragwort (*Senecio blochmaniae*), branching phacelia (*Phacelia ramosissima*), yellow sand-verbena (*Abronia latifolia*), and yarrow (*Achillea millefolium*) are frequent, but comprise less of the cover. Open areas in the scrub were dominated by invasive veldt grass (*Ehrharta calycina*) and false ice plant (*Conicosia pugioniformis*) (Storrer Environmental 2019). Dune scrub and the larger Guadalupe Dunes are designated EHS by the County and identified as an "Ecological Community of Greatest Interest" in the Conservation Element of the Santa Barbara County Comprehensive Plan.

Ruderal/Disturbed habitat is present in and around the facility areas and along West Main Street. This vegetation type is not a recognized community as it consists of a variety of invasive species, not native to the region, that are adapted to regular disturbance. The vegetation in the ruderal/disturbed portions of the project area is dominated by bromes (*Bromus diandrus*, *B. madritensis* ssp. *rubens*, *B. hordeaceus*), rattail sixweeks grass (*Festuca myuros*), veldt grass, false ice plant, black mustard (*Brassica nigra*), European sea rocket (*Cakile maritima*), and sweet clover (*Melilotus albus*, *M. indicus*) (Storrer Environmental 2019).

Bare Sand. Much of the project area is comprised of bare sand, with little to no vegetation present (Storrer Environmental 2019).

Flora and Fauna

Reptiles, mammals, and birds live in the dunes (nested in the vegetated areas) and feed on invertebrates (insects), many of which are specially adapted to the high winds and shifting sands of the habitat. Wildlife species typically associated with dune and riparian habitats and that are most abundant in the project area include California quail (*Callipepla californica*), turkey vulture (*Carthartes aura*), red-tailed hawk (*Buteo jamaicensis*), spotted towhee (*Pipilo maculatus*), white-crowned sparrow (*Zonotrichia leucophrys*), kangaroo rat (*Dipodomys* sp.), black-tailed deer (*Odocoileus hemionus*), raccoon (*Procyon lotor*), brush rabbit (*Sylvilagus backmani*), western fence lizard (*Sceloporus occidentalis*), and coast horned lizard (*Phrynosoma coronatum*), among others.

Vegetation within the coastal dunes consist of low-growing, succulent, mat-forming perennial herbs with extensive root systems. Many species are endemic to the Central Coast area, and some are endemic to the dunes complex. All vegetation within the dune complex is considered important as it is limited in its distribution and plays a valuable role in the stabilization of the dunes, subsequently allowing for greater diversity of plant and animal species.

Special Status Species

According to previously conducted biological evaluations and surveys conducted by Storrer Environmental and WRA, the following special-status species are either present within the project area, or have the potential to occur within the project area based on habitat suitability and requirements, seasonally-timed biological surveys, elevation and geographic range, soils, topography, surrounding land uses, and proximity of known occurrences in the CDFW California Natural Diversity Database (CNDDB) to the project area.

Present within the Project Area		
Common Name	Scientific Name	Rank
Plant Species		
Surf thistle	<i>Cirsium rhotophilum</i>	ST, CRPR 1B.2, G1, S1
Blochman's ragwort	<i>Senecio blochmaniae</i>	CRPR 4.2
Crisp monardella	<i>Monardella undulata</i> ssp. <i>crispa</i>	CRPR 1B.2, G3, S2
Wildlife Species		
Northern harrier	<i>Circus cyaneus</i>	SSC, G5, S3

Potential to Occur within the Project Area		
Common Name	Scientific Name	Rank
Plant Species		
Aphanisma	<i>Aphanisma blitoides</i>	CRPR 1B.2, G3, S2
California spineflower	<i>Mucronea californica</i>	CRPR 4.2
Coast woolly-heads	<i>Nemacaulis denudata</i> var. <i>denudata</i>	CRPR 1B.2
Coastal goosefoot	<i>Chenopodium littoreum</i>	CRPR 1B.2, G1, S1
Compact cobwebby thistle	<i>Cirsium occidentale</i> var. <i>compactum</i>	CRPR 1B.2, G3, S2
Crisp monardella	<i>Monardella undulata</i> ssp. <i>crispa</i>	CRPR 1B.2
Beach layia	<i>Layia carnosa</i>	FE, SE, CRPR 1B.1
Beach spectaclepod	<i>Dithyrea maritima</i>	ST, CRPR 1B.2, G1, S1
Black-flowered figwort	<i>Scrophularia atrata</i>	CRPR 1B.2
Blochman's dudleya	<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i>	CRPR 1B.1
Blochman's leafy daisy	<i>Erigeron blochmaniae</i>	CRPR 1B.2, G2, S2
Branching beach aster	<i>Corethrogyne leucophylla</i>	CRPR 3.2
Davidson's saltscale	<i>Atriplex serenana</i> var. <i>davidsonii</i>	CRPR 1B.2

Potential to Occur within the Project Area		
Common Name	Scientific Name	Rank
Dune larkspur	<i>Delphinium parryi</i> ssp. <i>blochmaniae</i>	CRPR 1B.2, G4, S2
Dunedelion	<i>Malacothrix incana</i>	CRPR 4.3
Eastwood's brittle-leaf manzanita	<i>Arctostaphylos crustacean</i> ssp. <i>eastwoodiana</i>	CRPR 1B.2
Gaviota tarplant	<i>Dienandra increscens</i> ssp. <i>villosa</i>	FE, SE, CRPR 1B.1
Hoffmann's sanicle	<i>Sanicula hoffmannii</i>	CRPR 4.3
Kellogg's horkelia	<i>Horkelia cuneata</i> var. <i>sericea</i>	CRPR 1B.1, G4, S1
La Graciosa thistle	<i>Cirsium scariosum</i> var. <i>loncholepis</i>	FE, ST, CRPR 1B.1
La Purisima manzanita	<i>Arctostaphylos purissima</i>	CRPR 1B.1
Lompoc ceanothus	<i>Ceanothus cuneatus</i> var. <i>fascicularis</i>	CRPR 4.2
Mesa horkelia	<i>Horkelia cuneata</i> var. <i>puberula</i>	CRPR 1B.1
Nipomo Mesa lupine	<i>Lupinus nipomensis</i>	FE, SE, CRPR 1B.1
Ocean bluff milk-vetch	<i>Astragalus nuttallii</i> var. <i>nuttallii</i>	CRPR 4.2
Pale-yellow layia	<i>Layia heterotricha</i>	CRPR 1B.1
Paniculate tarplant	<i>Deinandra paniculata</i>	CRPR 4.2
Point Reyes ceanothus	<i>Ceanothus gloriosus</i> var. <i>gloriosus</i>	CRPR 4.3
Red sand-verbena	<i>Abronia maritima</i>	CRPR 4.2
San Bernardino aster	<i>Symphyotrichum defoliatum</i>	CRPR 1B.2
San Luis mariposa lily	<i>Calochortus obispoensis</i>	CRPR 1B.2
San Luis Obispo monardella	<i>Monardella undulata</i> ssp. <i>undulata</i>	CRPR 1B.2, G2, S2
Sand almond	<i>Prunus fasciculata</i> var. <i>punctata</i>	CRPR 4.3
Sand mesa manzanita	<i>Arctostaphylos rudis</i>	CRPR 1B.2
Santa Margarita manzanita	<i>Arctostaphylos pilosula</i>	CRPR 1B.2
Seaside bird's-beak	<i>Cordylanthus rigidus</i> ssp. <i>littoralis</i>	SE, CRPR 1B.1
Seaside cistanthe	<i>Cistanthe maritima</i>	CRPR 4.2
Short-lobed broomrape	<i>Orobanche parishii</i> spp. <i>brachyloba</i>	CRPR 4.2
Small-flowered morning-glory	<i>Convolvulus simulans</i>	CRPR 4.2
South coast branching phacelia	<i>Phacelia ramosissima</i> var. <i>austrolitoralis</i>	CRPR 3.2
Southern curly-leaved monardella	<i>Monardella sinuate</i> ssp. <i>sinuata</i>	CRPR 1B.2
Straight-awned spineflower	<i>Chorizanthe rectispina</i>	CRPR 1B.3
Suffrutescent wallflower	<i>Erysimum suffretescens</i>	CRPR 4.2
Wildlife Species		
California red-legged frog	<i>Rana draytonii</i>	FT, SSC, G2, S2
Northern California legless lizard	<i>Anniella pulchra</i>	SSC, G3, S3
Blainville's (Coast) horned lizard	<i>Phrynosoma blainvillii coronatum</i>	SSC, G3, S3
Hoary bat	<i>Lasiurus cinereus</i>	WBWG Medium
Pallid bat	<i>Antrozous pallidus</i>	SSC, G5, S3
Townsend's big eared bat	<i>Corynorhinus townsendii</i>	SSC, G3G4, S2
Western red bat	<i>Lasiurus blossevillei</i>	SSC, G5, S3
Western snowy plover	<i>Charadrius alexandrinus nivosus</i>	FT, SSC, G3, S2

Listing Status:

ST – State listed Threatened

FT – Federally listed Threatened

SSC – CDFW Species of Special Concern

CRPR: California Native Plant Society Rare Plant Rank

1B – Rare, threatened, or endangered in CA and elsewhere

0.1 – Seriously endangered in California

0.2 – Fairly endangered in California

0.3 – Not very endangered in California

Global/State Rarity Ranking:

G1/S1 – Critically imperiled (often 5 or fewer populations)

G2/S2 – Imperiled. Very few populations (often 20 or fewer)

G3/S3 – Vulnerable. At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer)

G4/S4 – Apparently Secure. Uncommon but not rare

G5/S5 – Demonstrably Secure. Common; widespread and abundant

County Environmental Thresholds: Santa Barbara County's Environmental Thresholds and Guidelines Manual (2008) includes guidelines for the assessment of biological resource impacts. The following thresholds are applicable to this project:

Riparian Habitats: Project created impacts may be considered significant due to: direct removal of riparian vegetation; disruption of riparian wildlife habitat, particularly animal dispersal corridors and or understory vegetation; or intrusion within the upland edge of the riparian canopy leading to potential disruption of animal migration, breeding, etc. through increased noise, light and glare, and human or domestic animal intrusion; or construction activity which disrupts critical time periods for fish and other wildlife species.

Other Rare Habitat Types: The Manual recognizes that not all habitat-types found in Santa Barbara County are addressed by the habitat-specific guidelines. Impacts to other habitat types or species may be considered significant, based on substantial evidence in the record, if they substantially: (1) reduce or eliminate species diversity or abundance; (2) reduce or eliminate the quality of nesting areas; (3) limit reproductive capacity through losses of individuals or habitat; (4) fragment, eliminate, or otherwise disrupt foraging areas and/or access to food sources; (5) limit or fragment range and movement; or (6) interfere with natural processes, such as fire or flooding, upon which the habitat depends.

Impact Discussion: Project-related equipment and ground disturbance would primarily be confined to the ruderal/disturbed and bare sand habitats; however the project may result in direct and indirect impacts to riparian habitat (arroyo willows), and well as other rare habitat types (central dune scrub habitat) and the sensitive species they support during facility decommissioning. These impacts are described below.

- (a) The project may result in direct impacts to arroyo willows (e.g. trimming, removal, or accidental upset from equipment operation) adjacent to the existing sand wash station when the facility is decommissioned. No direct impacts to the riparian corridor of the Santa Maria River are expected.
- (b) The project may result in direct impacts to the central dune scrub habitat (silver lupine-mock heather community) located around the facilities and along the access road to the mine pit during removal of the road's clay base and decommissioning of the equipment.
- (c) Ground disturbance and decommission are likely to create fugitive dust, which may indirectly impact sensitive habitats and sensitive species.
- (d) The project may result in direct impacts to special-status plant species including Blochman's ragwort, crisp monardella, and surf thistle (e.g., crushed, removed, covered with sand, etc.). Blochman's ragwort comprises a significant amount of the dune scrub habitat in the project area and crisp monardella and surf thistle are adjacent to the access road to the mine pit.
- (e) The project may result in direct impacts to special-status reptile and amphibian species (e.g., injured or killed during initial demolition and regrading), if present within the limits of excavation.
- (f) The project may result in direct and indirect impacts to nesting birds if construction is to occur during the breeding season (February 1 through August 31). Direct impacts could occur through removal of vegetation supporting active nests. Noise, dust, and general activity associated with construction could result in nest abandonment.

Cumulative Impacts: Since the project would not significantly impact biological resources onsite, it would not have a cumulatively considerable effect on the County's biological resources.

Mitigation and Residual Impact: The following mitigation measures would reduce the project's biological resource impacts to a less than significant level.

Bio-01 Nesting Bird Surveys. To avoid disturbance of nesting birds, including raptorial species, protected by the Federal Migratory Bird Treaty Act (MBTA) and Sections 3503, 3503.5, and 3513 of the California Fish and Game Code (CFGF), the removal of vegetation, ground disturbance, exterior construction activities, and demolition shall occur outside of the bird nesting season (February 1 through August 31) whenever feasible. If these activities must occur during the bird nesting season, then a pre-construction nesting bird survey shall be performed by a County-qualified biologist. Pre-construction surveys for nesting birds shall occur within the area to be disturbed and shall extend outward from the disturbance area by 500 feet. The distance surveyed from the disturbance may be reduced if property boundaries render a 500-foot survey radius infeasible, or if existing disturbance levels within the 500-foot radius (such as from a major street or highway) are such that project-related activities would not disturb nesting birds in those outlying areas. If any occupied or active bird nests are found, a buffer shall be established and demarcated by the biologist with bright orange construction fencing, flagging, construction lathe, or other means to mark the boundary. The buffer shall be 300 feet for non-raptors and 500 feet for raptors, unless otherwise determined by the qualified biologist and approved by P&D. Buffer reductions shall be based on the known natural history traits of the bird species, nest location, nest height, existing pre-construction level of disturbance in the vicinity of the nest, and proposed construction activities. All construction personnel shall be notified as to the location of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground disturbing activities or vegetation removal shall occur within this buffer until the County-qualified biologist has confirmed that nesting is completed, the young have fledged and are no longer dependent on the nest, or the nest fails, and there is no evidence of a second nesting attempt; thereby determining the nest unoccupied or inactive. If birds protected under MBTA or CFGF are found to be nesting in construction equipment, that equipment shall not be used until the young have fledged and are no longer dependent on the nest, and there is no evidence of a second nesting attempt.

PLAN REQUIREMENTS AND TIMING: This condition shall be printed on project plans and Final Reclamation Plan submitted for Zoning Clearance.

If construction must begin within the nesting season, then the pre-construction nesting bird survey shall be conducted no more than one week (7 days) prior to commencement of vegetation removal, grading, or other construction activities. Active nests shall be monitored by the biologist at a minimum of once per week until it has been determined that the nest is no longer being used by either the young or adults, and there is no evidence of a second nesting attempt. Bird survey results and buffer recommendations shall be submitted to County Planning and Development for review and approval prior to commencement of grading or construction activities. The qualified biologist shall prepare weekly monitoring reports, which shall document nest locations, nest status, actions taken to avoid impacts, and any necessary corrective actions taken. Active nest locations shall be marked on an aerial map and provided to the construction crew on a weekly basis after each survey is conducted. Active nests shall not be removed without written authorization from USFWS and CDFW.

MONITORING: P&D shall be given the name and contact information for the biologist prior to initiation of the pre-construction survey. Permit Compliance and P&D staff shall review the survey report(s) for compliance with this condition prior to the commencement of ground-

disturbing activities and perform site inspections throughout the construction period to verify compliance in the field.

Bio-02 Pre-construction Survey. Conduct a pre-construction survey of the operations facilities and access road for special-status species prior to commencement of demolition and regarding. Surf thistle, crisp monardella, Blochman's ragwort, California red-legged frog, Blainville's horned lizard, and western snowy plover should be specifically targeted during the survey. The location and/or limits of rare plant occurrences and sensitive vegetation shall be clearly flagged, delineated, or fenced as necessary to prevent inadvertent damage during demolition/reclamation.

PLAN REQUIREMENTS AND TIMING: This condition shall be printed on project plans and Final Reclamation Plan submitted for Zoning Clearance.

Pre-construction survey results shall be submitted to County Planning and Development for review and approval prior to commencement of grading or construction activities. Survey shall indicate whether special-status species were identified, and their location and/or limits of occurrences.

MONITORING: P&D shall be given the name and contact information for the biologist prior to initiation of the pre-construction survey. Permit Compliance and P&D staff shall review the survey report(s) for compliance with this condition prior to the commencement of ground-disturbing activities.

Bio-03 Wildlife Relocation. Capture and relocate any wildlife found (with the exception of California red-legged frog and nesting birds) to suitable habitat beyond the affected area. If California red-legged frogs are found within the work area, (considered highly unlikely) the USFWS and CDFW should be consulted regarding any necessary avoidance measures (e.g. morning inspections of the work area, installation of exclusion barriers around active work zones). Any special-status wildlife species observed in the project area shall not be physically relocated without permission from the CDFW or the USFWS, as appropriate. To the extent practical, common wildlife species entering the construction zone shall be captured and relocated to suitable habitat.

PLAN REQUIREMENTS AND TIMING: This condition shall be printed on project plans and Final Reclamation Plan submitted for Zoning Clearance.

The Owner/Applicant shall submit a report of relocated wildlife to Permit Compliance and P&D staff for review and approval.

MONITORING: Permit Compliance and P&D staff shall review the survey report(s) for compliance with this condition.

Bio-04 Worker Environmental Awareness Training. Conduct a worker environmental awareness training, overseen by a County-approved biologist, for all contractors which emphasizes the presence of special-status species within or adjacent to the project area, identification of those species, their habitat requirements, applicable regulatory policies and provisions regarding their protection, measures being implemented to avoid and/or minimize impacts, and penalties for noncompliance. If new members of the crew arrive after the initial orientation meeting, they shall attend a subsequent training prior to working on the job. No staging of equipment or construction supplies shall occur prior to the tailgate meeting.

PLAN REQUIREMENTS AND TIMING: This condition shall be printed on project plans and Final Reclamation Plan submitted for Zoning Clearance.

The Owner/Applicant shall submit a training record to Permit Compliance and P&D staff for review and approval prior to commencement of grading or construction activities.

MONITORING: Permit Compliance and P&D staff shall review the training report(s) for compliance with this condition prior to the commencement of ground-disturbing activities.

Bio-05 Limits and Delineation. Limit all construction equipment to the use of designated access roads, staging areas, and/or previously identified work areas.

PLAN REQUIREMENTS AND TIMING: This condition shall be printed on project plans and Final Reclamation Plan submitted for Zoning Clearance.

MONITORING: Permit Compliance and P&D staff shall perform site inspections throughout the construction period to verify compliance in the field.

Bio-06 Equipment Storage-Construction. The Owner/Applicant shall designate one or more construction equipment filling and storage areas within the designated work areas to contain spills, facilitate cleanup and proper disposal, and prevent contamination from discharging to the storm drains, street, drainage ditches, creeks, or wetlands. The areas shall be no larger than 50 x 50 foot unless otherwise approved by P&D and shall be located at least 100 feet from any storm drain, waterbody or sensitive biological resources.

PLAN REQUIREMENTS AND TIMING: This condition shall be printed on project plans and Final Reclamation Plan submitted for Zoning Clearance. The Owner/Applicant shall install the area prior to commencement of construction.

MONITORING: P&D compliance monitoring staff shall ensure compliance prior to and throughout construction.

Bio-07 Erosion and Sediment Control Plan. Where required by the latest edition of the California Green Code and/or Chapter 14 of the Santa Barbara County Code, a Storm Water Pollution Prevention Plan (SWPPP), Storm Water Management Plan (SWMP) and/or an Erosion and Sediment Control Plan (ESCP) shall be implemented as part of the project. Grading and erosion and sediment control plans shall be designed to minimize erosion during construction and shall be implemented for the duration of the grading period and until re-graded areas have been stabilized by structures, long-term erosion control measures or permanent landscaping. The Owner/Applicant shall submit the SWPPP, SWMP or ESCP) using Best Management Practices (BMP) designed to stabilize the site, protect natural watercourses/creeks, prevent erosion, convey storm water runoff to existing drainage systems keeping contaminants and sediments onsite. The SWPPP or ESCP will be reviewed for its technical merits by P&D. Information on Erosion Control requirements can be found on the County web site re: Grading Ordinance Chapter 14¹ Erosion and Sediment Control Plan Requirements; and in the California Green Code for SWPPP (projects < 1 acre) and/or SWMP requirements.

PLAN REQUIREMENTS AND TIMING: This condition shall be printed on project plans and Final Reclamation Plan submitted for Zoning Clearance.

The grading and SWPPP, SWMP and/or ESCP shall be submitted for review and approved by P&D prior to approval of the Zoning Clearance. The plan shall be designed to address erosion, sediment and pollution control during all phases of development of the site until all disturbed areas are permanently stabilized.

The SWPPP requirements shall be implemented prior to the commencement of grading and throughout the year. The ESCP/SWMP requirements shall be implemented between November 1st and April 15th of each year, except pollution control measures shall be implemented year round.

MONITORING: P&D staff shall perform site inspections throughout the construction phase.

¹ <http://sbcountyplanning.org/building/grading.cfm>

Bio-08 Excavations. Cover all open excavations will be covered at the end of each work day. If this is not feasible, escape ramps will be installed in the pits to ensure no entrapment of animals occur.

PLAN REQUIREMENTS AND TIMING: This condition shall be printed on project plans and Final Reclamation Plan submitted for Zoning Clearance.

MONITORING: P&D staff shall perform site inspections throughout the construction phase.

Bio-09 Habitat Restoration. The Owner/Applicant shall submit for P&D approval a Restoration Plan prepared by a P&D-approved biologist and designed to provide vegetative cover for final reclaimed surfaces if natural revegetation is not evident within the first three years following cessation of mining. The Owner/Applicant shall revise the Restoration Plan listed in the Reclamation Plan in sufficient detail to ensure that the site is returned to pre-operations conditions, and include the following components:

- a. Restoration shall be with native dune species such as silver beachweed, yarrow, common sandaster, beach blue lupine, lizard tail, mock heather, and dune ragwort, at a density of 20 native perennials per 5 x 5 meter plot, species richness of three species of native perennials per 5 x 5 meter plot, and species cover of 40% of area covered per 5 x 5 meter plot.
- b. Species shall be from locally obtained plants and seed stock.
- c. Measures to prevent incidental damage to native vegetation during demolition.
- d. A conceptual plan for recontouring/regrading the operations area once equipment, foundations, and structures are removed.
- e. A strategy for monitoring areas within 500 feet of the processing plant and 100 feet of the access road and mine pit for Cal-IPC “moderate” or “high” category invasive weed species.
- f. Prescriptions for seeding and/or planting the processing area to promote re-establishment of native dune vegetation.
- g. A description of maintenance actions to ensure survival following the initial seeding and planting.
- h. Interim and final performance criteria for measuring progress and eventual attainment of restoration objectives.
- i. A system of monitoring and reporting to track revegetation progress.
- j. Contingencies (remedial actions) to be implemented if revegetation progress fails to meet interim objectives.

PLAN REQUIREMENTS AND TIMING: The Final Restoration Plan shall be submitted to P&D prior to issuance of Zoning Clearance. The Owner/Applicant shall update the SMARA Financial Assurance Mechanism (a performance security) to ensure restoration objectives prior to Final Inspection Clearance and maintenance for five years.

MONITORING: The Owner/Applicant shall demonstrate to P&D compliance monitoring staff that all required components of the approved plan(s) are in place as required prior to Final Inspection Clearance and maintained throughout the maintenance period. P&D compliance monitoring staff signature is required to release the installation security upon satisfactory installation of all items in approved plans and maintenance security upon successful implementation of this plan.

Bio-10 Surface Decompaction. Surfaces subject to compaction from mining operations shall be decompacted (ripped) to aid in the establishment of native vegetation. Clay, silt, or rock materials removed from the access road and processing plant during reclamation shall be placed into the sand pit for disposal. The sand road, in particular, shall be decompacted, and any base materials placed on the sand road by Gordon Sand shall be removed and placed in the sand pit. Decompaction of the road and removal of the base materials shall be done to the County's satisfaction. To ensure compliance, the applicant shall arrange for P&D staff to observe the decompaction of the sand road.

PLAN REQUIREMENTS AND TIMING: This condition shall be printed on project plans and Final Reclamation Plan submitted for Zoning Clearance.

MONITORING: P&D staff shall perform site inspections throughout the construction phase.

Bio-11 Material Disposal. Clay and silt from the desilting basin which has been spread on the sand road as a stabilizer shall be removed from the portion of the road which crosses the vegetated area. This material, and that remaining in the desilting basin at the time of closure, shall be disposed of in the sand pit prior to decompaction activities. Any other rock materials used by Gordon Sand Company to stabilize the road shall also be disposed of in the sand pit. To ensure compliance, the applicant shall provide photo-documentation of the removal of this material and arrange for an inspection by P&D.

PLAN REQUIREMENTS AND TIMING: This condition shall be printed on project plans and Final Reclamation Plan submitted for Zoning Clearance.

MONITORING: P&D staff shall perform site inspections throughout the construction phase.

References:

Storrer Environmental Services, 2019. *Biological Resources Assessment for the Gordon Sand Mine Decommissioning/Reclamation Project, Guadalupe, Santa Barbara County, California*. July 2019.

WRA Environmental Consultants (WRA), 2019. Gordon Sand Mine Biological Assessment. February 5, 2019.

2017. *Gordon Sand Mine Biological Assessment*. December 20, 2017.

4.5 CULTURAL RESOURCES

Will the proposal:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. Cause a substantial adverse change in the significance of any object, building, structure, area, place, record, or manuscript that qualifies as a historical resource as defined in CEQA Section 15064.5?			X		
b. Cause a substantial adverse change in the significance of a prehistoric or historic archaeological resource pursuant to CEQA Section 15064.5?			X		
c. Disturb any human remains, including those located outside of formal cemeteries?			X		
d. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in the Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: 1) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or 2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.			X		

Existing Setting: For at least the past 10,000 years, the area that is now Santa Barbara County has been inhabited by Chumash Indians and their ancestors. As described in the Environmental Impact Study No. 73-EIS-4 for the Guadalupe Dunes Sand Facility, the dune area extending from Point Sal northward to the vicinity of Oceano is reported to contain large numbers of archaeological sites, especially near the mouth of the Santa Maria River. Several sites have been recorded in the surrounding area, including the “Ten Commandments” archaeological site, a plaster and wood movie set from 1923 which intersects the northern portion of the project site. The archaeological site contains alternatively exposed and buried wind-deflated cultural deposits. The sand pit is approximately 1,000 feet from the mean high tide line, and offers a buffer of 200 feet from the archaeology site. It was determined in Environmental Impact Study No.

73-EIS-4, that operations would have no immediate negative impact on any archaeological or historic resources in the area (73-EIS-4, Pages 13 – 15).

On April 2, 2019, a formal notification of application completeness for the proposed project was sent to Julie Tumamait-Stenslie, Chair of the Barbareno/Ventureno Band of Mission Indians. The notice provided notification of the opportunity for consultation under AB 52, and included a description of the proposed project. No reply was received and no tribal cultural resources (TCRs) were identified on the subject parcel.

County Environmental Thresholds: Chapter 8 of the Santa Barbara County Environmental Thresholds and Guidelines Manual (County of Santa Barbara 2018) contains guidelines for the identification, significance evaluation, and mitigation of impacts to cultural resources, including archaeological, historic, and tribal cultural resources. In accordance with the requirements of CEQA, these guidelines specify that if a resource cannot be avoided, it must be evaluated for importance under specific CEQA criteria. CEQA Section 15064.5(a)(3)A-D contains the criteria for evaluating the importance of archaeological and historic resources. Generally, a resource shall be considered by the lead agency to be “historically significant” if the resource meets the significance criteria for listing in the California Register of Historical Resources: (A) Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage; (B) Is associated with the lives of persons important in our past; (C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or (D) Has yielded, or may be likely to yield, information important in prehistory or history. The resource also must possess integrity of at least some of the following: location, design, setting, materials, workmanship, feeling, and association. For archaeological resources, the criterion usually applied is (D).

CEQA calls cultural resources that meet these criteria “historical resources”. Specifically, a “historical resource” is a cultural resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources, or included in or eligible for inclusion in a local register of historical resources, as defined in subdivision (k) of Section 5020.1, or deemed significant pursuant to criteria set forth in subdivision (g) of Section 5024.1. As such, any cultural resource that is evaluated as significant under CEQA criteria, whether it is an archaeological resource of historic or prehistoric age, a historic built environment resource, or a tribal cultural resource, is termed a “historical resource”.

CEQA Guidelines Section 15064.5(b) states that “a project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.” As defined in CEQA Guidelines Section 15064.5(b), substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired. The significance of an historical resource is materially impaired when a project: (1) demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; (2) demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources; or (3) demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

For the built environment, a project that follows the Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior’s Standards for Rehabilitation and

Guidelines for Rehabilitating Historic Buildings (Weeks and Grimmer 1995), is generally considered as mitigated to a less than a significant impact level on the historical resource.

Impact Discussion: The archaeological site associated with the 1923 Ten Commandments movie set was identified on the northern portion of the project site and does not qualify as a potentially significant cultural resource (“historical resource”) under CEQA as it does not serve to provide important information to prehistory or history.

The sand pit begins approximately 1,000 feet from the mean high tide line, and offers a 200 foot buffer from the identified archeological site. The existing Conditional Use Permit No. 77-CP-66 for the mining operation states that protection shall be provided to the archaeological site when excavating near the area. There are existing markers surrounding the perimeter of the sand pit that would remain in place to maintain the 200 foot buffer from the identified archeological site. Once daily operations have ceased, the sand pit would resume the natural processes of wind-blown sand movement, and no excavation or backfilling is proposed. These processes would eliminate the evidences of the operations in the sand removal area by eroding, depositing, and generally smoothing the contours of the sand. Therefore, reclamation activities are not expected to encroach into the archaeological site.

As a result, the proposed project would not cause a substantial adverse change in the significance of any historical resource, cause a substantial adverse change in the significance of a prehistoric or historic archaeological resource, disturb any human remains, or cause a substantial adverse change in the significance of a tribal cultural resource.

In order to comply with cultural resource policies, the project would be conditioned with a standard archaeological discovery clause which requires that any previously unidentified cultural resources discovered during construction are treated in accordance with the County’s Cultural Resources Guidelines [Chapter 8 of the County’s Environmental Thresholds and Guidelines Manual (rev.2/2018)]. Impacts would be less than significant.

Cumulative Impacts: Since the project would not significantly impact cultural resources, it would not have a cumulatively considerable effect on the County’s cultural resources with implementation of the mitigation measures described below.

Mitigation and Residual Impact: The following mitigation measures would reduce the project’s cultural resource impacts to a less than significant level:

CulRes-01 Stop Work at Encounter. The Owner/Applicant and/or their agents, representatives or contractors shall stop or redirect work immediately in the event archaeological remains are encountered during grading, construction, landscaping or other construction-related activity. The Owner/Applicant shall immediately contact P&D staff, and retain a P&D approved archaeologist and Native American representative to evaluate the significance of the find in compliance with the provisions of the County Archaeological Guidelines and conduct appropriate mitigation funded by the Owner/Applicant.

PLAN REQUIREMENTS: This condition shall be printed on project plans and the Final Reclamation Plan submitted for Zoning Clearance.

MONITORING: P&D permit processing planner shall check plans prior to issuance of the Zoning Clearance, and P&D compliance monitoring staff shall spot check in the field throughout grading and construction.

With the incorporation of this measure, residual impacts would be less than significant.

4.6 ENERGY

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. Substantial increase in demand, especially during peak periods, upon existing sources of energy?			X		
b. Requirement for the development or extension of new sources of energy?			X		

Existing Setting: An existing Pacific Gas and Electric power pole provides service to the project area. Upon reclamation, the power pole would remain in-place if allowed under the zoning in effect at the time. If needed, the Applicant would contact Pacific Gas and Electric to remove the onsite power pole with transformer and any appurtenances. Reclamation operations would utilize diesel-fueled equipment.

County Environmental Thresholds: The County's Environmental Thresholds and Guidelines Manual does not contain significance thresholds for electrical and/or natural gas service impacts (County of Santa Barbara 2018). Private electrical and natural gas utility companies provide service to customers in Central and Southern California, including the unincorporated areas of Santa Barbara County.

Impact Discussion: The scope of the project is too small to substantially affect energy demand or energy resources. There would be no substantial increase in demand upon existing sources of energy, nor new sources of energy for reclamation; therefore impacts are less than significant.

Cumulative Impacts: The project's contribution to the regionally significant demand for energy is not considerable, and is therefore less than significant.

Mitigation and Residual Impact: No mitigation is required. Residual impacts would be less than significant.

4.7 FIRE PROTECTION

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. Introduction of development into an existing high fire hazard area?			X		
b. Project-caused high fire hazard?			X		
c. Introduction of development into an area without adequate water pressure, fire hydrants or adequate access for fire fighting?			X		
d. Introduction of development that will hamper fire prevention techniques such as controlled burns or backfiring in high fire hazard areas?			X		
e. Development of structures beyond safe Fire Dept. response time?			X		

Existing Setting: The project area is considered a high fire hazard area, in a "moderate severity" zone. The processing plant area contains flammable materials such as a diesel fuel pump and 500-gallon diesel tank, a 2,500-gallon liquid propane tank, and a 300-gallon waste oil tank. Reclamation would include earthmoving equipment containing diesel fuel and lubricants. All equipment and tanks would be emptied and removed upon reclamation. The project is served by the Guadalupe Fire Department, Station 2 in Guadalupe, and has adequate access for purposes of fire response.

County Environmental Thresholds: The following County Fire Department standards are applied in evaluating impacts associated with the proposed project:

- The emergency response thresholds include Fire Department staff standards of one on-duty firefighter per 4,000 persons (generally 1 engine company per 12,000 people, assuming three firefighters/station). The emergency response time standard is approximately 5-6 minutes.
- Water supply thresholds include a requirement for 750 gpm at 20 psi for all single family dwellings.
- The ability of the County's engine companies to extinguish fires (based on maximum flow rates through hand held line) meets state and national standards assuming a 5,000 square foot structure. Therefore, in any portion of the Fire Department's response area, all structures over 5,000 square feet are an unprotected risk (a significant impact) and therefore should have internal fire sprinklers.
- Access road standards include a minimum width (depending on number of units served and whether parking would be allowed on either side of the road), with some narrowing allowed for driveways. Cul-de-sac diameters, turning radii and road grade must meet minimum Fire Department standards based on project type.
- Two means of egress may be needed and access must not be impeded by fire, flood, or earthquake. A potentially significant impact could occur in the event any of these standards is not adequately met.

Impact Discussion: Predictions about the long-term effects of global climate change in California include increased incidence of wildfires and a longer fire season, due to drier conditions and warmer temperatures. Any increase in the number or severity of wildfires has the potential to impact resources to fight fires when they occur, particularly when the state experiences several wildfires simultaneously. Such circumstances place greater risk on development in high fire hazard areas.

Reclamation activities would not involve the introduction of development into a high fire hazard area. Instead, it would include the removal of all such development at the site including storage tanks for diesel fuel and vehicular lubricants. The project would not involve development in an area without adequate water resources/access, nor development that would hamper fire prevention or development of structures beyond safe fire department response time.

Adequate storage and handling procedures in compliance with County Fire Department and Environmental Health standard regulations as identified in Section 4.9 would ensure that fire hazard impacts would be less than significant.

Cumulative Impacts: Since the project would not create significant fire hazards, it would not have a cumulatively considerable effect on fire safety within the County.

Mitigation and Residual Impact: No mitigation measures are required. Project impacts on fire hazard would be less than significant.

4.8 GEOLOGIC PROCESSES

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. Exposure to or production of unstable earth conditions such as landslides, earthquakes, liquefaction, soil creep, mudslides, ground failure (including expansive, compressible, collapsible soils), or similar hazards?			X		
b. Disruption, displacement, compaction or overcovering of the soil by cuts, fills or extensive grading?			X		
c. Exposure to or production of permanent changes in topography, such as bluff retreat or sea level rise?			X		
d. The destruction, covering or modification of any unique geologic, paleontologic or physical features?			X		
e. Any increase in wind or water erosion of soils, either on or off the site?			X		
f. Changes in deposition or erosion of beach sands or dunes, or changes in siltation, deposition or erosion which may modify the channel of a river, or stream, or the bed of the ocean, or any bay, inlet or lake?			X		
g. The placement of septic disposal systems in impermeable soils with severe constraints to disposal of liquid effluent?				X	
h. Extraction of mineral or ore?				X	
i. Excessive grading on slopes of over 20%?			X		
j. Sand or gravel removal or loss of topsoil?			X		
k. Vibrations, from short-term construction or long-term operation, which may affect adjoining areas?			X		
l. Excessive spoils, tailings or over-burden?			X		

Existing Setting: The project area is an existing mining operation that extracts, washes, dries, stockpiles, and packages sand. There is no overburden or topsoil removed or stockpiled. Reclamation of the site would return the area to naturally occurring sand dunes, and extraction of sand would cease. The reclaimed sand pit would be finished at a 2:1 horizontal to vertical slope, and any stockpiles of sand would be leveled. Over time, areas where sand was extracted and stockpiled would be leveled by natural windblown processes.

County Environmental Thresholds: Pursuant to the County's Adopted Thresholds and Guidelines Manual, impacts related to geological resources may have the potential to be significant if the proposed project involves any of the following characteristics:

1. The project site or any part of the project is located on land having substantial geologic constraints, as determined by P&D or PWD. Areas constrained by geology include parcels located near active or potentially active faults and property underlain by rock types associated with compressible/collapsible soils or susceptible to landslides or severe erosion. "Special Problems" areas designated by the Board of Supervisors have been established based on geologic constraints, flood hazards and other physical limitations to development.

2. The project results in potentially hazardous geologic conditions such as the construction of cut slopes exceeding a grade of 1.5 horizontal to 1 vertical.
3. The project proposes construction of a cut slope over 15 feet in height as measured from the lowest finished grade.
4. The project is located on slopes exceeding 20% grade.

Impact Discussion:

- a. Potential to Result in Geologic Hazards. The project site is not underlain by any known fault. However, there is always the possibility of ground shaking during an earthquake. No other geologic hazards have been identified.
- b, c and i. Potential for Grading-Related Impacts. Minor grading would be involved during reclamation to remove structures and equipment and to leave the site in a clean and orderly state. Existing stockpiles would be leveled and silt from the onsite silt pond would be distributed across the plant area. No extensive grading is proposed. No permanent changes in topography are proposed. No excessive grading on slopes over 20% is proposed.
- c. Exposure to Rising Sea Level. Predictions about the long-term effects of global climate change include rising sea levels due to the melting of glaciers and thermal expansion. Rising sea-levels caused by global climate change could increase the rate of coastal-bluff retreat due to scouring of the base of bluffs. Although the exact rate of potential sea level rise cannot be determined, the Intergovernmental Panel on Climate Change² predicts that sea levels could possibly rise between 50 and 90 centimeters (approximately 1.6-to-3 feet) by the year 2100. Although the project does involve lands near sea level, the sand pit is approximately 1,000 – 3,000 feet inland from the Pacific Ocean and would not be excavated below 52 feet above sea level at final reclamation. Therefore, even if these rates of sea level rise are realized, the excavation area would remain well above sea level within that planning horizon. In addition, the access road is approximately 3,000 – 5,700 feet from the Pacific Ocean, and the processing plant area is located approximately 5,700 – 6,300 feet from the Pacific Ocean. Given these distances from the shoreline, the site location is adequately set back from coastal erosion.
- d. Physical Features. The project would not destruct, cover, or modify any unique geological, paleontologic, or physical feature.
- e, f. Potential Erosion and Sedimentation Impacts. Minor grading operations that would occur on the project site during reclamation would remove vegetative cover and disturb the ground surface, thereby increasing the potential for erosion and sedimentation impacts. Upon reclamation, extraction of sand would cease and depositions would be filled with windblown sand over time. The potential for the project to cause substantial erosion and sediment transport would be adequately mitigated by the County's standard erosion control and drainage requirements implemented during site activities. Thus, impacts would be less than significant with mitigation.
- g. Septic Systems. The project would not result in the use of septic systems.

² The Intergovernmental Panel on Climate Change is a scientific intergovernmental body set up by the World Meteorological Organization (WMO) and by the United Nations Environment Programme (UNEP).

- h, j, k, l. **Other Potential Geological Hazards.** The project is limited to existing sand mining operations and reclamation activities. The extraction of sand is an existing permitted activity. Upon reclamation, extraction/removal of sand would cease, and all stockpiles would be leveled. Vibrations from short-term construction activities during reclamation would not affect adjoining areas. The nearest residences are sufficiently distant that they would not be affected by vibrations associated with machinery necessary for reclamation.

Cumulative Impacts: Since the project would not result in significant geologic impacts after mitigation, and geologic impacts are typically localized in nature, it would not have a cumulatively considerable effect on geologic hazards within the County.

Mitigation and Residual Impact: No mitigation measures are required. Project impacts on geologic processes would be less than significant.

4.9 HAZARDOUS MATERIALS/RISK OF UPSET

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. In the known history of this property, have there been any past uses, storage or discharge of hazardous materials (e.g., fuel or oil stored in underground tanks, pesticides, solvents or other chemicals)?			X		
b. The use, storage or distribution of hazardous or toxic materials?			X		
c. A risk of an explosion or the release of hazardous substances (e.g., oil, gas, biocides, bacteria, pesticides, chemicals or radiation) in the event of an accident or upset conditions?			X		
d. Possible interference with an emergency response plan or an emergency evacuation plan?			X		
e. The creation of a potential public health hazard?			X		
f. Public safety hazards (e.g., due to development near chemical or industrial activity, producing oil wells, toxic disposal sites, etc.)?			X		
g. Exposure to hazards from oil or gas pipelines or oil well facilities?				X	
h. The contamination of a public water supply?			X		

Existing Conditions: A 500 gallon diesel tank and fuel pump, a 2,500 gallon liquid propane tank, and a 300 gallon waste oil tank are present at the site, along with diesel fuel and lubricants used in plant, mining, and reclamation equipment. In addition, existing mining equipment and structures are operational onsite.

County Environmental Threshold: The County's safety threshold addresses involuntary public exposure from projects involving significant quantities of hazardous materials. The threshold addresses the likelihood and severity of potential accidents to determine whether the safety risks of a project exceed significant levels.

Impact Discussion: Equipment involved in the mining operation could constitute a potentially significant public safety hazard if allowed to remain in the area of a public park; however, all equipment and structures would be removed during reclamation.

There is no evidence of past contamination of the site due to hazardous materials use or hazardous waste. Operations do not store, use, or handle any EPA-designated Extremely Hazardous Materials Chemical Substances, or any mixture containing an EPA Extremely Hazardous Substance in any amount. All fuel tanks and equipment would be removed during reclamation, leaving no hazardous materials onsite.

The risk of exposure to the public or contamination of the site or area water supply from hazardous materials is negligible because the public is not allowed on site; the nearest residences are more than 3,000 feet away; the amount of material is relatively low; and all storage would be accomplished in accordance with the requirements of the Fire Department. The project is not expected to interfere with emergency response access because it is located in a rural area, away from residences and public places. No oil exploration or oil extraction activity is known to have occurred on the project site, nor are major pipelines present. The reclamation activities at the site do not involve actions that could significantly impact local groundwater resources that would in turn affect drinking water supplies.

Cumulative Impacts: Since the project would not create significant impacts with respect to hazardous materials and/or risk of upset, it would not have a cumulatively considerable effect on safety within the County.

Mitigation and Residual Impact: No mitigation measures are required. Project impacts on hazardous materials/risk of upset would be less than significant.

4.10 LAND USE

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. Structures and/or land use incompatible with existing land use?			X		
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?			X		
c. The induction of substantial growth or concentration of population?			X		
d. The extension of sewer trunk lines or access roads with capacity to serve new development beyond this proposed project?				X	
e. Loss of existing affordable dwellings through demolition, conversion or removal?				X	
f. Displacement of substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X	
g. Displacement of substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X	
h. The loss of a substantial amount of open space?				X	

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
i. An economic or social effect that would result in a physical change? (i.e. Closure of a freeway ramp results in isolation of an area, businesses located in the vicinity close, neighborhood degenerates, and buildings deteriorate. Or, if construction of new freeway divides an existing community, the construction would be the physical change, but the economic/social effect on the community would be the basis for determining that the physical change would be significant.)			X		
j. Conflicts with adopted airport safety zones?				X	

Existing Setting: The project site is located in the Coastal Zone within the Santa Maria Valley Rural Region. Zoning includes RES-30 (Resource Management) and REC (Recreation). Comprehensive Plan designations for the project parcels include mining, parks, beaches, and sand dunes. Existing land uses in the vicinity include open land and agriculture uses.

County Environmental Thresholds: The County's Environmental Thresholds and Guidelines (County of Santa Barbara 2018) contains no specific thresholds for land use. Generally, a potentially significant impact can occur if a project would result in substantial growth-inducing effects or result in a physical change in conflict with County policies adopted for the purpose of avoiding or mitigating an environmental effect.

Impact Discussion: The proposed project does not cause a physical change that conflicts with adopted environmental policies or regulations. The project is not growth inducing, and does not result in the loss of affordable housing, loss of open space, or a significant displacement of people. The project does not involve the extension of a sewer trunk line, and does not conflict with any airport safety zones. The project is compatible with existing land uses.

The Conservation Element of the County Comprehensive Plan contains very general policy language regarding the extraction of mineral resources, as follows:

Mineral resource extraction in the County makes a relatively important contribution to the local, state, and national economies, and, as such, should be encouraged. At the same time, every effort should be made to minimize direct and indirect adverse environmental impacts, and to achieve and maintain federal and State standards of emissions controls and environmental quality. Much already has been done by the County to achieve these goals, the oil drilling ordinances and the air and water pollution control regulations being prime examples. However, the County and the cities should continue to push for necessary environmental safeguards, as well as to encourage exploration for new resource sites. To meet these general objectives, the County and the cities should adopt the following policies on mineral resource extraction:

In addition to the relevant policies within this Element, all proposed surface mining operations shall be required to be consistent with the policies contained in the other elements of the Santa Barbara County Comprehensive General Plan, all relevant sections of the Santa Barbara County Code, and all relevant sections of State law.

Under provisions of the Surface Mining and Reclamation Act of 1975, the County must adopt ordinances to establish procedures for the review of site reclamation plans and issuance of permits to conduct surface mining operations. Within one year after State geologists map areas of mineral

deposits, the County must establish resource management policies for incorporation into the Comprehensive Plan. The Board of Supervisors on October 23, 1978, adopted Ordinance No. 3065 (Case No. 77-0A-33), amending Santa Barbara County Zoning Ordinance No. 661 relative to surface mining operations and reclamation plan requirements. The State has not yet mapped County mineral resources.

The County, in cooperation with responsible federal and State agencies, should undertake a study to evaluate its mineral resources, particularly rock, sand, and gravel, to determine how to protect and exploit them to meet future needs without adverse environmental impacts. The Comprehensive Plan then should be examined in light of the new information gleaned from this analysis, and revisions of the plan made as necessary to achieve maximum compatibility of mineral resource extraction programs with other planned land uses. The results of studies of offshore oil drilling also should be considered in this analysis.

The reclamation of mined land is required by the Surface Mining and Reclamation Act (SMARA) and Santa Barbara County Code. The proposed project is consistent with State and County codes and guidelines would be compatible with existing land uses on the site and in the project area.

Mitigation and Residual Impact: No mitigation measures are required. Project impacts on land use would be less than significant.

4.11 NOISE

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. Long-term exposure of people to noise levels exceeding County thresholds (e.g. locating noise sensitive uses next to an airport)?			X		
b. Short-term exposure of people to noise levels exceeding County thresholds?			X		
c. Project-generated substantial increase in the ambient noise levels for adjoining areas (either day or night)?			X		

Setting/Threshold: Noise is generally defined as unwanted or objectionable sound which is measured on a logarithmic scale and expressed in decibels (dB(A)). The duration of noise and the time period at which it occurs are important values in determining impacts on noise-sensitive land uses. The Community Noise Equivalent Level (CNEL) and Day-Night Average Level (L_{dn}) are noise indices which account for differences in intrusiveness between day- and night-time uses. County noise thresholds are: 1) 65 dB(A) CNEL maximum for exterior exposure, and 2) 45 dB(A) CNEL maximum for interior exposure of noise-sensitive uses. Noise-sensitive land uses include: residential dwellings; transient lodging; hospitals and other long-term care facilities; public or private educational facilities; libraries, churches; and places of public assembly.

The proposed project site is located outside of 65 dB(A) noise contours for roadways, public facilities, airport approach and take-off zones, and there are no nearby noise-sensitive uses.

Impact Discussion: The proposed project consists of post-mining reclamation activities which would involve the temporary and short-term use of heavy equipment and associated noise. The noise generated onsite from reclamation activities would not exceed County thresholds or substantially increase ambient noise levels in adjoining areas. There are no noise sensitive uses on or near the project site, and no offsite sensitive receptors within 1,600 feet. Impacts would be less than significant.

Cumulative Impacts: The implementation of the project is not anticipated to result in any substantial noise effects. Therefore, the project would not contribute in a cumulatively considerable manner to noise impacts.

Mitigation and Residual Impact: No mitigation measures are required. Project impacts on noise would be less than significant.

4.12 PUBLIC FACILITIES

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. A need for new or altered police protection and/or health care services?				X	
b. Student generation exceeding school capacity?				X	
c. Significant amounts of solid waste or breach any national, state, or local standards or thresholds relating to solid waste disposal and generation (including recycling facilities and existing landfill capacity)?				X	
d. A need for new or altered sewer system facilities (sewer lines, lift-stations, etc.)?				X	
e. The construction of new storm water drainage or water quality control facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X	

Existing Setting: Public services include law enforcement, fire protection, schools, library, solid waste management, water, wastewater, and specialized facilities such as landfills and jails. The project does not contain any public services. The nearest law enforcement location is the Guadalupe Police Department at 4490 10th Street in Guadalupe, approximately four miles northeast of the project site. Section 4.7, Fire Protection, addresses fire hazards and protection, and Section 4.13 addresses potential impacts to recreation uses.

County Environmental Thresholds: A significant level of school impacts is generally considered to occur when a project would generate sufficient students to require an additional classroom. A project is considered to result in significant impacts to landfill capacity if it would generate 196 tons per year of solid waste (operational). This volume represents 5% of the expected average annual increase in waste generation, and is therefore considered a significant portion of the remaining landfill capacity. In addition, construction and demolition waste from new construction, remodels, and demolition/rebuilds is considered significant if it exceeds 350 tons. A project that generates between 40 and 196 tons per year of solid waste is considered to have an adverse cumulative effect on solid waste generation, and mitigation via a Solid Waste Management Plan is recommended. According to Appendix G for the 2019 State *CEQA Guidelines*, a project may have a significant adverse impact of public services if it would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need of new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services.

Impact Discussion: The proposed project is the continuation of an existing mining use and associated reclamation and does not include residences, businesses, or other new land uses that would result in additional population to the area, including new residents or students. The project would not have a significant impact on existing police protection or health care services. Existing service levels would be sufficient to serve the proposed project. The proposed project would not generate solid waste in excess of

County thresholds. The project would not cause the need for new or altered sewer system facilities as it is already in the service district, and the district has adequate capacity to serve the project.

Mitigation and Residual Impact: No impacts are identified. No mitigation is necessary.

4.13 RECREATION

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. Conflict with established recreational uses of the area?				X	
b. Conflict with biking, equestrian and hiking trails?				X	
c. Substantial impact on the quality or quantity of existing recreational opportunities (e.g., overuse of an area with constraints on numbers of people, vehicles, animals, etc. which might safely use the area)?				X	

Existing Setting: W Main Street, which is directly adjacent to the project site, has a long-established recreational use for access to the beach and the Rancho Guadalupe Dunes Preserve, a County Park and nature preserve. However, the project site is not part of the preserve, and no restrooms, bicycle paths, trails, or other public facilities existing within or near the project site. In addition, no safe, legal access exists to the beach from the project site.

County Environmental Thresholds: The County's *Environmental Thresholds and Guidelines Manual* (County of Santa Barbara, 2018) contains no thresholds for park and recreation impacts. The Board of Supervisors has established a minimum standard ratio of 4.7 acres of recreation/open space per 1,000 people to meet the needs of a community. The County Parks Department maintains more than 900 acres of parks and open spaces, as well as 84 miles of trails and coastal access easements.

Impact Discussion: The project site is located on both private land and County-owned property which has no existing or designated public access, recreation use, or trails. Because the project involves only mining reclamation activities, it has no potential to impact other recreational facilities or affect recreational needs of the area.

Mitigation and Residual Impact: No impacts are identified. No mitigation is necessary.

4.14 TRANSPORTATION/CIRCULATION

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. Generation of substantial additional vehicular movement (daily, peak-hour, etc.) in relation to existing traffic load and capacity of the street system?			X		
b. A need for private or public road maintenance, or need for new road(s)?			X		
c. Effects on existing parking facilities, or demand for new parking?			X		
d. Substantial impact upon existing transit systems (e.g. bus service) or alteration of present patterns of circulation or movement of people and/or goods?			X		
e. Alteration to waterborne, rail or air traffic?			X		

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
f. Increase in traffic hazards to motor vehicles, bicyclists or pedestrians (including short-term construction and long-term operational)?			X		
g. Inadequate sight distance?			X		
ingress/egress?			X		
general road capacity?			X		
emergency access?			X		
h. Impacts to Congestion Management Plan system?			X		

Existing Setting: The project site is located in the County of Santa Barbara adjacent to the City of Guadalupe. The regional transportation network mostly consists of State Routes 1 and 166 (W Main Street), with local residential and commercial streets centered in Guadalupe's downtown. The only access to the project site is via W Main Street, a two lane road west of the intersection of State Route 1 and State Route 166.

County Environmental Thresholds: According to the County's Environmental Thresholds and Guidelines Manual, a significant traffic impact would occur when:

- a. The addition of project traffic to an intersection increases the volume to capacity (V/C) ratio by the value provided below, or sends at least 15, 10 or 5 trips to an intersection operating at LOS D, E or F.

LEVEL OF SERVICE (including project)	INCREASE IN VOLUME/CAPACITY GREATER THAN
A	0.20
B	0.15
C	0.10
	Or the addition of:
D	15 trips
E	10 trips
F	5 trips

- b. Project access to a major road or arterial road would require a driveway that would create an unsafe situation, or would require a new traffic signal or major revisions to an existing traffic signal.
- c. Project adds traffic to a roadway that has design features (e.g., narrow width, road side ditches, sharp curves, poor sight distance, inadequate pavement structure) or receives use which would be incompatible with substantial increases in traffic (e.g. rural roads with use by farm equipment, livestock, horseback riding, or residential roads with heavy pedestrian or recreational use, etc.) that would become potential safety problems with the addition of project or cumulative traffic. Exceeding the roadway capacity designated in the Circulation Element may indicate the potential for the occurrence of the above impacts.
- d. Project traffic would utilize a substantial portion of an intersection(s) capacity where the intersection is currently operating at acceptable levels of service (A-C) but with cumulative traffic would degrade to or approach LOS D (V/C 0.81) or lower. Substantial is defined as a minimum

change of 0.03 for intersections which would operate from 0.80 to 0.85 and a change of 0.02 for intersections which would operate from 0.86 to 0.90, and 0.01 for intersections operating at anything lower.

Impact Discussion: Traffic generated by reclamation activities would consist of employee and contractor home-work trips, and truck trips associated with the removal and off-site haul of equipment and structures. A maximum of five employees would present onsite during reclamation activities. Estimated employee and contractor trip rates during favorable weather are six am peak hour trips arriving at the site, and six pm peak hour trips exiting the site. In this case, project traffic would not impact a street or intersection that is operation at a LOS D, E, or F, and the project would constitute a negligible fraction of the capacity of area roadways and intersections. The project does not propose unsafe driveways; impede pedestrian, bicycle, or transit access; nor would it otherwise cause or exacerbate an unsafe traffic condition. The project therefore would not have a significant impact related to traffic.

- a. Potential Impacts to the Street System. The proposed project would generate approximately twelve average daily vehicle trips. The addition of this traffic onto roadways in the project area would not result in significant traffic or other transportation related impacts.
- b. Need for New Roads or Road Maintenance. Traffic that would be generated by the project would not result in significant impacts to public streets that would require new roads or a significant amount of increased roadway maintenance.
- c. Parking. The proposed project would be required to provide all required parking spaces on-site, and out of the road right-of-way.
- d, e. Transit. The proposed project would not result in significant transit- or transportation-related impacts.
- f, g. Traffic Hazards and Emergency Access. The project would not create a traffic hazard for motorists, pedestrians, bicyclists, or transit users, or affect emergency access. The additional traffic caused by the project would not result in significant traffic safety impacts.
- h. Congestion Management Plan. Roadways and intersections in the project area operate at acceptable levels of service and are not subject to Congestion Management Plan requirements.

Cumulative Impacts: The County's Environmental Thresholds were developed, in part, to define the point at which a project's contribution to a regionally significant impact constitutes a significant effect at the project level. In this instance, the project has been found not to exceed the threshold of significance for traffic. Therefore, the project's contribution to the regionally significant traffic congestion is not considerable, and is less than significant.

Mitigation and Residual Impact: No mitigation is required. Project impacts on circulation, traffic, and traffic safety would be less than significant.

4.15 WATER RESOURCES/FLOODING

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. Changes in currents, or the course or direction of water movements, in either marine or fresh waters?				X	
b. Changes in percolation rates, drainage patterns or the rate and amount of surface water runoff?			X		

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
c. Change in the amount of surface water in any water body?			X		
d. Discharge, directly or through a storm drain system, into surface waters (including but not limited to wetlands, riparian areas, ponds, springs, creeks, streams, rivers, lakes, estuaries, tidal areas, bays, ocean, etc) or alteration of surface water quality, including but not limited to temperature, dissolved oxygen, turbidity, or thermal water pollution?			X		
e. Alterations to the course or flow of flood water or need for private or public flood control projects?				X	
f. Exposure of people or property to water related hazards such as flooding (placement of project in 100 year flood plain), accelerated runoff or tsunamis, sea level rise, or seawater intrusion?			X		
g. Alteration of the direction or rate of flow of groundwater?				X	
h. Change in the quantity of groundwater, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations or recharge interference?				X	
i. Overdraft or over-commitment of any groundwater basin? Or, a significant increase in the existing overdraft or over-commitment of any groundwater basin?				X	
j. The substantial degradation of groundwater quality including saltwater intrusion?				X	
k. Substantial reduction in the amount of water otherwise available for public water supplies?			X		
l. Introduction of storm water pollutants (e.g., oil, grease, pesticides, nutrients, sediments, pathogens, etc.) into groundwater or surface water?			X		

Existing Setting: The proposed project is located on an existing mining site. The project area is located in an area of minimal flood hazard as designated by the FEMA Flood Map Service Center. There are no waters or wetland features on the property. The Santa Maria River is located outside of the project area on the north side of W Main Street, approximately 50 feet to the north. An ephemeral drainage is located east of the facility entrance, and conveys flow from adjacent agricultural fields to the Santa Maria River.

County Environmental Thresholds:

Water Resources: A project is determined to have a significant effect on water resources if it would exceed established threshold values which have been set for each overdrafted groundwater basin. These values were determined based on an estimation of a basin's remaining life of available water storage. If the project's net new consumptive water use [total consumptive demand adjusted for recharge less discontinued historic use] exceeds the threshold adopted for the basin, the project's impacts on water resources are considered significant.

A project is also deemed to have a significant effect on water resources if a net increase in pumpage from a well would substantially affect production or quality from a nearby well.

Water Quality: A significant water quality impact is presumed to occur if the project:

- Is located within an urbanized area of the county and the project construction or redevelopment individually or as a part of a larger common plan of development or sale would disturb one (1) or more acres of land;
- Increases the amount of impervious surfaces on a site by 25% or more;
- Results in channelization or relocation of a natural drainage channel;
- Results in removal or reduction of riparian vegetation or other vegetation (excluding non-native vegetation removed for restoration projects) from the buffer zone of any streams, creeks or wetlands;
- Is an industrial facility that falls under one or more of categories of industrial activity regulated under the NPDES Phase I industrial storm water regulations (facilities with effluent limitation; manufacturing; mineral, metal, oil and gas, hazardous waste, treatment or disposal facilities; landfills; recycling facilities; steam electric plants; transportation facilities; treatment works; and light industrial activity);
- Discharges pollutants that exceed the water quality standards set forth in the applicable NPDES permit, the Regional Water Quality Control Board's (RWQCB) Basin Plan or otherwise impairs the beneficial uses³ of a receiving water body;
- Results in a discharge of pollutants into an "impaired" water body that has been designated as such by the State Water Resources Control Board or the RWQCB under Section 303 (d) of the Federal Water Pollution Prevention and Control Act (i.e., the Clean Water Act); or
- Results in a discharge of pollutants of concern to a receiving water body, as identified by the RWQCB.

Impact Discussion: The project would create minor amounts of additional storm water runoff as a result of reclamation activities. Construction activities such as grading could also potentially create temporary runoff and erosion problems. Adherence with SMARA performance standards 3704 and 3706 and the application of standard County grading, erosion, and drainage-control measures would ensure that no significant increase of erosion or storm water runoff would occur.

Hazardous materials would be removed from the site, leaving no tanks, equipment, or material onsite. Reclamation activities would not present a significant potential for release of waterborne pollutants and would be highly unlikely to create a public health hazard.

Predictions about the long-term effects of global climate change include rising sea levels due to melting of glaciers and thermal expansion. Rising sea levels could increase the incidence of flooding in coastal areas with altitudes at or near sea-level. Although the exact rate of future sea level rise is unknown, the Intergovernmental Panel on Climate Change has estimated that sea levels may rise between 50 and 90 centimeters (approximately 1.6-to-3 feet) by the year 2100.⁴ Although the project does involve lands near sea level, the sand pit, which is nearest to the Ocean, is approximately 1,000 – 3,000 feet inland from the Pacific Ocean and would not be excavated below 52 feet above sea level. Therefore, even if these rates of

³ Beneficial uses for Santa Barbara County are identified by the Regional Water Quality Control Board in the Water Quality Control Plan for the Central Coastal Basin, or Basin Plan, and include (among others) recreation, agricultural supply, groundwater recharge, fresh water habitat, estuarine habitat, support for rare, threatened or endangered species, preservation of biological habitats of special significance.

⁴ The Intergovernmental Panel on Climate Change is a scientific intergovernmental body set up by the World Meteorological Organization (WMO) and by the United Nations Environment Programme (UNEP).

sea level rise are realized, the excavation area would remain well above sea level within that planning horizon.

Cumulative Impacts: The County's Environmental Thresholds were developed, in part, to define the point at which a project's contribution to a regionally significant impact constitutes a significant effect at the project level. In this instance, the project has been found not to exceed the threshold of significance for water resources. Therefore, the project's contribution to the regionally significant issues of water supplies and water quality is not considerable, and is less than significant.

Mitigation and Residual Impact: No mitigation is required. Project impacts on water resources would be less than significant.

Resources:

FEMA Flood Map Service Center. Available at: <https://msc.fema.gov/portal/home>. Accessed September 2020.

5.0 INFORMATION SOURCES

5.1 County Departments Consulted

Police, Fire, Public Works, Flood Control, Parks, Environmental Health, Special Districts,
Regional Programs, Other : _____

5.2 Comprehensive Plan

_____ Seismic Safety/Safety Element	<u>X</u> Conservation Element
_____ Open Space Element	_____ Noise Element
<u>X</u> Coastal Plan and Maps	_____ Circulation Element
_____ ERME	_____

5.3 Other Sources

<u>X</u> Field work	_____ Ag Preserve maps
_____ Calculations	<u>X</u> Flood Control maps
<u>X</u> Project plans	<u>X</u> Other technical references (reports, survey, etc.)
_____ Traffic studies	<u>X</u> Planning files, maps, reports
<u>X</u> Records	_____ Zoning maps
_____ Grading plans	<u>X</u> Soils maps/reports
_____ Elevation, architectural renderings	<u>X</u> Plant maps
_____ Published geological map/reports	<u>X</u> Archaeological maps and reports
_____ Topographical maps	_____ Other

6.0 PROJECT SPECIFIC (*short- and long-term*) AND CUMULATIVE IMPACT SUMMARY

6.1 SIGNIFICANT UNAVOIDABLE IMPACTS

The proposed project would not result in any significant and unavoidable impacts.

6.2 SIGNIFICANT BUT MITIGABLE IMPACTS

The proposed project may result in the following significant impacts; however, implementation of the identified mitigation measures would reduce impacts to a less-than-significant level.

Aesthetics. The project may result in the following impacts, which would be mitigated by Mitigation Measures Aes-01.

- Visually incompatible structures

Air Quality. The project may result in the following impacts, which would be mitigated by Mitigation Measure Air-01:

- Extensive dust generation

Biological Resources. The project may result in the following impacts, which would be mitigated by Mitigation Measures Bio-01 through Bio-11.

- A loss or disturbance to a unique, rare or threatened plant community
- A reduction in the numbers or restriction in the range of any unique, rare or threatened species of plants
- A reduction in the extent, diversity, or quality of native vegetation (including brush removal for fire prevention and flood control improvements)
- A deterioration of existing fish or wildlife habitat (for foraging, breeding, roosting, nesting, etc.)
- Introduction of any factors (light, fencing, noise, human presence and/or domestic animals) which could hinder the normal activities of wildlife

6.3 CUMULATIVE IMPACTS

Cumulative impacts are defined as two or more individual effects which, when considered together are considerable, or which compound or increase other environmental impacts. Under Section 15064 of the CEQA Guidelines, the lead agency (Santa Barbara County Planning and Development Department) must identify cumulative impacts, determine their significance and determine if the effects of the project are cumulatively considerable. Cumulative impacts have been addressed under each issue area. As discussed therein, the proposed project would not result in cumulatively considerable contributions to cumulative impacts.

7.0 MANDATORY FINDINGS OF SIGNIFICANCE

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
1. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, contribute significantly to greenhouse gas emissions or significantly increase energy consumption, or eliminate important examples of the major periods of California history or prehistory?		X			
2. Does the project have the potential to achieve short-term to the disadvantage of long-term environmental goals?				X	
3. Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects and the effects of probable future projects.)			X		
4. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		X			
5. Is there disagreement supported by facts, reasonable assumptions predicated upon facts and/or expert opinion supported by facts over the significance of an effect which would warrant investigation in an EIR ?				X	

- 1. Less than significant with mitigation.** As detailed in Section 4.4 *Biological Resources*, reclamation would have the potential to cause disturbance to biological resources. With implementation of Mitigation Measures Bio-01 through Bio-11, which require biological training, surveys, delineation, monitoring, and proper material disposal, the potential impacts would be reduced to less-than-significant levels. Therefore, the potential to substantially degrade the quality of the environment would be less than significant with mitigation incorporated under the proposed project.
- 2. No Impact.** The project is designed to reclaim an existing mining site, as required under SMARA. The project does not have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals. No impact would occur.
- 3. No Impact.** As discussed in Sections 4.1 through 4.15, the project would have impacts that are individually limited to the project area, but are not cumulatively considerable. This impact would be less than significant.
- 4. Less than significant with mitigation.** In general, impacts to human beings are associated with such issues as air quality, hazards and hazardous materials, and noise impacts. As detailed in Section 4.3a

Air Quality, reclamation would have the potential to generate extensive dust. With implementation of Mitigation Measure Air-01, which requires implementation of the County's and SBCAPCD's dust control measures, the potential impacts would be reduced to less-than-significant-levels. Therefore, impacts to human beings would be less than significant with mitigation incorporated under the proposed project.

5. **No Impact.** There is no known disagreement supported by facts or any reasonable assumptions predicated upon facts and/or expert opinion supported by facts over the significance of an effect which would warrant investigation in an EIR.

8.0 PROJECT ALTERNATIVES

Pursuant to CEQA, project alternatives are only required for projects which would result in significant and inmitigable impacts to the environment. Any potentially significant impacts resulting from the proposed project could be mitigated to less than significant impacts. Therefore, no project alternatives were considered.

9.0 INITIAL REVIEW OF PROJECT CONSISTENCY WITH APPLICABLE SUBDIVISION, ZONING AND COMPREHENSIVE PLAN REQUIREMENTS

9.1.1 Land Use Designation

Consistent. The proposed project is consistent with minimum lot size requirements and proposes allowable, or conditionally allowable, uses.

9.1.2 Land Use Development Policy #4

Prior to issuance of a use permit, the County shall make the finding, based on information provided by environmental documents, staff analysis, and the applicant, that adequate public or private services and resources (i.e., water, sewer, roads, etc.) are available to serve the proposed development. The applicant shall assume full responsibility for costs incurred as a result of the proposed project. Lack of public or private services or resources shall be grounds for denial of the project or reduction in the density otherwise indicated in the land use plan.

Consistent.

- Water: Proposed service by existing on-site well.
- Sewer: Existing portables and the private wastewater system would continue to be used.
- Roads: The project site would be accessed via existing driveways off West Main Street.
- Fire: Fire Protection service would be provided by the Guadalupe Fire Department and County Fire.

9.1.3 Hillside and Watershed Protection Policies:

Consistent. Plans for site reclamation would re-contour and replant the site to appear natural and minimize the perceived alteration of the natural terrain.

9.1.4 Visual Resources Policy #2:

In areas designated as rural on the land use plan maps, the height, scale, and design of structures shall be compatible with the character of the surrounding natural environment, except where technical requirements dictate otherwise. Structures shall be subordinate in appearance to natural landforms; shall be designed to follow the natural contours of the landscape; and shall be sited so as not to intrude into the skyline as seen from public viewing places.

Consistent. The existing mining activity is visible from West Main Street. No new structures are proposed. Reclamation would remove all structures and equipment from the project site, and return mined land to a condition that looks natural and to a condition that would not be offensive from public viewing points.

10.0 RECOMMENDATION BY P&D STAFF

On the basis of the Initial Study, the staff of Planning and Development:

- ☐ Finds that the proposed project WILL NOT have a significant effect on the environment and, therefore, recommends that a Negative Declaration (ND) be prepared.
- ☒ Finds that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures incorporated into the REVISED PROJECT DESCRIPTION would successfully mitigate the potentially significant impacts. Staff recommends the preparation of an ND. The ND finding is based on the assumption that mitigation measures will be acceptable to the applicant; if not acceptable a revised Initial Study finding for the preparation of an EIR may result.
- ☐ Finds that the proposed project MAY have a significant effect on the environment, and recommends that an EIR be prepared.
- ☐ Finds that from existing documents (previous EIRs, etc.) that a subsequent document (containing updated and site-specific information, etc.) pursuant to CEQA Sections 15162/15163/15164 should be prepared.

Potentially significant unavoidable adverse impact areas:

☐ With Public Hearing ☒ Without Public Hearing

PREVIOUS DOCUMENT: 90-ND-64, 73-EIS-4

PROJECT EVALUATOR: Jacquelynn Ybarra, Planner

DATE: September 11, 2020

11.0 DETERMINATION BY ENVIRONMENTAL HEARING OFFICER

- ☒ I agree with staff conclusions. Preparation of the appropriate document may proceed.
☐ I DO NOT agree with staff conclusions. The following actions will be taken:
☐ I require consultation and further information prior to making my determination.

SIGNATURE:  INITIAL STUDY DATE: September 11, 2020

SIGNATURE:  NEGATIVE DECLARATION DATE: September 11, 2020

SIGNATURE: _____ REVISION DATE: _____

SIGNATURE: _____ FINAL NEGATIVE DECLARATION DATE: _____

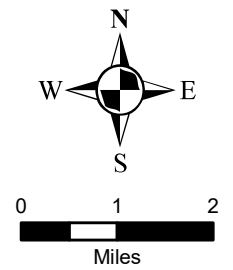
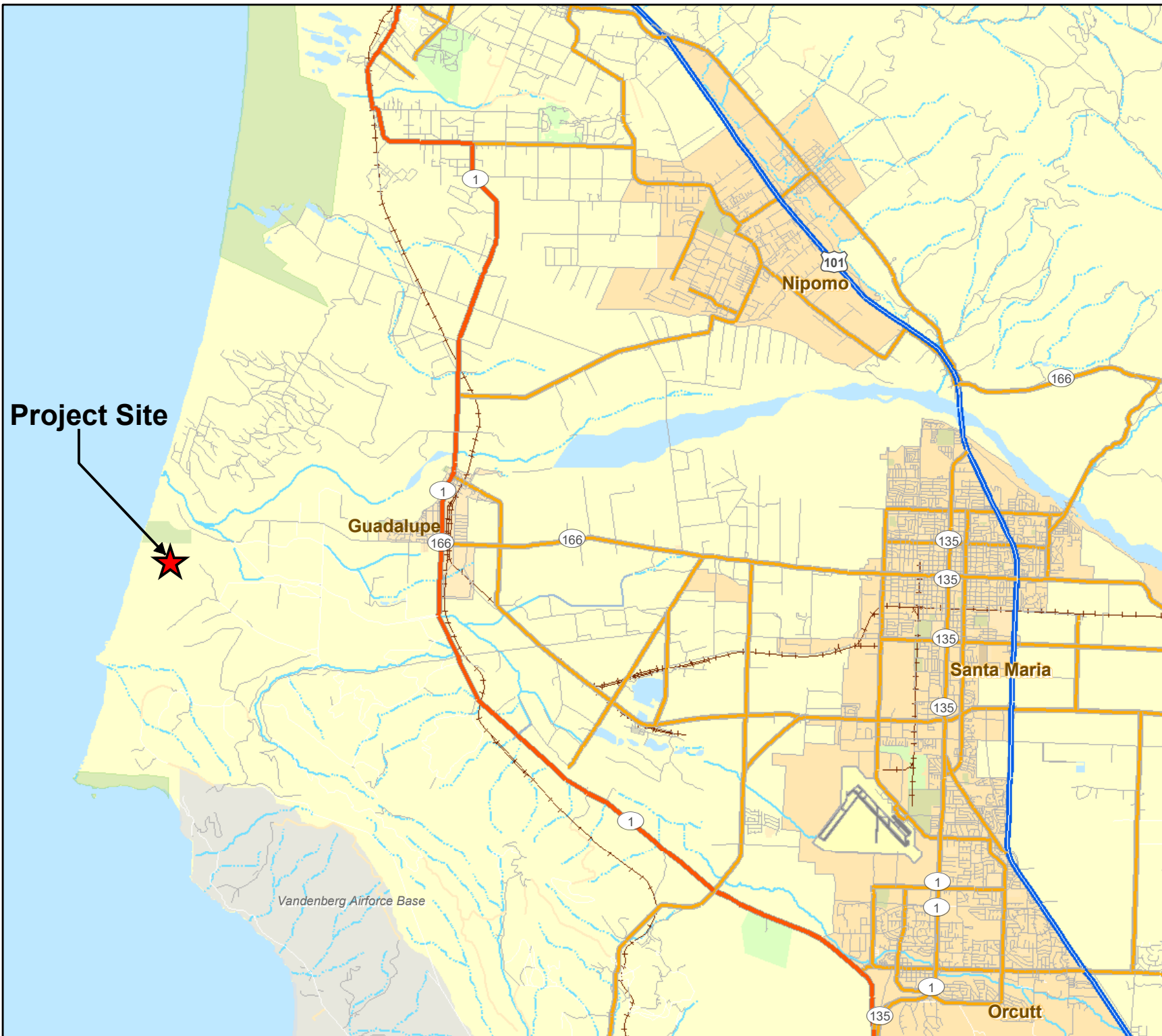
12.0 ATTACHMENTS

1. Vicinity Map
2. Site Plan
3. Reclamation Plan Amendment for Gordon Sand Company, EnviroMINE, Inc., June 16, 2020
4. Biological Resources Assessment for the Gordon Sand Mine Decommissioning/Reclamation Project, Storrer Environmental Services, July 2019
5. Air Quality Calculations from CalEEMod Appendix D

Attachment 1

Vicinity Map

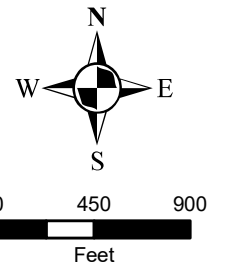
Figure 1
Vicinity Map
Gordon Sand





Attachment 2

Site Plan

Figure 2
Location Map
Gordon Sand



-  APN Boundaries
-  Exist. Haul Road

Attachment 3

Reclamation Plan Amendment

RECLAMATION PLAN AMENDMENT
FOR
GORDON SAND COMPANY

GUADALUPE DUNES / GUADALUPE AREA
SANTA BARBARA COUNTY, CALIFORNIA

FILE NO. 90-RP-002
CA Mine ID# 91-42-0002

UPDATED: 06/16/20
ORIGINAL: APRIL 16, 1990

Updated by:

Gordon Sand Company
P.O. Box 4157
Hayward CA 94540

FORWARD

This Reclamation Plan Amendment is submitted in accordance with the requirements of the State of California "Surface Mining and Reclamation Act of 1975" (SMARA), Public Resources Code § 2770 *et seq.*, and Santa Barbara County Code.

SMARA requires that all surface mining operations "reclaim" mined lands to a condition which allows post-mining land uses upon termination of surface mining activities and, as such, surface mining operations are required to have a Reclamation Plan approved by the Lead Agency.

It should be noted that this is currently an active mine operation and that the daily operations of Gordon Sand Company are currently monitored by the County of Santa Barbara under a Conditional Use Permit No. 77 -CP-66 (originally 72-CP-114). The permit's criteria will be addressed in a subsequent section.

The following report in its entirety will constitute a Reclamation Plan for the GORDON SAND COMPANY as outlined in SMARA. SMARA Section 2770 identifies the minimum information requirements for inclusion in a Reclamation Plan. Section 2772 (b) further identifies the need for an index listing the location of the specific information requirements, as follows:

§ 2772 (b) The reclamation plan shall include a chart identifying the page number, chapter, appendix, or other specific location in the reclamation plan where content meeting the requirements, as applicable, of Sections 2772, 2773, and 2773.3 and Article 1 (commencing with Section 3500) and Article 9 (commencing with Section 3700) of Subchapter 1 of Chapter 8 of Division 2 of Title 14 of the California Code of Regulations, is located.

The following table identifies the location of each required element of the Reclamation Plan.

Content Requirement	Location Reference	
	Section/Appendix	Page(s) No.
PRC 2772 (c)		
Operator Name and address.	LC	4
Names and addresses of persons designated as an agent for the service of process.	I.D	5
Quantity and type of minerals to be mined	11.B.4.F	10
Proposed dates of mine initiation and termination.	II.B.4.F	10
Maximum anticipated depth of the surface mining.	11.B.4.F	10
Reclamation Plan map(s) with appropriate information	Attachment A	
A description of and plan for the type of surface mining to be employed.	II.8 .4 . D	8
Time schedule that provides for the completion of surface mining on each segment of the mined lands so that reclamation can be initiated at the earliest possible time on portions of the mined lands not subject to further disturbance by mining.	II.B.4.E	9
Proposed use or potential uses of the mined lands	III.C.2	16
Evidence that all owners of a possessory interest in the land have been notified of the proposed use or potential uses.	III.C.2	16
Description of the manner in which reclamation, adequate for the proposed use or potential uses, will be accomplished. To include: a. Description of how known contaminants will be controlled and mining waste will be disposed. b. Description of the manner in which affected streambed channels and stream banks will be rehabilitated to minimize erosion and sedimentation.	III.A - III.C	12
Assessment of the effect of implementation of the reclamation plan on future mining in the area.	III.A Scenario "C"	13

Content Requirement	Location Reference	
	Section / Appendix	Page(s) No.
Statement that the person submitting the reclamation plan accepts responsibility for reclaiming the mined lands in accordance with the reclamation plan.	111.E	18
Other information required		
PRC 2772.1		
Information , document, or component of a Document prepared as part of a permit application for the surface mining operation or as part of an environmental document prepared for the project shall be incorporated into the reclamation plan or amendment used to satisfy the requirements shall be referenced by Appendix and page number.	Attachment A - Reclamation Plan	
PRC 2773(b) - Reclamation Standards		
Wildlife habitat.	III.C .6	17
Backfilling, re-grading, slope stability, and re-contouring.	III.C .2	16
Revegetation .	III.C.3	16
Drainage, diversion structures, waterways, and erosion control.	11.B.4.K	13
Prime and other agricultural land reclamation.	N/ A - Sand Dunes	
Building, structure, and equipment removal .	III.C .2	14
Stream protection.	N/A	
Topsoil salvage, maintenance, and redistribution	III.C.4	17
Tailing and mine waste management.	III.C.5	17

INTRODUCTION

I.A. Purpose

The purpose of this Reclamation Plan is to propose an additional 100 years of continued sand mining and processing operations, consistent with the existing reclamation plan and CUP. There will be no change to the existing mining operation, which will continue to extract up to 60,000 tons annually from the 31.4-acre mining area (APN 113-020-09). Also, this amendment will not include an increase to the intensity of sand processing at the existing plant (APN 113-020-13).

This Reclamation Plan has been prepared in conformance with applicable County and State Guidelines.

Under the California Surface Mining and Reclamation Act of 1975 (SMARA) (Public Resources Code Section 2719 *et seq.*), all extractive operations are required to have a Reclamation Plan approved by the Lead Agency. A reclamation plan defines the activities to be carried out when extraction has been completed at a particular site. The extracted land must be returned to a useful, approved alternative purpose.

LB. Scope of Content

According to Surface Mining and Reclamation Act of 1975 (SMARA), a reclamation plan is required to propose a subsequent use for the site after the site's mining operation is terminated. The proposed subsequent use should:

- a). create no danger to public health & safety;
- b). give consideration to values relating to recreation, watershed, wildlife, range and forage, and aesthetic enjoyment,
- c). represent a legal agreement between the mine operator, his heirs or successors, and the lead agency who has been determined by the state of California to be the County of Santa Barbara.

The Reclamation Plan, consisting of this written document, exhibits, maps, tables and plan, etc., will provide a description of the manner in which reclamation, adequate for the proposed end use, will be accomplished at the termination of the mining operation.

I.C. OWNERSHIP OF GORDON SAND COMPANY - GUADALUPE DIVISION

Gordon Sand Company - Guadalupe Division, A.P.N. 113-020-09 is currently owned by:

GORDON SAND COMPANY, a California Corporation
P.O. Box 4157
Hayward, CA 94540
Attn: Salud Arellano-Gordon

I.D. PREPARATION OF THE REPORT

This plan was originally prepared by:

SID GOLSTIEN - CIVIL ENGINEER.
650 ALAMO PINTADO ROAD SUITE 302
SOLVANG, CALIF. 91463
1-805-688-1526
contact: Sid Goldstien RCE 33042 or
Michael (Mike) Manus

and has been updated by:

EnviroMINE, Inc.
3511 Camino Del Rio South, Suite 403
San Diego, CA 92108
(619) 284-8515

II.

CURRENT AND HISTORICAL DATA

II.A. Project Description

II.A. 1. Project Location and Description

Gordon Sand company - Guadalupe Division site is located within the area known as the "Guadalupe Sand Dunes" approximately 3.75 miles west of the town of Guadalupe. Access to the site is westerly via Main Street. (see Figure 1: Vicinity Map). The sand mining area is identified as Assessor's Parcel Number 113-020-09 and consists of approximately 31.42 acres±4. The sand processing plant is located on a portion of Assessor's Parcel 113-020-13.

II.A.2. Legal Description

A portion of LOT 161 of the Subdivision of the Rancho Guadalupe recorded in Book "B" of Miscellaneous Maps at Page 420 filed in the Office of the County Recorder, County of Santa Barbara, State of California; Being more precisely shown in Record of Survey Book 83, at Page 75 per said records..

II.A.3. Lease Area

The sand processing plant is located on an unrecorded lease agreement area of approximately 7 acres of A.P.N. 113-020-13. (see Figure 2: Location Map)

NOTE: An area of approximately 1.05 acres lies 340 feet, more or less, north of the sand pit. This area was leased by SHELL OIL CO. and is "NOT-A-PART" of this project

H.B. Project Characteristics

II-B. 1. Components

A.P.N. 113-020-09 is a 300 foot wide parcel of land extending east from the mean high tide line 4,600 feet. The sand removal area is located within this parcel only.

The sand processing plant is located on an unrecorded lease agreement area of approximately 7 acres of A.P.N. 113 -0 20 -13 .

These two areas comprise Gordon Sand Company - Guadalupe Division. (see Figure 2: Location Map).

11.B.2. Current Zoning

A.P.N. 113-020-09 (31.42 ACRES±) is currently zoned RES-30 (Resource Management)

A.P.N. 113-020-013 (18.53 ACRES+) is currently zoned REC (Recreation)

A.P.N. 113-020-020 (79.50 ACRES+) is currently zoned RES-30 (Resource Management)

A.P.N 113-020-021 (488 ACRES+) is currently zoned RES-30 (Resource Management)

II.B.3. Comprehensive Plan

A.P.N. 113-020-09 (31.42 ACRES+) is currently designated “mining”

A.P.N. 113-020-013(18.53 ACRES+) is currently designated “parks”

A.P.N. 113-020-20 (79.50 ACRES+) is currently designated “beaches, sand dunes”

A.P.N. 113-020-21 (488 ACRES+) is currently designated “beaches, sand dunes”

11.B.4. History of Site

II.B.4.A. General Information

A.P.N. 113-020-09 (sand pit extraction site) consists of 2 visually distinct areas. The most easterly 500 feet of the 300 feet wide by 4,600 foot long parcel contains vegetation indigenous to these coastal dunes. The remaining 4,100 feet of the parcel to the mean high tide line contains sand. The sand pit area is surrounded on the east, west, and south perimeters by semi-permanent type markers at 50-foot intervals, or less, and outside the area within 3,000 feet of the mean high tide line.

The sand processing plant is located on an unrecorded lease agreement area of approximately 7 acres of A.P.N. 113-020-13. The processing plant consists of the following:

Sand wash plant, dry plant, turf plant, bulk bag system, sacking system, pump house, power room, scale, scale house, work shop, office, diesel fuel pump and 500-gallon diesel tank, 8,000-gallon water tank, 2,500-gallon liquid propane tank, 300 gallon waste oil tank and two 966 front-end loaders, two forklifts, equipment storage area. Two storage containers of parts and tools, two storage containers of packaging materials, one container of miscellaneous and one container for quality control.

The actual sand pit area is connected to the processing area by an approximately 3,200 foot long private roadway which traverses Assessor's Parcels 113-020-20 and -21. (A majority of the road width was installed by Shell Oil Company and will be reclaimed by that company under the supervision of the County of Santa Barbara). Gordon Sand Company will continue to use their vested "sand road" until the pit budget is exhausted and the GSCo Reclamation Plan has to be completed.

The sites, as noted above, outside the vegetated area and the uses of excavation, harvesting, quarrying, mining, extraction, processing, storage, packaging, loading, and related activities of sand removal, were first established in 1967 and has continued to the present under a succession of amended permits issued by the County of Santa Barbara. The current permit 77-CP-66 was updated June 11, 1985 and is monitored yearly by the County of Santa Barbara for compliance with conditions as set forth in said permit.

11.B.4.B. Permit Information

In the permit processes that the County of Santa Barbara required for allowing Gordon Sand Company rights to related activities of sand removal, certain conditions were imposed and required to be monitored yearly. Of these conditions, the following directly affect the implementation of the Reclamation Plan:

1. The removal of sand shall be limited to that portion of property described as Assessor's Parcel# 113-020-09 on Exhibit 1 to the applicant's application of this Conditional Use Permit. (now on file with the County Of Santa Barbara) The Exhibit is further identified as Planning Commission Exhibit No.1, February 15, 1978, 77-CP-66.
2. Within each year of this permit, no more than 60,000 tons of sand shall be removed from the premises. At the end of each year of operation, under this permit, permittee shall furnish to the County of Santa Barbara an annual report of tonnage excavated and removed from the premises.
3. A single archaeological site is located at the southwestern edge of the sand excavation site, about 700 feet inland from the beach at the north edge of a dune depression. Protection shall be provided to such site when excavating near such area.
4. The depths of the excavation pits shall not be excavated below elevation 52 feet above sea level. All elevations to be based upon existing bench mark monuments on the property with the identical datum used for preparing Exhibit #4 (topographic map).

11.B.4.C. Environmental Impact Study

An approved Environmental Impact Study was prepared for 72-CP-114 (the original case number) in January 1973 and is on file with the County of Santa Barbara Resource Management Department. The study is entitled:

ENVIRONMENTAL IMPACT STUDY GUADALUPE DUNES SAND FACILITY

Prepared by: **M.B. Johnson Associates , Inc,**
Economics and Environmental Consultants
115 East Victoria Street
Santa Barbara, Ca. 93101

11.B.4.D. Project Plant Operations

In general, the sand processing operations at Guadalupe consist of the following:

Mining Sand:

An articulated dump truck and/or a front-end loader takes a load of unprocessed damp sand from the Mine to the Upper Wet Plant.

Washing Sand:

At the Upper Wet Plant, a front-end loader feeds a sand hopper above the wash plant. The sand is slurried with well water, through the Upper Wash Plant where less than 1% clay is separated from the sand. The wet sand is sent, as a slurry of sand with attached clay and water, by gravity pipeline to the Lower Wet Plant.

At the Lower Wet Plant, the slurry discharges into a Sand Separator where the water and clay are separated from the sand. The sand "Unders" continue to a Stacker for drainage and storage. The water and clay Unders discharge by gravity to a Split Chamber Slurry Pump Tank, to the Slurry Pump, on to the Hydro Cone wherein most of the remaining sand is separated from the water and deposited back into the discharge chute of the sand Unders from the Sand Separator. The water Overs, clay and water are returned to the Slurry Pump Tank Second Chamber and discharged by gravity to the Feed Chamber of the pond.

At the pond (a two chamber, four feet-deep open-bottom enclosure), the water and clay are separated by gravity. Over hours of stability, the water will percolate out of the slurry water by gravity, back into the ground. No chemicals , foreign to the area, are used in this process.

The washed sand is left to allow a majority of the water in the sand to drain. An amount, visually estimated by the Plant Forman to be a six to eight-week supply, is maintained in this area. We drain the washed sand down to between 1.5% and 2.5% moisture (water) so as to minimize energy costs.

Washed and drained sand maybe sold "wet" in bulk quantities.

Drying & Grading Sand:

Washed and drained sand is transported by front end loader from the Lower Wash Plant storage to the Dry Plant Feed Hopper. Wet sand is mechanically fed into a Rotary Kiln at a measured rate where it is, in a continuous process, brought to =< .25% moisture content (water).

This dried sand is discharged into an Elevator (Vertical Conveyor) which elevates the now dry sand to a "Scalping" (Screening) Machine at the top of the Grading Silo where any oversize material is removed from the dry sand.

A group of three multi-grade high frequency electronic screens, mounted around the belt of the Silo, produce the finished grades and grade components into seven covered bulk sand storage bunkers.

From the bunkers, Bulk Sand and Blended Bulk Sand is weighed and shipped Bulk, or transferred to onsite packaging facilities for palletized 50# and 100# paper sacks and for 3,000# bulk bags.

The silo separates the "grades" of sand into bins under a roof-covered ground storage area and then the sand can be placed into enclosed sand transportation trucks or into sacks to be placed on pallets for transport.

All shipments are weighed, all Bulk Shipments are "covered vehicles" and all shipments are documented on consecutive numbered Weigh Master documents.

II.B.4E Monitored Sand Removal

For the past few decades, the site has experienced average annual production of approximately 25,000 - 30,000 tons. Actual production volumes, for each year, are on file with the County of Santa Barbara.

Based upon information provided by Gordon Sand Company, 1.35 tons of this sand is equal to 1 cubic yard. This amended plan proposes a total reserve volume of 569,900 cubic yards (approximately 769,365 tons). Therefore, assuming annual production remains the same, it will take about 25 years to extract all existing reserves. However, the total reserve will likely increase due to replenishment from wind-blown sand and therefore, it is estimated that mining could occur for another 100 years.

II.B.4F Sand Budget Remaining

Determination of the actual amount of sand remaining is difficult due to the dynamics of the sand dunes. However, a general amount can be determined for this report, and, with the required monitoring by the County of Santa Barbara, the available amount can be modified for Reclamation Plan implementation as discussed in a subsequent section.

As discussed previously in section II.B.4.B(5) Permit Information, the bottom of the sand pit shall not be deeper than elevation "52" above mean sea level. The amount therefore available is dependent upon 2 criteria: a.) not to encroach into the vegetation area from 0 feet to 500 feet west of the east property line & b.) not to be deeper than elevation 52 feet m.s.l.

The 52 contour is generally running due north and south across APN 113-020-09 approximately 1,000 feet east from the mean high tide line. Again the property is 4,600 feet long by 300 feet wide, so the available area for sand removal would therefore be:

$4,600 - 500 - 1,000 = 3,100$ lineal feet x 300 ft. = 930,000 S.F.

Topo maps on file with the County of Santa Barbara for this property indicate that in previous years, an area of approximately 1,000 lineal feet (from the easterly 500 foot line) by 300 feet wide equaling 300,000 square feet have been removed to an approximate depth of 52 feet above m.s.l. However, over time, sand has been redeposited in the pit by natural processes.

Based upon recent topographic data, it is estimated that the amount of sand remaining as of this report is 569,900 cubic yards or (x 1.35) 769,365 tons.

Annual production will be:

Under 5,000 cu. yards/year	_____
5,000 - 50,000 cu. yards/year	_____ X _____
50,000 - 250,000 cu. yards/year	_____
250,000 - 1,000,000 cu. yards/year	_____
Over 1,000,000 cu. yards/year	_____

Total Anticipated Production:

Mineral commodities to be removed:	<u>569,900 cu. yards sand</u>
Waste retained on site:	<u>0</u>
Water disposed off site:	<u>0</u>

Starting Date of Operations:

Currently Active

Estimated Life of Operation:

Until depletion, operations expected to last until 2118 or longer dependent upon market demand and sand replenishment. The anticipated end date is December 31, 2118.

11B4G Sand Movement

"Quantitative" evidence demonstrating the feasibility of relying completely on natural processes for reclamation of the mine and access road would be very difficult to attempt, much less derive. However, Gordon Sand Company does maintain a pictorial record of the site which shows that the dynamics of dune movement does "claim" any existing intrusion and will eventually "mold" this intrusion into the dunes.

11.8.4.H. Archaeology

A single archaeology site was located on APN 113-020 -09 and is shown in the above referenced EIS. The 200 foot by 75 foot portion of the archaeology site located within the property, is situated approximately 700 east of the mean high tide line. The

sand pit, being restricted to the 52 foot m.s.l. elevation, will begin approximately 1,000 feet from the mean high tide line, thus offering a buffer of 200 feet from said archaeology site.

Additionally, a condition of the current CUP states:

"A single archaeological site is located at the southwestern edge of the sand excavation site, about 700 feet inland from the beach at the north edge of a dune depression. Protection shall be provided to such site when excavating near such area."

The word "protection" is not defined by the condition, however, as it is noted above, the sand pit will probably come no closer than 200 feet to the archaeology site. When the operation is within the area of 1,000 feet from the beach, it will be necessary for the mine operator and the County to examine the archaeology site during annual monitoring processes.

11.B.4.1. Hazardous Materials

This business does not store, use, or handle any of the EPA Extremely Hazardous Substances or any mixture containing an EPA Extremely Hazardous Substance in any amount.

A Hazardous Materials Chemical Inventory is on file with the County of Santa Barbara for this site.

II.B.4.J. Environmental: Flora/Fauna

February 1, 1990 90-ND-002 (Project 89 -SUP-47) was reviewed for APN 11 3 -0 20 -20, & -21 (the Nature Conservatory property of which Gordon Sand Company property lies adjacent to and which the pit access road traverses portions of -20 and -21). The following is a portion of that ND that is incorporated herein for informational purposes:

"The active sand dune habitat is considered sensitive because these areas contain specific animal communities adapted to living in harsh, highly fluctuating environment. The major constituents of the animal communities are invertebrates which provide an important food supply for many birds and mammals. Vegetation within the active coastal dunes consist of low-growing, succulent, mat-forming perennial herbs with extensive root systems. Important species in this association in proximity to the project site are yellow sand verbena (*Ambronia Chamissonis*), silver beach weed (*Ambrosia Chamissonis*), crisp monardella (*Monardella Crispa*), and Blochman's groundsel (*Scenio Blochmaniae*). Of the plants mentioned above, crisp monardella is listed as rare and endangered by the California Native Plant Society (CNPS) and it is federally listed as threatened; its occurrence within the dune is common. Blochman's groundsel is listed as rare and endangered by the CNPS, has no federal listing, and is common within the dune complex. All vegetation within the dune complex is considered important as it plays an important role in the stabilization of the dunes, subsequently allowing for greater diversity of plant and animal species."

The EIS, as stated in section II.B.4.C. has complete plant listings from the overall dune areas.

As noted previously, the sand pit area is only permitted outside of the existing vegetated areas of the property within the dunes; however, a portion of the access road to the pit has traversed through a portion of the vegetated area. Revegetation of this portion of the sand road will be discussed in a subsequent section.

11.B.4.K. Drainage and Erosion Control

Existing drainage in the dune areas percolates into the sand. Drainage in the plant area mainly percolates into the sand; however, the water from the wash plant is directed to a siltation pond which minimizes any siltation intrusion into the slough area that exits across the asphalt concrete main-road from the sand operations area. The site is also subject to a State Water Resources Control Board General Industrial Permit.

RECLAMATION PLAN

III.A. Termination Date of the Reclamation Plan

Based on our best opinion of material budget and regional growth trends as derived from monitoring removal over a 40-year period, as noted in the previous sections, this report's best opinion is that the termination of the "fulltime" mining operation will be in 100 years, or in December of the year 2118.

Three scenarios are thus possible for total fulfillment of this Reclamation Plan.

- a. The site's material is totally extracted prior to the above time frame.
- b. The site's material is totally extracted at or near the above time frame.
- c. The site's material continues to be available past the above date.

SCENARIO "A"

The site's material is totally extracted prior to the above timeframe and the continuation of the operation strictly on the basis of redeposition is not feasible. The following Reclamation Plan will be fully completed within 12 months after cessation of operations, or additional time may be granted by the Lead Agency to fulfill all requirements noted herein.

It may be feasible to continue operation based on redeposition of the sand on the site. The Reclamation Plan would then be fully completed within 12 months after cessation of operations. Cessation of operations would therefore be directly related to non-renewal of the Conditional Use Permit.

SCENARIO "B"

The site's material is totally extracted at or near the above timeframe and the continuation of the operation strictly on the basis of redeposition is not feasible. The following Reclamation Plan will be fully completed within 12 months cessation of operations, or additional time may be granted by the Lead Agency to fulfill all requirements noted herein.

It may be feasible to continue operation based on redeposition of the sand on the site. Should this be the case, it is possible that the sand mining operation could continue indefinitely, so long as no provision of the Conditional Use Permit is violated. The Reclamation Plan would then be fully completed within 12 months after cessation of operations. Cessation of operations would therefore be directly related to non-renewal of the Conditional Use Permit.

SCENARIO "C"

The site's material continues to be available past the above date. This scenario is the reason the operator is submitting an amended reclamation plan at this time. Renewal of the Reclamation Plan should be applied for to the LEAD AGENCY no later than 6 months prior to the termination date of approved Reclamation Plan. This should allow ample time for review by the appropriate agencies. A new termination date will be assigned for the Reclamation Plan Amendment by the Lead Agency.

Should the mining operation fail to amend the Reclamation Plan by the initial termination date, mining operations will cease until a Reclamation Plan is approved by the Lead Agency. If the mining operation chooses to terminate its operations as of that initial termination date, then the following Reclamation Plan will be fully completed within 12 months after cessation of operations.

This Reclamation Plan will not preclude future extraction activities on this property or within the surrounding area. It may be feasible to continue operation based on redeposition of the sand on the site. Should this be the case, it is possible that the sand mining operation could continue indefinitely, so long as no provision of the Conditional Use Permit is violated. The Reclamation Plan would then be fully completed within 12 months after cessation of operations. Cessation of operations would therefore be directly related to non-renewal of the Conditional Use Permit.

Should the mine operators choose to renew the Reclamation Plan, efforts by all parties involved should be to expedite the procedures in a timely manner. As noted in a November 28, 1989 letter from the STATE MINING & GEOLOGY BOARD to all LEAD AGENCIES "...the BOARD would emphasize the desire for LEAD AGENCY and operator cooperation and LEAD AGENCY action on these pending Reclamation Plans."

Monitoring of the future degradation is a yearly function under the Conditional Use Permit. Said monitoring will allow both the owners and the Lead Agency, a method to coordinate the "life" of the mining operation and provide a more accurate timetable within which to implement the Reclamation Plan.

III.B. Future Degradation Monitoring

The surface supply of sand to the site is expected to fluctuate in any given year. During years of little wind-blown replenishment from the surrounding dunes, the termination date of the Reclamation Plan could be accelerated based on the supply that is available with respect to an increase in contract demands. The opposite could be true in years that wind-blown sand replenish the lower areas of the site that are surrounded by dunes. In an effort to evaluate the effective "life" of the operation, yearly degradation monitoring is and has been a condition of the Conditional Use Permit.

III.C. Reclamation Plan Implementation

As noted in SCENARIO'S "A", "B" & "C" of TERMINATION DATE OF THE RECLAMATION PLAN, the following Reclamation Plan will be fully completed 12 months after permanent cessation of operations. The following is a list of the sections with the appropriate items that constitute the Reclamation Plan.

1. Assumed Site Characteristics At Time Of Mining Cessation.
2. Removal of sand processing operation and Proposed Use.
3. Revegetation
4. Re-establishment of Wildlife Value within portions of the site.

III.C. 1. Assumed Site Characteristics at Time of Mining Cessation

It is assumed, for the implementation of the Reclamation Plan, that the sand mining operations have ceased, the mine has exhausted its major sand budget and it is not feasible to continue operations based upon sand redeposition. The buildings and equipment would still be in place, fuel, propane and waste-oil tanks still onsite, areas where materials are stockpiled, and the extraction site to its maximum depth. Each item above will be addressed in the following sections to detail the completion of the Reclamation Plan.

III.C.2. Removal of Sand Processing Operation and Proposed End Use

"The access road consists of an approximately 15 to 20-foot-compact clay base over dune sand. Clay and silt from the desilting basin has also been spread on the sand road as stabilizer. A substantial portion of the road is buried under several feet or more of friable sand. Upon reclamation, the sand road will be decompacted to aid in establishment of native vegetation. Any base materials placed on the road by Gordon Sand Company would be removed and placed in the sand pit. Decompaction of the road and removal of base materials would be to the County's satisfaction."

A.P.N. 113 -020 -09 contains the sand pit area. As shown on the attached Reclamation Plan drawing, the maximums for the 300 foot wide property could be as follows:

- 1.) The highest elevation will probably be around 110 feet with the bottom of the pit being not less than elevation 52, a difference of 58 vertical feet.
- 2.) The limits of the top edge of slope will be at the 300 property lines.
- 3.) The side-slopes will be initially constructed on the order of 2 feet horizontal to 1 foot vertical (2:1).
- 4.) The bottom of the pit will range from 300 feet wide at the 52 contour to 141 feet wide at the 110 contour.

SMARA's reclamation standards provide that reclaimed slopes shall not exceed 2H:1V

that is suitable for the proposed end use. The final slopes within the mine area are designed to be consistent with these standards and no backfilling is proposed.

The sand pit, once the daily operations have ceased, will resume the natural processes of wind-blown sand movement. These processes would, in a year or two, eliminate the evidences of the operations in the sand removal area by eroding, depositing and generally, smoothing the contours of the sand. (Refer to discussion in Section 11.B.4.G. Sand Movement)

The Environmental Impact Study, GUADALUPE DUNES SAND FACILITY by M.B. Johnson Associates dated January 15, 1973 concludes the following:

"A deeper than normal depression in the dunes might well remain a decade or more, but it would, at casual inspection, appear to be a normal dune feature. In this connection, it should be emphasized that active dune tracts, such as this one, are constantly changing and man-made features are often either buried or undermined."

The existing semi-permanent markers surrounding the perimeter of the pit would remain in place and not be removed, however, they would not be maintained by Gordon Sand Company beyond the time that the Reclamation Plan is fully implemented.

The County of Santa Barbara governs allowable land uses on the site. The post-extraction land use would be required to conform to the site's underlying zoning at that time; however, the site will likely remain undeveloped sand dunes.

B.) ACCESS ROAD

The access road connecting the processing plant with the sand pit area is not surfaced and is a compacted sand "track" made across the bare sand by the removal equipment. The natural surface will be restored in a very short time after the operation ceases. The blowing sand will eventually remove all traces of the roadway. (It should be noted that a majority of the road width was installed by Shell Oil Company and will be reclaimed by that company under the supervision of the County of Santa Barbara). The sand road, used by Gordon Sand Company, that traverses the section of existing vegetation, will be revegetated by Gordon Sand Company per Section 111.C.3.

C.) THE PROCESSING PLANT

The processing plant area consists of the following:

Sand wash plant, dry plant, turf plant, bulk bag system, sacking system, pump house, power room, scale, scale house, work shop, office, diesel fuel pump and 500 gallon diesel tank, 8,000 gallon water tank, 2,500 gallon liquid propane tank, 300 waste oil tank and two 966 front-end loaders, two forklifts, and equipment storage area.

1. The processing plant, equipment, storage tanks, and structures (listed above), and refuse or remaining materials, will be completely removed per any County or

State guidelines that are in effect at the time of removal. Stockpiles would be leveled and the site left in a clean and orderly state.

2. A decision will be made, at the time of implementation of this Reclamation Plan, by the mine operator and the owners of APN # 113-020-13, if the water well tank and equipment can remain for use by APN 113-020-13, that is allowed under the zoning in effect at the time of reclamation for 113-020-13. Should it not be possible to leave said well and equipment in place, then, the well pump-house, water tank and underground water lines, will be removed under any County & State guidelines in effect at the time of operations cessation and disposed of in a manner approved by the County and/or State. The water well will be "abandoned" in a manner approved and monitored by the County of Santa Barbara Environmental Health Department.

3. Should the water well not be able to remain for use by APN 113-020-13, Gordon Sand Company shall contact PGE to remove the onsite power pole with transformer and any appurtenances.

4. All front-end loaders or motorized equipment, owned and operated by the mine operator, will be removed from the site.

5. Silt from the siltation pond, adjacent to the screw lift, will be removed and spread back over the operations site and blended into the terrain. The siltation pond will remain in place to collect sediment from any drainage from the site that does not seep into the sand. However, raw sand that is found onsite drains very easily. Over a period of time, this pond will fill in with silt and blend in with the natural terrain. It will not be maintained by the mine operator after the initial removal of the silt.

6. The owner will endeavor to work jointly with the appropriate agencies in returning the above site to as natural a state as possible. As stated in the above referenced EIS, wind-blown sand should, over a period of time, eliminate any visual effects of mans past presence.

111.C.3 Revegetation

1.0 Introduction

This Revegetation Plan was prepared to comply with the Reclamation Standards identified in the Public Resources Code, Article 9, Section 3705. The purpose of the plan is to identify the following:

- Goals of the revegetation program,
- Cultural methods,
- Seed mixes,
- Success criteria, and
- Monitoring objectives

The objective of this revegetation plan is to provide vegetative cover for final reclaimed surfaces if natural revegetation is not evident within the first three years following cessation of mining. However, not all surfaces impacted by mining activities would require revegetation. A majority of the site is located on an active sand dune and vegetation is limited to relatively small clusters. Active revegetation, if necessary, would focus only on areas immediately adjacent to these vegetated clusters. These areas include portions of the access road and the processing plant area. Plant materials should be capable of self-regeneration without continued dependence on irrigation, soil amendments or fertilizer. Revegetation will be sufficient to stabilize the surface against the effects of long-term erosion and is designed to meet the post extractive land use objectives of the site.

2.0 Physical Features Important to Revegetation

2.1 Soils

The site consists of sand dunes that are constantly reconfigured by wind. Therefore, there is no topsoil available for use with revegetation efforts.

2.2 Climatic Considerations

The climate in the Santa Maria and Guadalupe area is typically mild year-round and influenced by the Pacific Ocean. Precipitation falls during late autumn, through the winter, and into the early spring. The majority of rainfall usually occurs from December until March. Total annual average rainfall is approximately 12.7 inches (County of Santa Barbara Public Works Department).

2.3 Vegetation

Natural vegetative communities found in the vicinity of the project footprint consist of two vegetation alliances, in addition to bare sand and disturbed/developed areas: Shining (or Pacific) willow groves and silver dune lupine-mock heather scrub of

varying density. A detailed list of all plant species observed within the project Study Area and a summary of vegetation composition can be found in the *Gordon Sand Mine Biological Assessment*, prepared by WRA, Inc. (12/20/2017).

3.0 Revegetation Objectives

The objective of the revegetation plan is to provide vegetative cover for final reclaimed surfaces if natural revegetation is not evident within the first three years following cessation of mining. This will be accomplished by using plant species capable of self-regeneration without continued dependence on irrigation, soil amendments or fertilizer. Revegetation will be sufficient to stabilize the surface against the effects of long-term erosion and is designed to meet the post extractive land use objectives of the site. The revegetation plan sets forth planting and verifiable monitoring standards to assure vegetative success.

3.1 Seeding

If active revegetation is required, the seed mixture that is used to revegetate the site will likely be collected from areas within the project vicinity. Due to the relatively small areas that may require seeding, it is recommended that these areas are to be seeded by hand or by means of a tractor pulling a seed imprinter.

Seed Mix

Where seeding is required, the following seed mixture would be used:

Seed Species	Common Name	Lbs./Acre
<i>Ambrosia chamissonis</i>	Silver beachweed	7.5
<i>Achillea millefolium</i>	Yarrow	3
<i>Corethrogyne filaginifolia</i>	Common sandaster	3
<i>Lupinus chamissonis</i>	Beach blue luoine	7.5
<i>Eriophyllum staechadifolium</i>	Lizard tail	3
<i>Ericameria ericoides</i>	Mock heather	3
<i>Senecio blochmaniae</i>	Dune ragwort	3
Total		30

* Seed mix was developed in coordination with a botanist at WRA, Inc.

3.2 Timing

All seeding should be performed and completed between October 15 and January 15. All efforts shall be made to plant during this time period since beneficial temperatures and anticipated rainfall will aid in germination, establishment and growth of seeds.

3.3 Ripping of Soil

If active revegetation is required, for areas where project operations result in compaction of the soil, these areas will be ripped to eliminate compaction and to establish a suitable root zone in preparation for planting.

3.4 Test Plots

Test plot areas can be conducted to determine the most appropriate seeding procedures to be followed in order to insure successful implementation of the revegetation plan. This may result in making revisions to the seed mix provided in this plan. Success of these revegetation areas shall 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 similar to that of the surrounding area. Comparisons will be made by a qualified individual until performance standards have been met.

4.0 Monitoring

4.1 Performance Standards for Vegetation

Following seeding, the site will be monitored periodically until performance criteria have been met. The most meaningful performance criteria are based on vegetative cover and species-richness. These standards are provided for guidance purposes.

Species Richness	3 species of natives perennials per 5x5 meter plot
Cover	40% of area covered per 5x5 plot
Density	20 natives perennials per 5x5 meter plot

4.2 Vegetation Monitoring and Maintenance

Monitoring must be performed to document revegetation success. Following seeding, the site will be monitored periodically (at least annually until success criteria have been met) by means of visual observation. Monitoring will be performed to document that the revegetation areas achieve, or are on track to achieving, the success standards for vegetative cover. Sample sizes must be sufficient to produce at least an 80% confidence level.

Maintenance of the revegetation areas shall consist of reseeding unsuccessful revegetation efforts and weed eradication to limit and control invasive noxious weeds.

III.C4. Topsoil Salvage, Maintenance, and Redistribution

The site consists of sand dunes that are constantly reconfigured by wind. Therefore, there is no topsoil available for use with revegetation efforts.

III.C.5 Tailing and Mine Waste Management

Due to the high demand for all sand produced at the site, no mine waste materials would be generated.

III.C.6 Re-Establishment of Wildlife Values Within the Site

The re-establishment of wildlife within the actual property containing the sand pit or the area of the sand processing is a function of the success of revegetating these areas, if attempted. Whether revegetation is performed by man or left to natural processes, and once the daily operations cease and the site is brought back to a natural appearance, wildlife should be free to migrate across these areas unhampered.

111.C.7 Public Safety

The existing semi-permanent type markers surrounding the perimeter of the pit would remain in place and not be removed, however, they would not be maintained by Gordon Sand Company beyond the time that the Reclamation Plan is fully implemented.

III.D. Financial Assurances

In addition to annual monitoring, all SMARA-regulated sites are required to provide financial assurances that reclamation of the site will be conducted in accordance with the approved Reclamation Plan. The financial assurance may be in the form of surety bonds, irrevocable letter of credit, trust funds, or other forms of financial assurances approved by the Lead Agency. The financial assurance is reviewed annually by the operator and lead agency to determine if operations or reclamation during the past year and planned operations during the upcoming year would require adjustments to the amount of the estimate.

III.E. Statement of Responsibility

Gordon Sand Company accepts responsibility for reclamation of the Guadalupe sand mine and processing plant as set forth in this Reclamation Plan.



Salud Arellano-Gordon, CEO

FIGURES

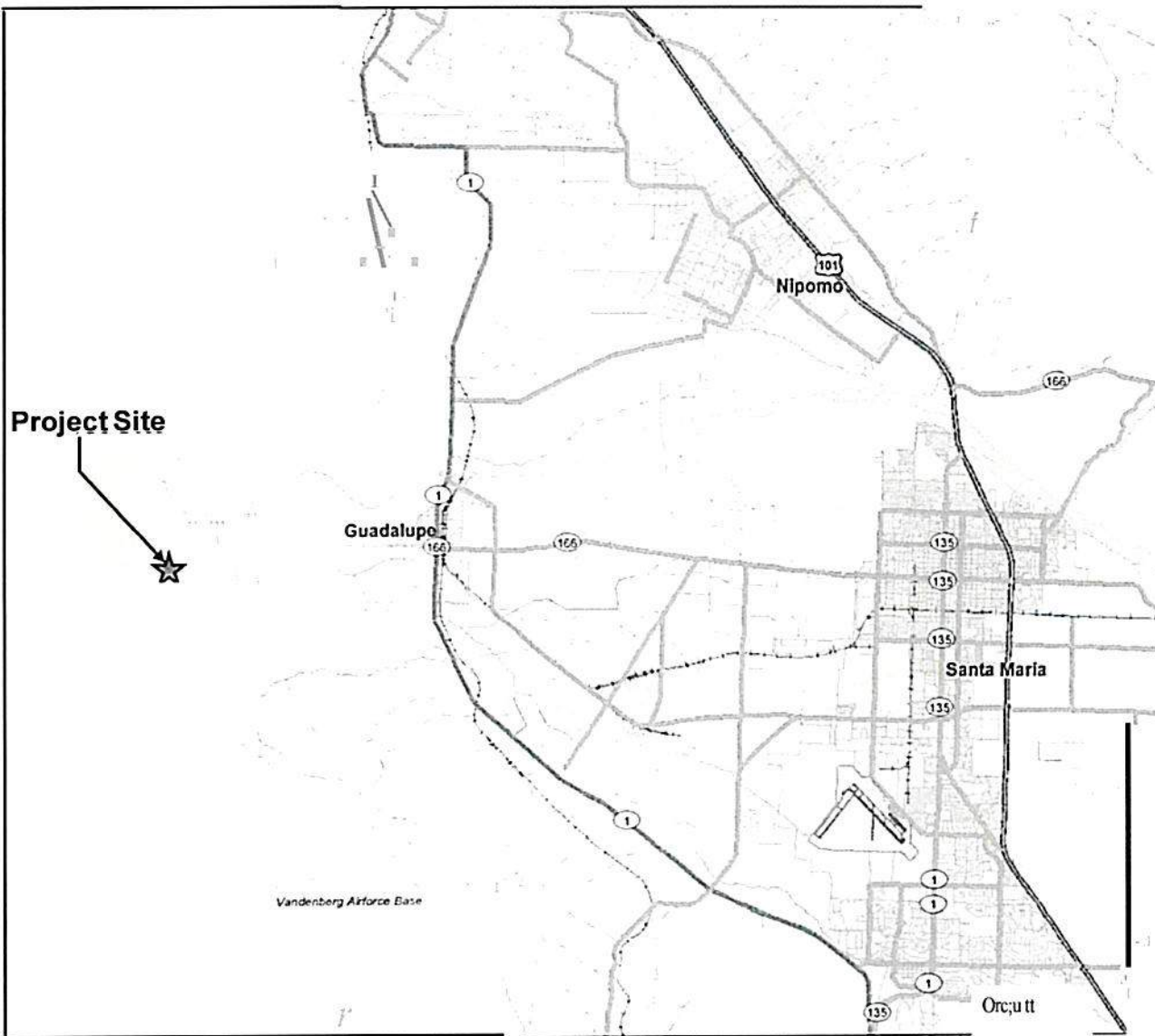
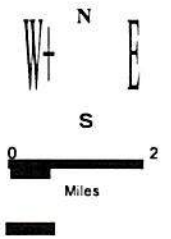


Figure 1
Vicinity Map
Gordon Sand



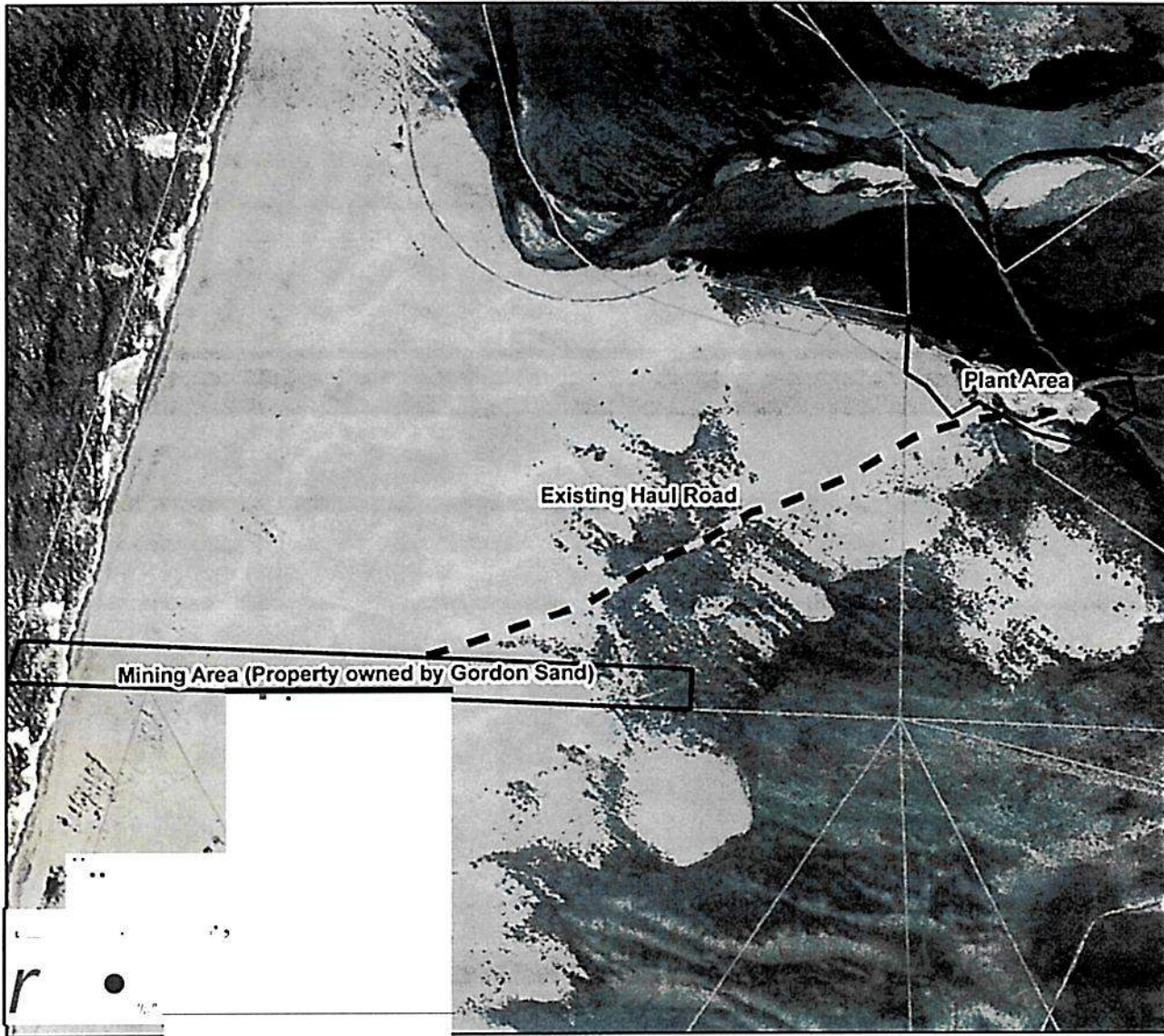


Figure 2
Location Map
Gordon Sand



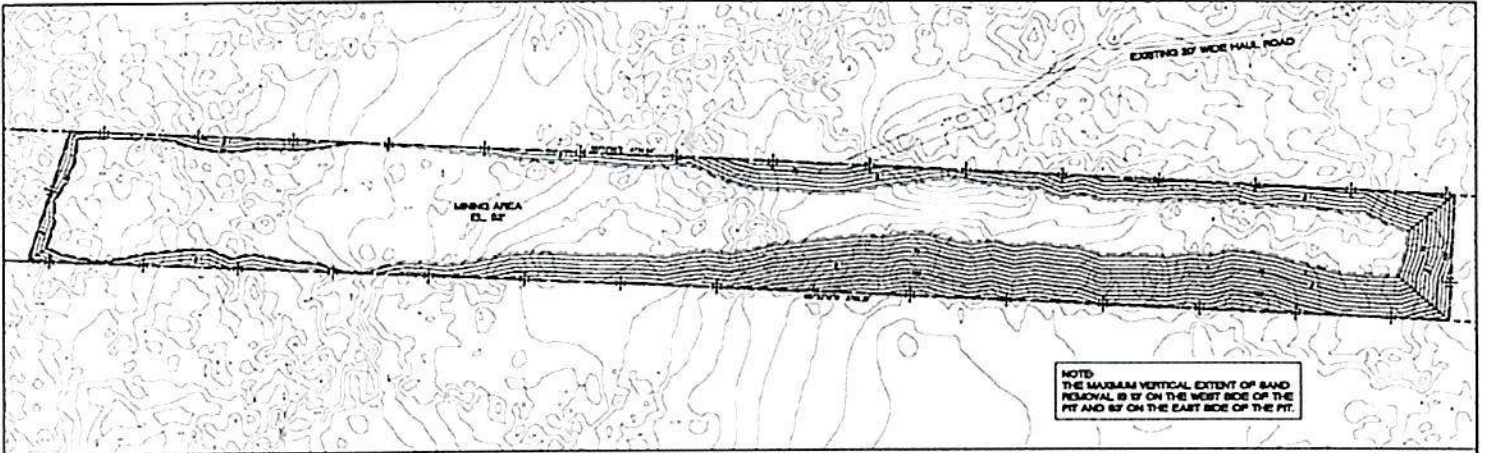
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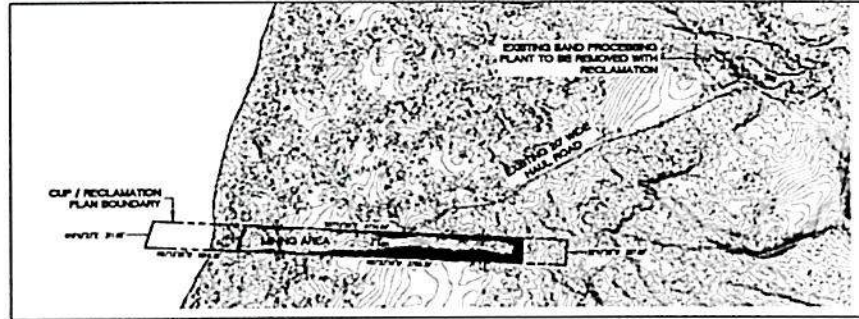
EnviroMINE Inc.

ATTACHMENT A

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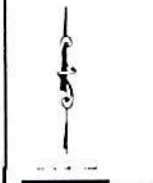


PLAN MINING AREA
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PLAN OVERALL
Scale 1"=50'

Scale 1"=50'



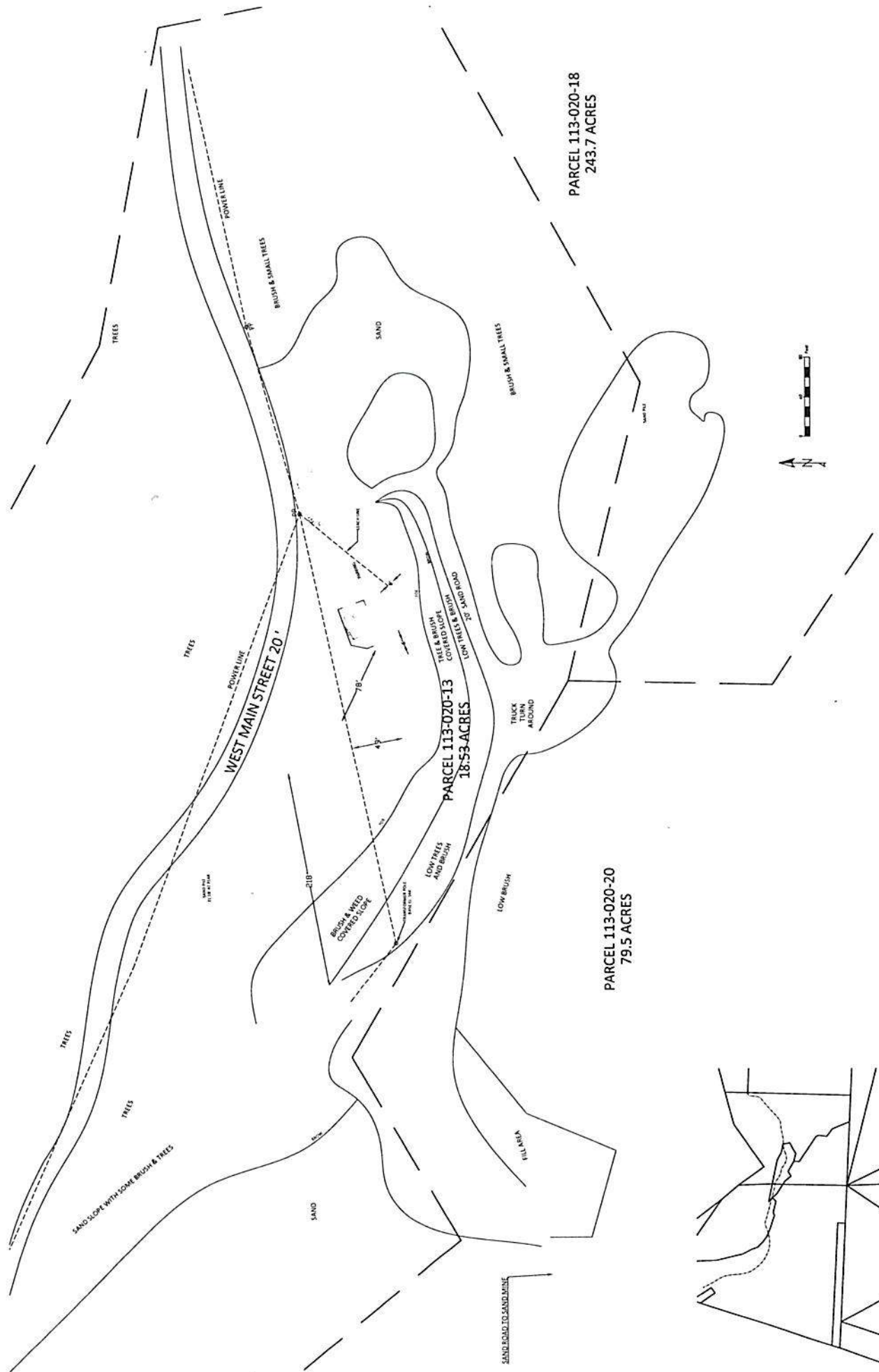
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Attachment 4

Biological Resources Assessment



STORRER
ENVIRONMENTAL
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**BIOLOGICAL RESOURCES ASSESSMENT
FOR THE
GORDON SAND MINE DECOMMISSIONING/ RECLAMATION PROJECT
GUADALUPE, SANTA BARBARA COUNTY, CALIFORNIA**



Prepared for:

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July 2019

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1.0 INTRODUCTION

The following Biological Resources Assessment (Assessment) presents the results of a biological resources survey and background review completed by Storrer Environmental Services, LLC (SES) on behalf of the County of Santa Barbara Planning and Development Department (County) for the Gordon Sand Mine Decommissioning/Reclamation Project (Project).

The Assessment is intended to fill data gaps in previous biological studies submitted in support of Project permitting (WRA 2017, 2019). Information contained in the previous reports is incorporated by reference.

1.1 PROJECT LOCATION AND DESCRIPTION

The Project is described as follows (County 2019):

“The project request is for a Reclamation Plan and Coastal Development Permit to an existing mining operation. A Conditional Use Permit (CUP) (Case No. 77-CP-66) exists for mining activities at the site and has no expiration date. Gordon Sand Company’s Guadalupe sand mine and processing plant is located within the area known as the “Guadalupe Sand Dunes,” approximately 3.75 miles west of the town of Guadalupe. Access to the site is westerly via Main Street. The project site is identified as Assessor’s Parcel Numbers 113-020-009, -013, -020, and -021, consisting of approximately 40 acres. Of this area, 31.4 acres are being used for sand extraction (APN 113-020-009) and 7 acres are used for sand processing (APN 113-020-013). The sand mine pit is connected to the processing area by a 3,200-foot long roadway consisting of 1.6 acres (AP Nos. 113-020-020 and -021). The mine pit site (APN 113-020-009) is located on property owned by Gordon Sand Company and the access road and sand processing area is located on property owned by the County of Santa Barbara (AP Nos. 113-020-013, -020, -021).

The request is for approval of a Reclamation Plan that identifies an estimated mining end date 100 years from present. No changes are requested to the existing mining operation, which would continue to extract up to 60,000 tons annually from the 31.4-acre mining area. Continued operations at the site would entail two to three front-end loaders for sand extraction, forklifts for sand processing and bagging, and various personal vehicles. Processing plant equipment consists of screens, hoppers, conveyors, a bag station, storage tanks, scale house, and office. No additional truck trips are proposed.

Reclamation of the site would occur immediately following cessation of mining. Slopes within the sand pit would be finish graded to their final configuration and the pit area would be naturally replenished with sand. Wind-blown sand has replenished the pit throughout the duration of the Gordon Sand mining operation. The private access road connecting the processing plant with the sand pit area is constructed with compacted silt and clay separated from sand during the mining process. The silt and clay road surface would be deconstructed in place after operation ceases. All processing plant equipment and structures would be removed from the site within six months of mining cessation. Any remaining stockpiles would be leveled and the site left in a clean and orderly state, in accordance with an approved site restoration plan.

The project site is zoned RES-320, totaling 40 acres on Assessor’s Parcel Numbers 113-020-009, -013, -020, and -021, located at 6150 West Main Street in Guadalupe, CA, Third Supervisorial District.”

1.2 ENVIRONMENTAL SETTING

The Project is situated in the Guadalupe-Nipomo Dunes, an extensive dune complex extending approximately 18 miles from southern San Luis Obispo County to northern Santa Barbara County. The Survey Area is immediately south of the Santa Maria River mouth (Figure 1 – Project Vicinity Map).

2.0 REGULATORY FRAMEWORK

Sensitive biological resources, including special-status plant and wildlife species, sensitive plant communities, wildlife corridors, nesting birds, and jurisdictional waters and wetlands, are protected under various federal, state, and local laws and regulations. The following sections summarize the regulations and policies administered by resource agencies pertaining to biological resources that are known to occur, or have the potential to occur, in the vicinity of the Survey Area.

2.1 FEDERAL REGULATIONS

2.1.1 Endangered Species Act (16 U.S.C. § 1531 et seq.)

The Endangered Species Act of 1973 (ESA) provides for the protection of plant and animal species listed by the federal government as “endangered” or “threatened,” and “the ecosystems upon which they depend.” The USFWS and National Marine Fisheries Service (NMFS) share responsibility for administration of the federal ESA. An “endangered” species is one that is “in danger of extinction” throughout all or a significant portion of its range. A “threatened” species is one that is “likely to become endangered” within the foreseeable future. The ESA prohibits “take” of threatened or endangered species except under certain circumstances and only with authorization from the USFWS. “Take” as defined by the ESA, “means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” This can also include the modification of a species’ habitat. For plants, this statute governs removing, possessing, maliciously damaging, or destroying any listed plant on federal land and removing, cutting, digging up, damaging, or destroying any listed plant on non-federal land in knowing violation of state law (16 U.S.C. § 1538(c)).

When non-federal entities, such as states, counties, local governments, and private landowners, wish to conduct an otherwise lawful activity that might incidentally, but not intentionally, “take” a listed species, an incidental take permit must first be obtained via formal consultation with the USFWS using one of two methods. If a federal nexus is not available, an incidental take permit (ITP) must be obtained for the project following formal consultation with the USFWS via Section 10 of the ESA (ESA § 10(a)(1)(B)).

If a federal nexus is available, then an incidental take permit may be obtained by the federal agency involved in the nexus (e.g., USACE) via Section 7 of the ESA (ESA § 7). Section 7 stipulates that any federal agency action that may affect a species listed as threatened or endangered requires a formal consultation with USFWS to ensure that the action is not likely to jeopardize the continued existence of the listed species or result in destruction or adverse modification of designated critical habitat (16 U.S.C. 1536(a)(2)). The Biological Opinion issued by the USFWS at the conclusion of the consultation may include authorization for incidental take of a listed species.

2.1.2 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MTBA) of 1918 (16 USC 703-711) is also administered by the USFWS. The MTBA provides protection of nearly all species of birds, their nests, and their eggs, including all native bird species. Under the MTBA, it is unlawful to “take”, kill, collect, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR 10, including feathers or other parts, nests, eggs or products, except as allowed by implementing regulations (50 CFR 21). Certain game bird species are allowed to be hunted for specific periods determined by federal and state governments.

2.1.3 Clean Water Act – Section 404

The Clean Water Act (CWA) is comprehensive legislation established to protect the nation’s water from pollution by setting water quality standards and by limiting the discharge of effluents in the waters of the United States. Section 404 of the CWA regulates the discharge of dredged and/or fill material into waters of the U.S., including wetlands. Section 404 of the CWA is jointly administered and enforced by the U.S. Army Corps of Engineers (USACE) and the U.S. Environmental Protection Agency (EPA). Activities in waters of the U.S. regulated under Section 404 include dredge or fill for development, water resources projects (i.e., dams and levees), infrastructure development (i.e., highways and airports), and mining projects. With the exception of certain farming and forestry activities that are exempt from Section 404 regulation, a Section 404 permit is required before any dredged or fill material may be discharged into waters of the U.S. The Section 404 program prohibits discharge of dredged or fill material if waters of the U.S. would be significantly degraded or a practical alternative exists that is less damaging to the aquatic environment.

2.2 STATE REGULATIONS

2.2.1 California Endangered Species Act (California Fish and Game Code § 2050, et seq.)

Fish and wildlife resources are protected by a number of laws and programs administered by the CDFW, formerly the California Department of Fish and Game. The California Endangered Species Act (CESA) generally parallels the provisions of the federal ESA, and states that “all native species of fishes, amphibians, reptiles, birds, mammals, invertebrates, and plants, and their habitats, threatened with extinction and those experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation, will be protected or preserved.”

Under the CESA, “endangered” is defined as “a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range;” and “threatened” is defined as “a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts.” “Take” is defined as “to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill” an individual of a species, but the definition does not include “harm” or “harass,” as the ESA does. As a result, the threshold for a take under the CESA is higher than that under the federal ESA. Exceptions to the take prohibition are limited to authorization of collection for “necessary scientific research”.

Consistent with the CESA, CDFW has established lists of endangered, threatened, and candidate species that may or may not also be included on a federal ESA list. CDFW also maintains a list of Species of Special Concern for those species that have declining populations, limited distribution, diminishing habitat, or unusual scientific, educational, or recreational value. In addition, CDFW manages a “watch list” of species that have been de-listed or are vulnerable. Species of Special concern and watch list species are not afforded the same legal protection as listed species.

Pursuant to California Fish and Game Code Section 2081, CESA allows for incidental take permits to otherwise lawful development projects that could result in the take of a state-listed threatened or endangered species. The application for an incidental take permit under Section 2081(b) has a number of requirements including the preparation of a conservation plan, generally referred to as a Habitat Conservation Plan. CESA emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate mitigation planning to offset project-caused losses of listed species.

2.2.2 Native Plant Protection Act (California Fish and Game Code §§ 1900 - 1913, § 2062 and § 2067)

The CDFW also manages the California Native Plant Protection Act (NPPA), which designates and protects species eligible for state listing. Eligible species include those identified on California Native Plant Society (CNPS) Rare Plant Ranks (CRPRs) 1A, 1B, and 2 meet the definitions of Sections 1901, Chapter 10 (NPPA) or Sections 2062 and 2067 (CESA) of the California Fish and Game Code. CRPR 3 and 4 species, though not meeting the criteria for listing by CDFW, may be considered during project review by the agencies.

2.2.3 Clean Water Act – Section 401

The CWA Section 401 Water Quality Certification (Section 401 Certification) provides states and authorized tribes an opportunity to address the aquatic resource impacts of federally issued permits and licenses, to help protect water quality. Under Section 401 of the CWA, any applicant for a federal license or permit to conduct any activity that may result in any discharge into waters of the U.S. must obtain a Section 401 Certification from the State Water Resources Control Board (SWRCB) that the proposed activity will comply with state water quality standards. In California, Section 401 Certifications are issued by Regional Water Quality Control Boards (RWQCB) located throughout the state. The Central Coast RWQCB issues Section 401 Certifications for projects in the County. The federal CWA Section 404 permit is dependent on and subject to the terms of the Section 401 Certification. Therefore, under Section 401, a federal agency cannot issue a permit or license for an activity that may result in discharge into waters of the U.S. until the RWQCB has granted or waived the Section 401 Certification. Section 401 Certification is limited to federally jurisdictional waters and wetlands.

2.3 LOCAL REGULATIONS

Requirements for the protection of biological resources in the unincorporated areas of the County are provided in the Comprehensive Plan Coastal Land Use Plan, Conservation Element, Environmental Resource Management Element, and Land Use Element and the County Code (SBCo 2009, 2010). These documents provide a framework of policies designed to protect special-

status species and sensitive habitats. The Environmental Thresholds and Guidelines Manual (County 2008) provides definitions of sensitive biological resources and guidance for determining levels of impacts to sensitive areas, including appropriate methods for avoidance, minimization, and/or mitigation.

Disturbance to habitats or species may be considered significant by the County if a Project substantially impacts sensitive resources in the following ways:

1. Substantially reduce or eliminate species diversity or abundance.
2. Substantially reduce or eliminate quantity or quality of nesting areas.
3. Substantially limit reproductive capacity through losses of individuals or habitat.
4. Substantially fragment, eliminate, or otherwise disrupt foraging areas and/or access to food sources.
5. Substantially limit or fragment range and movement (geographic distribution or animals and/or seed dispersal routes).
6. Substantially interfere with natural processes, such as fire or flooding, upon which the habitat depends.

Examples of less than significant impacts, where the habitat is given little or no importance and it is presumed that disturbance would not create a significant impact include:

1. Small acreages of non-native grassland if wildlife values are low.
2. Individuals or stands of non-native trees if not used by important animal species such as raptors or monarch butterflies.
3. Areas of historical disturbance such as intensive agriculture.
4. Small pockets of habitats already significantly fragmented or isolated, and degraded or disturbed.
5. Areas of primarily ruderal species resulting from pre-existing man-made disturbance.

2.3.1 County Stream and Riparian Habitat Protection

The Environmental Thresholds and Guidelines Manual (County 2008) defines riparian habitat as the “terrestrial or upland area adjacent to freshwater bodies, such as the banks of creeks and streams, the shores of lakes and ponds, and aquifers which emerge at the surface as springs or seeps. This habitat can also occur along arroyos and barrancas, and other types of drainages throughout the County”.

County-prescribed setbacks (i.e., buffer areas) from the outer (upland) edge of the riparian canopy, or the top-of-bank of the water body in the absence of riparian vegetation, are 50 feet in urban areas, 100 feet in rural areas, and 200 feet from major rivers (i.e., Santa Ynez, Santa Maria, Cuyama, and Sisquoc). Intrusion within the buffer areas for riparian habitats and streams may be considered significant.

3.0 METHODS

Results of previous biological surveys and assessments conducted for the Project were reviewed and are incorporated by reference (WRA 2017, 2019). Additional background research and field reconnaissance was completed by SES for this Assessment.

3.1 BACKGROUND REVIEW

Prior to conducting field surveys, a literature review was performed to identify any special-status plant and wildlife species and sensitive natural communities that have the potential to occur in the Survey Area. The literature review included an examination of the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants (CNPS 2019) and the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB 2019). SES also reviewed the NRCS Web Soil Survey of Santa Barbara County, California, South Coastal Part (NRCS 2019), the USGS Point Sal Canyon, CA 7.5-minute quadrangle map, the National Hydrography Dataset (NHD) (USGS-NHD 2019), National Wetlands Inventory (USFWS 2019), and weather data.

These biological reports and documents relevant to the Project were also reviewed:

- County of Santa Barbara, Planning and Development Department (County). 2019. Determination of Application Completeness - Gordon Sand Company Reclamation Plan - Case Nos. 17RPP-00000-00001 & 17CDP-00000-00057. Letter to T. Jockerst (EnviroMINE, Inc.). March 8.
- EnviroMINE, Inc. 2018. Reclamation Plan Amendment for Gordon Sand Company, Guadalupe Dunes/Guadalupe Area, Santa Barbara County, California. October 29.
- Storrer Environmental Services, Inc. 2018a. Review of Gordon Sand Mine Biological Assessment and Revegetation Plan. Memorandum to J. Dargel (SBCo Planning & Development Department. February 18.
- Storrer Environmental Services, Inc. 2018b. Review of Gordon Sand Mine Biological Assessment (WRA 2018). Memorandum to J. Dargel (SBCo Planning & Development Department. November 9.
- WRA Environmental Consultants. 2017. Gordon Sand Mine Biological Assessment. Memorandum to S. Arrellano (Gordon Sand Company). December 20.
- WRA Environmental Consultants. 2019. Gordon Sand Mine Biological Assessment. Letter report addressed to S. Arellano-Gordon (Gordon Sand Company). February 5.

3.2 FIELD METHODOLOGY

A botanical and wildlife survey, focused on special-status species and habitats, was conducted on June 18, 2019 by SES botanist Jessica Peak and wildlife biologist John Storrer. Special-status species targeted during the surveys included those that are known to occur or have the potential to occur in the vicinity of the Survey Area.

3.2.1 Botanical Surveys

The survey was done during the appropriate season to identify special-status plant species, and was consistent with the botanical survey guidelines of the California Department of Fish and Game (now CDFW) (2009), the USFWS (1996), and the California Native Plant Society (2001). The survey involved systematically searching the Survey Area for special-status plants. All vascular plant species observed within the Survey Area were recorded (see Appendix B – Vascular Plant Inventory). Plant specimens that were not positively identified in the field were further examined using a dissecting microscope and appropriate botanical keys, including *The Jepson Manual, Second Edition* (Baldwin et al. 2012) and *A Flora of the Santa Barbara Region, California, Second Edition* (Smith 1998). The field survey also documented sensitive vegetation communities (e.g., central dune scrub, willow riparian woodland) present within and adjacent to the Survey Area.

3.2.2 Wildlife Surveys

A list of wildlife species observed within the Survey Area was compiled during the June 18, 2019 reconnaissance (see Appendix C – Wildlife Inventory). An evaluation of wildlife use of the property was made in part through field reconnaissance, but was also based on habitat suitability within the Survey Area and known occurrence of various species in the Project vicinity. Habitat conditions and current status of special-status wildlife species, including California red-legged frog (*Rana draytonii*), Blainville's horned lizard (*Phrynosoma blainvillii*), and northern legless lizard (*Anniella pulchra*) were a particular focus of the wildlife surveys. Potential for nesting, roosting, or foraging by bird species of special concern, including western snowy plover (*Charadrius alexandrinus nivosus*) and raptors was also assessed.

4.0 RESULTS

The following sections provide a summary of environmental conditions in the Survey Area including existing plant communities, soils, hydrology, and wildlife habitat documented during the field survey. Representative photographs of biological character of the Survey Area are provided in Appendix A.

4.1 SOILS AND HYDROLOGY

Soils within the Survey Area were determined based on a review of the Web Soil Survey of Northern Santa Barbara County, California, (NRCS 2019). There are two mapped soil units present in and adjacent to the Survey Area: dune land and marsh. Within the Study Site, the marsh soil map unit is limited to the riparian habitat around the concrete wash station and on the east side of the entrance to the facility. The remainder of the Study Site is comprised of active dunes.

There are no waters or wetland features in the Survey Area. The Santa Maria River is located outside of the Survey Area on the other side of West Main Street, approximately 50 feet to the north. An ephemeral drainage east of the facility entrance, conveys flow from adjacent agricultural fields to the Santa Maria River.

4.2 VEGETATION AND LAND COVER TYPES

The composition and distribution of vegetation communities and land cover types observed during the 2019 surveys are consistent with those described and mapped by WRA (2017) (Figure 2 –

Vegetation Communities and Rare Plants). Descriptions of vegetation communities are adapted from *A Manual of California Vegetation, Second Edition* (MV-II) (Sawyer et al. 2009) and are described below.

4.2.1 Pacific Willow Groves (*Salix lasiandra* var. *lasiandra* Woodland Alliance) (ESH, G4, S3)¹

This alliance corresponds to the shining willow groves (*Salix lucida* Woodland Alliance) as described in MV-II (Sawyer et al. 2009), which is now known as Pacific willow [*S. lasiandra* var. *lasiandra*] (Baldwin et al. 2012).

This vegetation community is present around the concrete wash basin, near the entrance to the facility and in association with the riparian corridor of the Santa Maria River (across West Main Street from the Survey Area). This habitat is co-dominated by Pacific willow and arroyo willow (*Salix lasiolepis*), with understory species consisting primarily of spreading gooseberry (*Ribes divaricatum* var. *pubiflorum*) and California blackberry (*Rubus ursinus*).

A small stand of arroyo willows is present in the facility adjacent to the concrete wash basin near West Main Street. Due to the presence of prolonged standing water, the wash station also contained other hydrophytic plant species including bristly ox-tongue (*Helminthotheca echioides*), dock (*Rumex crispus*, *R. conglomeratus*), and common horsetail (*Equisetum arvense*).

Riparian habitat, including willow groves, is considered ESH by the County and CDFW.

4.2.2 Silver Dune Lupine-Mock Heather Scrub (*Lupinus chamissonis* - *Ericameria ericoides* Shrubland Alliance) (ESH, G3, S3)

This central dune scrub habitat is widespread in the Study Area and is variously dominated by silver dune lupine (*Lupinus chamissonis*) and mock heather (*Ericameria ericoides*). Other native shrubs such as seaside wooly sunflower (*Eriophyllum staechadifolium*), beach-bur (*Ambrosia chamissonis*), Blochman's ragwort (*Senecio blochmaniae*), branching phacelia (*Phacelia ramosissima*), yellow sand-verbena (*Abronia latifolia*), and yarrow (*Achillea millefolium*) are frequent but comprise less of the cover. Open areas in the scrub were dominated by invasive veldt grass (*Ehrharta calycina*) and false ice plant (*Conicosia pugioniformis*).

Central dune scrub habitat is considered ESH by the County and CDFW. Three special-status plant species: Blochman's ragwort, surf thistle (*Cirsium rothophilum*), and crisp monardella (*Monardella undulata* ssp. *crispa*) were observed in the silver dune lupine-mock heather scrub. Special-status plant species are discussed in Section 4.3.

¹ Listing Status:

ESH – Environmentally Sensitive Habitat

Global/State Rarity Ranking:

G3/S3 – Vulnerable. At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer).

G4/S4 – Apparently Secure. Uncommon but not rare.

4.2.3 Ruderal/Disturbed

Ruderal/disturbed habitat is present in and around the facility areas and along West Main Street. This vegetation type is not a recognized community in MV-II, as it consists of a variety of invasive species, not native to the region, that are adapted to regular disturbance. The vegetation in the ruderal/disturbed portions of the Survey Area is dominated by bromes (*Bromus diandrus*, *B. madritensis* ssp. *rubens*, *B. hordeaceus*), rattail sixweeks grass (*Festuca myuros*), veldt grass, false ice plant, black mustard (*Brassica nigra*), European sea rocket (*Cakile maritima*), and sweet clover (*Melilotus albus*, *M. indicus*).

4.2.4 Bare Sand

Much of the Survey Area is comprised of bare sand, with little to no vegetation present.

4.3 SPECIAL-STATUS SPECIES AND SENSITIVE HABITATS KNOWN OR WITH POTENTIAL TO OCCUR IN THE SURVEY AREA

Special-status species and sensitive habitats include plant and wildlife taxa, vegetation communities, or other unique biological features that are afforded special protection by local land use policies and/or state and federal regulations. Vegetation communities may warrant special status if they are of limited distribution, support protected plants and animals, have high wildlife value, or are particularly vulnerable to disturbance. Special-status plant and animal species are those that are listed as rare, threatened, or endangered under the state and/or federal Endangered Species Acts or those that appear on various “watch lists” compiled by academic institutions, conservation organizations, and wildlife agencies. These include the CNDDDB lists of “*Special Animals*” and “*Special Plants*” (CNDDDB 2019), CNPS Inventory of Rare and Endangered Vascular Plants of California (CNPS 2019), “*California Bird Species of Special Concern*” (Shuford and Gardali 2008), “*Amphibian and Reptile Species of Special Concern in California*” (Jennings and Hayes 1994), and “*Mammalian Species of Special Concern in California*” (Williams 1986).

Sixteen (16) special-status plant species and twelve (12) special-status wildlife species are known to occur within the USGS 7.5-minute Point Sal Quadrangle (CNDDDB 2019). Four sensitive plant communities: central dune scrub, central foredune, central maritime chaparral, and valley needlegrass grassland also occur in the Point Sal quadrangle.

The following conclusions as to likelihood for special-status species to occur in the Survey Area are based on habitat suitability and requirements, elevation and geographic range, soils, topography, surrounding land uses, and proximity of known occurrences in the CNDDDB database to the Survey Area. The likelihood for special-status species to occur within the Survey Area was assessed using information from the various listed sources and the wildlife and botanical surveys.

4.4 SPECIAL-STATUS PLANT SPECIES

The majority of the Survey Area consists of bare sand and dune scrub habitats. A total of 62 plant species was observed in the Survey Area during 2019 botanical survey. A comprehensive list of vascular plant species observed in the Survey Area during the June 18, 2019 survey is provided in Appendix B.

The field survey was conducted at an appropriate time of year (June) to detect all special-status plant species documented from the USGS Point Sal 7.5-minute quadrangle. Ten (10) of the sixteen (16) special-status plant species listed by CNDDB have the potential to occur in dune scrub habitat:

- Aphanisma (*Aphanisma blitoides*) (CRPR 1B.2, G3, S2)²;
- Coastal goosefoot (*Chenopodium littoreum*) (CRPR 1B.2, G1, S1);
- Compact cobwebby thistle (*Cirsium occidentale* var. *compactum*) (CRPR 1B.2, G3, S2);
- Surf thistle (*Cirsium rhotophilum*) (ST, CRPR 1B.2, G1, S1);
- Dune larkspur (*Delphinium parryi* ssp. *blochmaniae*) (CRPR 1B.2, G4, S2);
- Beach spectaclepod (*Dithyrea maritima*) (ST, CRPR 1B.2, G1, S1);
- Blochman's leafy daisy (*Erigeron blochmaniae*) (CRPR 1B.2, G2, S2);
- Kellogg's horkelia (*Horkelia cuneata* var. *sericea*) (CRPR 1B.1, G4, S1);
- Crisp monardella (*Monardella undulata* ssp. *crispa*) (CRPR 1B.2, G3, S2); and,
- San Luis Obispo monardella (*Monardella undulata* ssp. *undulata*) (CRPR 1B.2, G2, S2).

Three special-status plant species are present in the sensitive dune scrub habitat in the Survey Area. In addition to Blochman's ragwort and surf thistle, which were documented during previous surveys by WRA (2017), crisp monardella was also observed along the 3,200-foot long access road to the mine pit. Detailed descriptions of special-status species in the Survey Area are provided below.

4.4.1 Surf Thistle (*Cirsium rhotophilum*) (ST, CRPR 1B.2, G1, S1)

Surf thistle is a perennial herb in the sunflower family (Asteraceae) that typically blooms April through June. This species occurs in coastal bluff scrub and coastal dunes at elevations ranging from 10 to 90 feet in Santa Barbara and San Luis Obispo County (WRA 2017). Three individuals of this species were documented by WRA in two locations immediately adjacent to the access road in 2017 and the locations were confirmed during the June 2019 field survey (Figure 2 – Vegetation Communities and Rare Plants).

4.4.2 Crisp monardella (*Monardella undulata* ssp. *crispa*) (CRPR 1B.2, G3, S2)

Crisp monardella is a small, tufted or mounded shrub in the mint family (Lamiaceae) that blooms between April and November. This species occurs on active dunes in San Luis Obispo and Santa

² Listing Status:

ST – State listed Threatened

CRPR: California Native Plant Society Rare Plant Rank

1B – Rare, threatened, or endangered in CA and elsewhere

CRPR Extensions:

0.1 – Seriously endangered in California

0.2 – Fairly endangered in California

0.3 – Not very endangered in California

Global/State Rarity Ranking: G1/S1 – Critically imperiled (often 5 or fewer populations).

G2/S2 – Imperiled. Very few populations (often 20 or fewer).

G3/S3 – Vulnerable. At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer).

G4/S4 – Apparently Secure. Uncommon but not rare.

Barbara Counties (Baldwin et al. 2012). Crisp monardella was observed frequently in the dune scrub habitat along the access road to the sand mine pit during the June 2019 field survey. Due to the widespread distribution of crisp monardella, individual occurrences were not mapped.

4.4.3 Blochman's Ragwort (*Senecio blochmaniae*) (CRPR 4.2, G3, S3)

Blochman's ragwort is a perennial herb in the sunflower (Asteraceae) family that typically blooms from May through November. This species occurs in coastal sand dunes and sandy floodplains along the Central California coast (Baldwin et al. 2012). Blochman's ragwort is widespread throughout silver dune lupine-mock heather scrub, comprising approximately 5 percent of the shrub cover. Due to the widespread distribution of this species across the Study Area, individual occurrences were not mapped.

4.5 SENSITIVE VEGETATION COMMUNITIES

4.5.1 Central Dune Scrub

The Guadalupe Dunes are designated ESH in the Santa Barbara County Coastal Land Use Plan (CLUP) (County 2009). Coastal dunes are identified as an "Ecological Community of Greatest Interest" in the Conservation Element of the Santa Barbara County Comprehensive Plan (County 2010). Two dune communities, central dune scrub and central foredune are recognized by the state as important habitats (CNDDDB 2019). Central dune scrub is present in the Survey Area. Per the LCP, dune vegetation should be preserved. Potential impacts to dune habitat are discussed in Section 5.0.

4.5.2 Pacific Willow Woodland

The Santa Maria River and associate riparian corridor are designated ESH by the County and are under CDFW jurisdiction. One small stand of arroyo willow is present in the facility, adjacent to the concrete wash station. Willow woodland habitat is also present on the east of the entrance to the facility (Figure 2 – Vegetation Communities and Rare Plants).

The County-prescribed setback (i.e., buffer area) from the edge of drainages is 50 feet in urban areas and 100 feet in rural areas (County 2008). The existing facility and West Main Street are within 50 feet of the riparian corridor of the Santa Maria River.

4.6 GENERAL WILDLIFE HABITAT

The field survey conducted on June 18, 2019 was intended to assess the character and extent of wildlife habitat in and near the Survey Area. Emphasis was placed on potential for occurrence of special status wildlife species (e.g., California red-legged frog, Blainville's horned lizard, western snowy plover). A list of wildlife species observed within the Survey Area is provided in Appendix C.

Fifteen (15) bird species were observed during nine field surveys (Appendix C). Species typically associated with dune and riparian habitats were most abundant, as expected. Examples include California quail (*Callipepla californica*), turkey vulture (*Carthartes aura*), red-tailed hawk (*Buteo jamaicensis*), spotted towhee (*Pipilo maculatus*), and white-crowned sparrow (*Zonotrichia leucophrys*). Tracks and/or burrows of three mammal species were recorded: kangaroo rat

(*Dipodomys* sp.); black-tailed deer (*Odocoileus hemionus*); and raccoon (*Procyon lotor*). One common herpetile species, western fence lizard (*Sceloporus occidentalis*), was observed.

Central dune scrub is the prevailing habitat type, as described in Section 4.2.2.

4.7 SPECIAL-STATUS WILDLIFE SPECIES

One special-status wildlife species, northern harrier (*Circus cyaneus*), was observed at the west end of the survey reach, near the mine pit. Two juvenile birds were seen foraging among the dunes.

Of the twelve (12) wildlife species documented from the USGS Point Sal 7.5-minute quadrangle, four (4) special-status species have potential to occur in the Survey Area on a regular or permanent basis, in addition to northern harrier. This conclusion is based on presence of suitable habitat, soil types, and/or documentation of nearby occurrences. These are California red-legged frog, Blainville's horned lizard, northern legless lizard, and western snowy plover (*Charadrius alexandrinus nivosus*).

4.7.1 California red-legged frog (*Rana draytonii*) (FT, SSC, G2, S2)³

The California red-legged frog is known from the Santa Maria River and dune swale ponds in the Guadalupe Dunes (CNDDDB 2019). There is no aquatic breeding habitat in the Survey Area. However, the species may occur as a rare to uncommon transient during migration or dispersal to or from breeding sites.

4.7.2 Blainville's Horned Lizard (*Phrynosoma coronatum*) (SSC, G3, S3)

Blainville's (coast) horned lizard occurs in a variety of habitats including scrublands, grasslands, dunes, and woodlands. It prefers sandy sites in which it can bury itself; these are often associated with red ant colonies. There records for this species in the project vicinity (CNDDDB 2019). The vegetation and soils of the Survey Area provide suitable habitat and food resources to support Blainville's horned lizard.

4.7.3 Northern Legless Lizard (*Anniella pulchra*) (SSC, G3, S3)

This cryptic, fossorial reptile inhabits moist soil in sparsely vegetated areas of beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks. Leaf litter under trees and bushes in sunny areas and dunes stabilized with

³ Listing Status:

FT – Federally listed Threatened

SSC – CDFW Species of Special Concern

Global/State Rarity Ranking:

G1/S1 – Critically imperiled (often 5 or fewer populations).

G2/S2 – Imperiled. Very few populations (often 20 or fewer).

G3/S3 – Vulnerable. At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer).

G4/S4 – Apparently Secure. Uncommon but not rare.

G5/S5 – Demonstrably Secure. Common; widespread and abundant.

bush lupine and mock heather often indicate suitable habitat. Legless lizards can be found under surface objects such as rocks, boards, driftwood, and logs (Stebbins 2003).

4.7.4 Northern Harrier (*Circus hudsonius*) (SSC, G5, S3)

The northern harrier is considered an uncommon summer resident along the North Coast of Santa Barbara County (Lehman 2019). The species is found in open grassland, coastal sage scrub, marshes, and agricultural areas. Northern harriers are seen in low numbers along the immediate coast from the Santa Maria River mouth south to at least Point Arguello. The observation of two juvenile birds during the June 18, 2019 survey suggests that breeding may have occurred that spring.

4.7.5 Western Snowy Plover (*Chardrius alexandrinus nivosus*) (FT, SSC, G3, S2)

The western snowy plover is listed as threatened under the Federal Endangered Species Act and is considered a Species of Special Concern by CDFW (2019). The species is a year-round resident near the mouth of the Santa Maria River (Lehman 2019, CNDDDB 2019). The local western snowy plover population has been monitored for several years in relation to soil remediation work and other projects near the mouth of the Santa Maria River. Western snowy plovers have reportedly nested in the vicinity of the mine and processing plant historically (Applegate, 2019 personal communication). Gravel pads associated with the former Shell Husky Oil and Gas Lease stabilized a portion of the dunes such that the birds were induced to nest. Present conditions, with shifting sands and sparse vegetation may not be conducive to nesting.

4.8 JURISDICTIONAL WATERS AND WETLANDS

No jurisdictional waters or wetland features are present in the Survey Area. The Santa Maria River, adjacent to West Main Street on the northern boundary of the Survey Area, is a blue-line stream that is considered jurisdictional under current federal guidance. The Survey Area is outside of the channel and the riparian corridor of Santa Maria River.

5.0 IMPACT DISCUSSION

The following section describes the potential for direct, indirect, temporary, and permanent impacts of the proposed Project on biological resources.

5.1 IMPACTS TO EXISTING VEGETATION AND SENSITIVE COMMUNITIES

Project-related equipment, and ground disturbance will primarily be confined to the ruderal/disturbed and bare sand habitats within the Survey Area. Direct impacts to the arroyo willows (e.g., trimming, removal) adjacent to the sand wash station may occur when the facility is decommissioned. No direct impacts to the riparian corridor of the Santa Maria River are expected as part of the Project.

The central dune scrub habitat (silver lupine-mock heather community) located around facilities and along the access road to the mine pit may be impacted during removal of the road's clay base and decommissioning of the equipment. Vegetation removal and trimming should be minimized as much as possible to avoid direct impacts to this sensitive habitat and the various special-status species it supports.

Ground disturbance and decommissioning are likely to create fugitive dust. Dust from construction would be minimized through implementation of the recommended dust control measures and Best Management Practices (BMPs) outlined in Section 6.0 below. With implementation of the recommended avoidance and mitigation measures, direct and indirect impacts to sensitive habitat (i.e., riparian and dune scrub habitat) within and adjacent to the Survey Area would be mitigated to a less than significant level.

5.2 IMPACTS TO PLANTS AND WILDLIFE

Three special-status plant species were observed in the dune scrub habitat within Survey Area during the June 2019 field surveys. One special status bird species, Northern harrier, was observed. Direct and/or indirect impacts to special-status plants and wildlife that have the potential to occur as a result of the Project (e.g., ground disturbance, equipment removal, etc.) are discussed below.

5.2.1 Impacts to Special-status Plants

Blochman's ragwort, crisp monardella, and surf thistle have the potential to be directly impacted (e.g., crushed, removed, covered with sand, etc.) by the Project. Blochman's ragwort is comprises a significant amount of the dune scrub habitat in the Survey Area and crisp monardella and surf thistle are adjacent to the access road to the mine pit. Impacts to special-status plant species from construction would be minimized through implementation of the recommended avoidance and mitigation measures outlined in Section 6.0.

5.2.2 Impacts to Special-status Wildlife

Five special-status wildlife species, CRLF, Blainville's horned lizard, northern legless lizard, northern harrier, and western snowy plover have potential to occur in the Project Area, as described in Section 4.5.2. The reptile and amphibian species could be injured or killed during initial demolition and regrading, if present within the limits of excavation. These impacts can be avoided through pre-project survey, monitoring, and capture and relocation. With implementation of the recommended avoidance and mitigation measures, direct and indirect impacts to special-status wildlife would be mitigated to a less than significant level.

5.2.3 Impacts to Nesting Birds

If construction is to occur during the breeding season (February 1 through August 31), work could result in direct or indirect impacts to nesting birds. Direct impacts could occur through removal of vegetation supporting active nests. Noise, dust, and general activity associated with construction could result in nest abandonment.

These potential impacts can be avoided by conducting a pre-construction bird survey and establishment of buffers or setbacks from construction activity, as described below.

5.3 IMPACTS TO JURISDICTIONAL WATERS

No jurisdictional waters or wetland features are present in the Survey Area and no impacts to jurisdictional waters are expected as a result of the Project. Indirect impacts to the Santa Maria River riparian corridor (e.g., erosion/sedimentation) would be minimized through implementation of the recommended mitigation measures and BMPs outlined in Section 6.0 below.

6.0 RECOMMENDED AVOIDANCE AND MINIMIZATION MEASURES

The following measures are recommended to reduce the potential for impacts to biological resources prior to and during demolition/reclamation. With implementation of the recommended avoidance and minimization measures, Project impacts to biological resources would be mitigated to a less than significant level. A number of these measures were also recommended by WRA (2017, 2019).

The focus of the reclamation effort is on decommissioning and removal of equipment, foundations, and structures associated with processing, storage, and transport of sand. Removal of the access road to the mine pit will require demolition of its clay base. The mine pit will be allowed to replenish with wind-blown sand. Active restoration is not proposed for the pit or access road. Restoration of the operations area will require regrading and actions to promote re-establishment of native vegetation.

6.1 SPECIES-SPECIFIC AND GENERAL AVOIDANCE AND MINIMIZATION MEASURES

- If work is to occur during the breeding season (February 1 to August 31), a County-approved biologist shall conduct a pre-construction nesting bird survey of the Project Area and adjacent habitats within 7 days of construction commencement (i.e., mobilization, staging, vegetation clearing, or excavation) to avoid impacts to nesting raptors and other birds. Surveys shall be conducted in all areas within 500 feet of proposed disturbance areas, or a lesser distance if dense vegetation renders a 500-foot survey radius infeasible. If breeding birds with active nests are found prior to (or during) Project implementation, a County-approved biologist shall oversee the establishment of a buffer (typically 300 feet for passerines and 500 feet for raptors) around the nest; no activities will be allowed within the buffer(s) until the young have fledged from the nest or the nest fails. If western snowy plovers are found within the work area, the USFWS will be immediately notified to determine what steps might be necessary to comply with the Federal Endangered Species Act.
- A qualified biologist shall conduct a pre-construction survey of the operations facilities and access road for special status plants and wildlife prior to commencement of demolition and regrading. Surf thistle, crisp monardella, Blochman's ragwort, California red-legged frog, Blainville's horned lizard, and western snowy plover will be specifically targeted during the survey. The location and/or limits of rare plant occurrences and sensitive vegetation shall be clearly flagged, delineated, or fenced as necessary to prevent inadvertent damage during demolition/reclamation. Any wildlife found (with the exception of California red-legged frog and nesting birds) shall be captured and relocated

to suitable habitat beyond the affected area. If California red-legged frogs are found within the work area, (considered highly unlikely) the USFWS and CDFW will be consulted regarding any necessary avoidance measures (e.g. morning inspections of the work area, installation of exclusion barriers around active work zones). Any special-status wildlife species observed in the Project Area shall not be physically relocated without permission from the CDFW or the USFWS, as appropriate. To the extent practical, common wildlife species entering the construction zone shall be captured and relocated to suitable habitat.

- Prior to the start of work, a County-approved biologist shall oversee worker orientation for all contractors (including site supervisors, equipment operators, and laborers) which emphasizes the presence of special-status species within or adjacent to the Project Area, identification of those species, their habitat requirements, applicable regulatory policies and provisions regarding their protection, measures being implemented to avoid and/or minimize impacts, and penalties for noncompliance will be conducted. If new members of the crew arrive after the initial orientation meeting, they shall attend a subsequent training prior to working on the job. No staging of equipment or construction supplies shall occur prior to the tailgate meeting.
- A County-approved biological shall monitor earthwork activities (e.g., re-grading,) and shall periodically inspect the Project site during demolition and reclamation. Work shall be stopped if necessary, to protect wildlife and other biological resources, or if violations of laws or permit conditions are observed.
- All construction equipment shall be limited to the use of designated access roads, staging areas, and/or previously identified work areas.
- All motorized equipment used at the Survey Area shall be maintained in proper working condition and shall be free of drips and leaks of coolant, hydraulic, and petroleum products. No equipment shall be used in the Survey Area unless such equipment is free of leaks and drips.
- A spill prevention and clean-up kit (including socks, absorbent pads, kitty litter, broom, dustpan, shovel, and container for dirty absorbent material) shall be available on-site for immediate use in case of an accidental spill.
- Erosion control measures (e.g., which may include silt fencing, jute netting, straw bales) shall be used throughout all phases of construction where sediment runoff from exposed soils could enter the Santa Maria River.
- Open excavations will be covered at the end of each work day. If this is not feasible, escape ramps will be installed in the pits to ensure no entrapment of animals occur.
- The applicant shall revise the Restoration Plan (EnviroMINE 2018) in sufficient detail to ensure that the site is returned to pre-operations conditions. The plan shall include these key elements:
 1. Measures to prevent incidental damage to native vegetation during demolition.

2. A conceptual plan for recontouring/regrading the operations area once equipment, foundations, and structures are removed.
3. A strategy for monitoring areas within 500 feet of the processing plant and 100 feet of the access road and mine pit for Cal-IPC “moderate” or “high” category invasive weed species.
4. Prescriptions for seeding and/or planting the processing area to promote re-establishment of native dune vegetation.
5. A description of maintenance actions to ensure survival following the initial seeding and planting.
6. Interim and final performance criteria for measuring progress and eventual attainment of restoration objectives.
7. A system of monitoring and reporting to track revegetation progress.
8. Contingencies (remedial actions) to be implemented if revegetation progress fails to meet interim objectives.

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FIGURES



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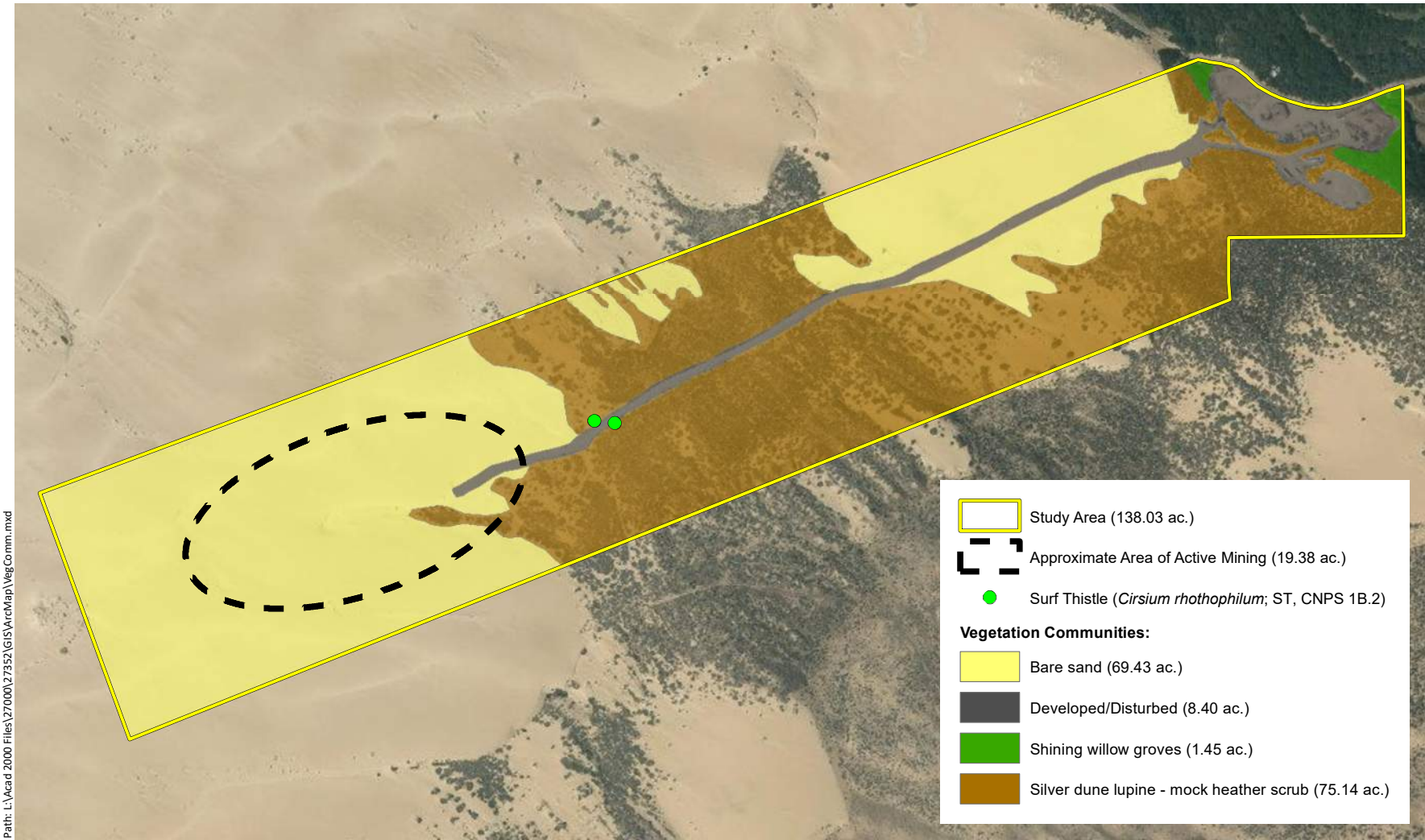


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Project Vicinity Map
Biological Resources Assessment
Gordon Sand Company

Figure 1

July 8, 2019



Sources: Esri Streaming - NAIP 2016, WRA | Prepared By: smortensen, 12/19/2017

Gordon Sand Company
Santa Barbara County, California

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Feet



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**Vegetation and Rare Plants Map (WRA)
Biological Resources Assessment
Gordon Sand Company**

Figure 2

July 8, 2019

APPENDIX A
SITE PHOTOGRAPHS



Photo 1: Office, scales and storage structure.



Photo 2: West Main Street near site entrance.



Photo 3. Basin at sand wash station.



Photo 4: Process area adjacent to West Main Street – Santa Maria River in background.



Photo 5: Conveyor for sand transport to wash station.



Photo 6. Bloomer's ragwort in foreground adjacent to facilities.



Photo 7. Access road to mining pit.



Photo 8. Mining pit.



Photo 9. Close-up of crisp monardella.



Photo 10. Crisp monardella adjacent to access road to mining pit.



Photo 11. Surf thistle flagged adjacent to access road to mining pit.

APPENDIX B
VASCULAR PLANT INVENTORY

**Vascular Plant Species Observed at
Gordon Sand Mine
Santa Barbara County, California**

Family	Scientific Name	Common Name	Origin	Rarity Status	Cal-IPC Rating
GYMNOSPERMS					
<u>Equisetaceae</u>	<i>Equisetum arvense</i>	common horsetail	N		
<u>Pinaceae</u>	<i>Pinus radiata</i>	Monterey pine	O		
ANGIOSPERMS - Dicots					
<u>Adoxaceae</u>	<i>Sambucus nigra</i> ssp. <i>caerulea</i>	blue elderberry	N		
<u>Aizoaceae</u>	<i>Carpobrotus chilensis</i>	sea fig	I		Moderate
	<i>Conicosia pugioniformis</i>	false ice plant	I		Limited
<u>Anacardiaceae</u>	<i>Toxicodendron diversilobum</i>	poison oak	N		
<u>Apiaceae</u>	<i>Conium maculatum</i>	poison hemlock	I		Moderate
<u>Asteraceae</u>	<i>Achillea millefolium</i>	yarrow	N		
	<i>Ambrosia chamissonis</i>	beach-bur	N		
	<i>Ambrosia psilostachya</i>	western ragweed	N		
	<i>Artemisia californica</i>	California sagebrush	N		
	<i>Baccharis pilularis</i> ssp. <i>consanguinea</i>	coyote brush	N		
	<i>Carduus pycnocephalus</i>	Italian thistle	I		Moderate
	<i>Centaurea melitensis</i>	toocalote	I		Moderate
	<i>Cirsium occidentale</i> var. <i>californicum</i>	California thistle	N		
	<i>Cirsium rhotophilum</i>	surf thistle	N	ST, CRPR 1B.2	
	<i>Corethrogyne filaginifolia</i> var. <i>filaginifolia</i>	common sandaster	N		
	<i>Ericameria ericoides</i>	mock heather	N		
	<i>Erigeron canadensis</i>	Canada horseweed	N		
	<i>Eriophyllum staechadifolium</i>	seaside wooly sunflower	N		
	<i>Helenium puberulum</i>	sneezeweed	N		
	<i>Helminthotheca echioides</i>	bristly ox tongue	I		Limited
	<i>Heterotheca grandiflora</i>	telegraph weed	N		
	<i>Pseudognaphalium californica</i>	California cudweed	N		
	<i>Pseudognaphalium luteoalbum</i>	Jersey cudweed	I		
	<i>Senecio blochmaniae</i>	Blochman's ragwort	N	CRPR 4.2	
	<i>Silybum marianum</i>	milk thistle	I		Limited
	<i>Sonchus asper</i>	prickly sow thistle	I		
	<i>Sonchus oleraceus</i>	common sow thistle	I		
<u>Boraginaceae</u>	<i>Cryptantha microstachys</i>	popcorn flower	N		
	<i>Phacelia ramosissima</i>	branching phacelia	N		
<u>Brassicaceae</u>	<i>Brassica nigra</i>	black mustard	I		Moderate
	<i>Brassica rapa</i>	common mustard	I		Limited
	<i>Cakile maritima</i>	European sea rocket	I		Limited
	<i>Erysimum capitatum</i> var. <i>capitatum</i>	sanddune wallflower	N		
<u>Chenopodiaceae</u>	<i>Chenopodium album</i>	lamb's quarters	I		
	<i>Chenopodium murale</i>	nettle-leaf goosefoot	I		
<u>Fabaceae</u>	<i>Lotus corniculatus</i>	bird's-foot trefoil	I		
	<i>Lupinus chamissonis</i>	dune bush lupine	N		
	<i>Melilotus albus</i>	white sweetclover	I		
	<i>Melilotus indicus</i>	annual yellow sweetclover	I		
<u>Grossulariaceae</u>	<i>Ribes divaricatum</i> var. <i>pubiflorum</i>	spreading gooseberry	N		
<u>Lamiaceae</u>	<i>Monardella undulata</i> ssp. <i>crispa</i>	crisp monardella	N	CRPR 1B.2	
<u>Myrsinaceae</u>	<i>Lysimachia arvensis</i>	scarlet pimpernel	I		
<u>Nyctaginaceae</u>	<i>Abronia latifolia</i>	yellow sand-verbena	N		
<u>Onagraceae</u>	<i>Camissoniopsis bisorta</i>	California suncup	N		
	<i>Epilobium ciliatum</i>	slender willowherb	N		
<u>Orobanchaceae</u>	<i>Castilleja affinis</i>	Indian paintbrush	N		
<u>Polygonaceae</u>	<i>Chorizanthe angustifolia</i>	narrow leaf spineflower	N		
	<i>Helminthotheca echioides</i>	green dock	I		
	<i>Rumex crispus</i>	curly dock	I		Limited
<u>Rosaceae</u>	<i>Rubus ursinus</i>	California blackberry	N		
<u>Salicaceae</u>	<i>Salix lasiolepis</i>	arroyo willow	N		

**Vascular Plant Species Observed at
Gordon Sand Mine
Santa Barbara County, California**

Family	Scientific Name	Common Name	Origin	Rarity Status	Cal-IPC Rating
<u>Solanaceae</u>	<i>Solanum douglasii</i>	Douglas' nightshade	N		
ANGIOSPERMS- Monocots					
<u>Poaceae</u>	<i>Bromus diandrus</i>	ripgut brome	I		Moderate
	<i>Bromus hordeaceus</i>	soft chess	I		Limited
	<i>Bromus madritensis</i> ssp. <i>rubens</i>	red brome	I		High
	<i>Cynodon dactylon</i>	Bermuda grass	I		Moderate
	<i>Ehrharta calycina</i>	veldt grass	I		High
	<i>Festuca myuros</i>	rattail sixweeks grass	I		Moderate
	<i>Lamarckia aurea</i>	goldentop	I		
	<i>Polypogon monspeliensis</i>	rabbit's-foot grass	I		Limited

NOTES

Scientific nomenclature follows: The Jepson Manual: Vascular Plants of California, Second Edition, Baldwin et al. (2012); Jepson Online Interchange (2018).

Origin Codes:

N = Native to Region

I = Introduced to Region (Non-native species which have become naturalized or persist without cultivation).

O = Ornamental/Landscaping (Non-native species that have been planted or are escaped cultivars).

Rarity Status Codes:

Species in bold type are listed as rare, threatened, or endangered by the State of California and/or the California Native Plant Society (CNPS 2019).

State:

ST - State listed as Threatened

CNPS Rare Plant Ranking System:

CRPR 1A - Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere

CRPR 1B - Plants Rare, Threatened, or Endangered in California and Elsewhere

CRPR 2A - Plants Presumed Extirpated in California, But Common Elsewhere

CRPR 2B - Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere

CRPR 3 - Plants About Which More Information is Needed - A Review List

CRPR 4 - Plants of Limited Distribution - A Watch List

CRPR Threat Ranks:

0.1 - Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)

0.2 - Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

0.3 - Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

California Invasive Plant Council (Cal-IPC) Rating System:

High – Species that have severe ecological impacts. Moderate to high rates of dispersal and establishment. Most are widely distributed ecologically.

Moderate – Species that have substantial and apparent-but generally not severe-ecological impacts. Moderate to high rates of dispersal, generally dependent upon ecological disturbance. Ecological amplitude and distribution may range from limited to widespread.

Limited – Species that are invasive but their ecological impacts are minor on a statewide level or there was not enough information to justify a higher score. Low to moderate r invasiveness. Distribution is generally limited, but species may be locally persistent and problematic.

Alert – Species with High or Moderate impacts that have limited distribution in California, but may have the potential to spread much further.

Watch – These species have been assessed as posing a high risk of becoming invasive in the future in California

**APPENDIX C
WILDLIFE INVENTORY**

Wildlife Species Observed within the Gordon Sand Mine Biological Resources Assessment Survey Area
Santa Barbara County, California
June 18, 2019

Common Name	Scientific Name	Regulatory Status
<u>Reptiles</u>		
Western Fence Lizard	<i>Sceloporus occidentalis</i>	N/A
<u>Birds</u>		
Mallard	<i>Anas platyrhynchos</i>	MBTA
California Quail	<i>Callipepla californica</i>	MBTA
Mourning Dove	<i>Zenaida macroura</i>	MBTA
Turkey Vulture	<i>Cathartes aura</i>	MBTA
Northern Harrier	<i>Circus cyaneus</i>	SSC/MBTA
Red-tailed Hawk	<i>Buteo jamaicensis</i>	MBTA
Black Phoebe	<i>Sayornis nigricans</i>	MBTA
Common Raven	<i>Corvus corax</i>	MBTA
Cliff Swallow	<i>Petrochelidon pyrrhonota</i>	MBTA
Western Bluebird	<i>Sialia mexicana</i>	MBTA
European Starling	<i>Sturnus vulgaris</i>	MBTA
House Finch	<i>Carpodacus mexicanus</i>	MBTA
Spotted Towhee	<i>Pipilo maculatus</i>	MBTA
White-crowned Sparrow	<i>Zonotrichia leucophrys</i>	MBTA
Brewer's Blackbird	<i>Euphagus cyanocephalus</i>	MBTA
<u>Mammals</u>		
Kangaroo Rat	<i>Dipodomy sp.</i>	N/A
Black-tailed Deer	<i>Odocoileus hemionus</i>	N/A
Raccoon	<i>Procyon lotor</i>	N/A

Regulatory Status Codes:

FE – Federal endangered species

FT -- Federal threatened species

FC – Federal candidate species

MBTA – Migratory Bird Treaty Act

SE – State endangered species

ST – State threatened species

SSC – Species of Special Concern (CDFW)

CFP – California Fully Protected Species

MMPA - Marine Mammal Protection Act

Attachment 5

Air Quality Calculations

Construction Equipment Estimated Emissions
based on CalEEMod

							Emission Factors, g/bhp-hr									Criteria Pollutant Emissions (Peak Day Pounds)						Criteria Pollutant Emissions (Annual Tons)						GHG Emissions (Metric Tons/Year)				
Equipment	Number	HP	Load Factor	Hours per Day	Hours per Year	Use Year	NOx	ROG	CO	SOx	PM ₁₀	PM _{2.5}	CO ₂	CH ₄	N ₂ O	NOx	ROG	CO	SOx	PM ₁₀	PM _{2.5}	NOx	ROG	CO	SOx	PM ₁₀	PM _{2.5}	CO ₂	CH ₄	N ₂ O	CO ₂ e	
Support Structure Removal																																
Excavator	1	158	0.38	8	500	2040	0.311	0.193	3.363	0.006	0.013	0.013	568.299	0.017	0.311	0.33	0.20	3.56	0.01	0.01	0.01	0.01	0.01	0.01	0.11	0.00	0.00	0.00	16.92	0.00	0.01	19.70
Semi-truck	2	402	0.38	8	500	2040	0.305	0.204	1.105	0.005	0.012	0.012	568.299	0.018	0.305	1.64	1.10	5.95	0.03	0.06	0.06	0.05	0.03	0.19	0.00	0.00	0.00	86.12	0.00	0.05	99.97	
Wheel Loader	1	203	0.36	8	500	2040	0.346	0.185	1.128	0.006	0.013	0.013	568.299	0.016	0.346	0.45	0.24	1.45	0.01	0.02	0.02	0.01	0.01	0.05	0.00	0.00	0.00	20.60	0.00	0.01	24.35	
Welding Truck	1	46	0.45	8	500	2040	3.093	0.402	4.336	0.007	0.015	0.015	568.300	0.036	3.093	1.13	0.15	1.58	0.00	0.01	0.01	0.04	0.00	0.05	0.00	0.00	0.00	5.84	0.00	0.03	15.31	
TOTAL																3.55	1.69	12.55	0.04	0.10	0.10	0.11	0.05	0.39	0.00	0.00	0.00	129.49	0.00	0.10	159.33	
Foundation Removal																																
Excavator	2	158	0.38	8	500	2040	0.311	0.193	3.363	0.006	0.013	0.013	568.299	0.017	0.311	0.66	0.41	7.12	0.01	0.03	0.03	0.02	0.01	0.22	0.00	0.00	0.00	33.85	0.00	0.02	39.40	
Semi-truck	1	402	0.38	8	500	2040	0.305	0.204	1.105	0.005	0.012	0.012	568.299	0.018	0.305	0.82	0.55	2.98	0.01	0.03	0.03	0.03	0.02	0.09	0.00	0.00	0.00	43.06	0.00	0.02	49.98	
TOTAL																1.48	0.96	10.10	0.03	0.06	0.06	0.05	0.03	0.32	0.00	0.00	0.00	76.91	0.00	0.04	89.38	
Equipment Removal																																
Wheel Loader	1	203	0.36	8	500	2040	0.346	0.185	1.128	0.006	0.013	0.013	568.299	0.016	0.346	0.45	0.24	1.45	0.01	0.02	0.02	0.01	0.01	0.05	0.00	0.00	0.00	20.60	0.00	0.01	24.35	
Semi-trucks	2	402	0.38	8	500	2040	0.305	0.204	1.105	0.005	0.012	0.012	568.299	0.018	0.305	1.64	1.10	5.95	0.03	0.06	0.06	0.05	0.03	0.19	0.00	0.00	0.00	86.12	0.00	0.05	99.97	
TOTAL																2.09	1.34	7.41	0.03	0.08	0.08	0.07	0.04	0.23	0.00	0.00	0.00	106.73	0.00	0.06	124.32	
Site Grading																																
Wheel Loader	1	203	0.36	8	500	2040	0.346	0.185	1.128	0.006	0.013	0.013	568.299	0.016	0.346	0.45	0.24	1.45	0.01	0.02	0.02	0.01	0.01	0.05	0.00	0.00	0.00	20.60	0.00	0.01	24.35	
Semi-truck	1	402	0.38	8	500	2040	0.305	0.204	1.105	0.005	0.012	0.012	568.299	0.018	0.305	0.82	0.55	2.98	0.01	0.03	0.03	0.03	0.02	0.09	0.00	0.00	0.00	43.06	0.00	0.02	49.98	
Bulldozer	2	247	0.4	8	500	2040	0.810	0.253	1.225	0.006	0.031	0.031	568.299	0.022	0.810	2.82	0.88	4.27	0.02	0.11	0.11	0.09	0.03	0.13	0.00	0.00	0.00	55.70	0.00	0.08	79.42	
TOTAL																4.09	1.67	8.70	0.04	0.16	0.16	0.13	0.05	0.27	0.00	0.00	0.00	119.37	0.00	0.12	153.75	
Revegetation																																
Bulldozer	1	247	0.4	8	500	2040	0.810	0.253	1.225	0.006	0.031	0.031	568.299	0.022	0.810	1.41	0.44	2.13	0.01	0.05	0.05	0.04	0.01	0.07	0.00	0.00	0.00	27.85	0.00	0.04	39.71	
TOTALS																12.62	6.10	40.89	0.16	0.45	0.45	0.39	0.19	1.28	0.00	0.01	0.01	460.34	0.02	0.35	566.48	

Summary of Estimated Project Operational Emissions

Emissions Source	Criteria Pollutants (lb/day)						Criteria Pollutants (tons/yr)					
	NOx	ROG	CO	SOx	PM10	PM2.5	NOx	ROG	CO	SOx	PM10	PM2.5
Support Structure Removal	3.55	1.69	12.55	0.04	0.1	0.1						
Foundation demolition												
Removal of concrete slabs/retaining walls	1.48	0.96	10.1	0.03	0.06	0.06						
Equipment and rubbish removal	2.09	1.34	7.41	0.03	0.08	0.08						
Site Grading and Ripping	4.09	1.67	8.7	0.04	0.16	0.16						
Revegetation	1.41	0.44	2.13	0.01	0.05	0.05						
Total Project Emissions	12.62	6.1	40.89	0.16	0.45	0.45	0.52	0.24	1.55	0.01	0.02	0.02
County Significance Threshold (Mobile Sources Only)	25	25	-	-	-	-						
Significant Impact?	No	No	-	-	-	-						
County Significance Threshold (Total Operational Emissions)	55	55	-	-	80	-	25	25	-	25	25	25
Significant Impact?	No	No	-	-	No	-	NO	NO	NO	NO	NO	NO