1.0 PROJECT DESCRIPTION

1.1 INTRODUCTION

Sargent Ranch Management Company (Applicant) proposes to mine and conduct reclamation activities on approximately 317 acres of the 6,400 acre property known as the Sargent Ranch, in unincorporated Santa Clara County.

OWNER, OPERATOR, AND OPERATOR'S AGENT

RELATIONSHIP BETWEEN PROPERTY OWNERS AND OPERATOR

Sargent Ranch Management Company is the applicant and quarry operator for approval of the Conditional Use Permit and Reclamation Plan for the proposed Sargent Quarry. The operator's Statement of Responsibility to reclaim the property is contained in Appendix A of the Reclamation Plan. A number of tenants in common own property where the quarry will be located.

Applicant:	Sargent Ranch Management Company
Name of Mineral Property:	Sargent Quarry
Owner of Surface Rights:	See attached ownership list
Owner of Mineral Rights:	See attached ownership list
Operator:	Sargent Ranch Management Company
Agent of Process:	Verne Freeman Freeman Associates 994 San Antonio Road Palo Alto, CA 94303

This section provides a detailed description of the proposed Project including Project objectives, operational aspects of proposed mining and processing, and proposed reclamation activities. It also includes a description of the site location, layout,

operational schedule, workforce, and lists potential permits, approvals, and regulatory processes with which the Project may be required to conform to or obtain.

1.2 REQUESTED ENTITLEMENTS

The Applicant seeks the following entitlements from Santa Clara County:

- A Conditional Use Permit for a 30-year term for:
    - The mining of sand and gravel from a 317-acre area shown on Figures 10 through 15 of the attached Mining and Reclamation Plan; and
    - Installation and operation of aggregate processing facilities within a 14-acre processing plant site that would be located within the southeastern portion of the 317-acre Project site and shown on Figure 8
- Approve the proposed reclamation activities including reclaiming mined areas to grazing land, stabilizing and revegetating slopes, and reclaiming the processing site, roads, and the cessation of mining pursuant to the Mining and Reclamation Plan included with this application.

1.3 PROJECT SETTING

This section describes the Project location and discusses the Project site's existing characteristics.

1.3.1 Location and Size

The proposed project, Sargent Quarry, is a pit mining operation that would occur on approximately 317 acres of the existing Sargent Ranch. The operation would occur on portions of Assessor's Parcel Numbers 810-38-014, -017 and -018. It is estimated that this site contains approximately 40 million tons of sand and gravel aggregate and that the operation could have a lifespan of 50 years or more based on consumption rates. However, the operator is requesting a 30-year term on the Conditional Use Permit.

The primary market for products produced from the mine (sand and gravel, which can be used for concrete and asphalt production, and rock) will be contractors and public agencies in the Santa Clara, San Benito and Monterey County areas.

The Project site is approximately 4 miles south of the town of Gilroy, California, west of Highway 101 in Santa Clara County and is accessed off of Old Monterey Road.

Assessor's Parcel Numbers:	810-38-014, -017 and -018 Also see Appendix B, Site Legal Description.
Section, Township and Range:	Sections 32 & 33 of Township 11 South, Range 4 East and Sections 5, 6 &7 Township 12 South, Range 4 East MDB&M.

1.3.2 Existing Land Use

The Project site currently has a land use designation of "Agricultural Ranchlands" in the *Santa Clara County General Plan* and is also zoned Agricultural Ranchlands in the County's zoning code (see Figure 1.1, "General Plan Land Use Designations"). Aggregate extraction operations are permitted under this zoning, subject to a Conditional Use Permit.

Surrounding land uses are summarized in Table 1-1, "Surrounding Land Uses."

TABLE 1-1
SURROUNDING LAND USES

Direction from Project Site	Land Use Designation(s)	Land Use Description
East	Caltrans Highway	Highway 101
West	Agricultural Rangeland	Sargent Ranch
North	Agricultural Rangeland	Sargent Ranch
South	Agricultural Rangeland	Sargent Ranch

Currently, other than ranching and agricultural uses, there are no authorized land uses in the Project area.

1.4 PROJECT OBJECTIVES

The Project involves the mining of sand and gravel, and associated reclamation activities. The Applicant's objectives for the Project include the following:

- Mine and process sand and gravel on site;

- Authorize land uses on the subject property consistent with the *Santa Clara County General Plan* and the County Zoning Code;
- Create an additional local source of construction materials for potential use by local construction contractors and other economic actors in need of such materials, who otherwise might have to seek such materials from more distant sources, resulting in greater associated air quality and traffic impacts;
- Increase the tax base of Santa Clara County; and provide employment opportunities for workers qualified to participate in mining activities.
- Make an economically beneficial use of a mineral-rich property; and,
- Reclaim the Project site pursuant to a Reclamation Plan.

1.5 SITE PLAN AND FACILITIES

Of the Project site's 317 acres, approximately 238 acres comprise the area of proposed mining. The proposed processing plant site is located near Highway 101 and is roughly 14 acres in size. Reclamation activities would be conducted on mining phases that are completed. The remaining portions of the site would not be utilized for mining, processing, or reclamation activities and would be maintained in their current conditions. The following sections describe the mining plan, the processing plant facilities and proposed operations, and the proposed reclamation activities associated with the Project.

1.5.1 Mining Plan

Sand and gravel would be extracted from within the 238-acre mining area in four Phases as illustrated on 10 through 15. Mining will be done in an open pit fashion with 2:1 side slopes with 10-foot benches every 30 vertical feet. Finished slopes will then be backfilled to 3:1 and revegetated. No underground mining will be necessary for this project. Mining is proposed to occur year-round. The total volume of material to be mined annually would be determined by the market demand. However, in the absence of other limitations, a maximum of 1,000,000 cubic yards of material would be mined in any single year.

The targeted materials to be mined are alluvial deposits of sand and gravel. Mined materials would be hauled to the proposed on-site aggregate processing plant for screening and limited crushing. The material would then be sold for a variety of construction related uses. Waste materials (e.g., silts and clays) not suitable for

construction or concrete uses would make up approximately 25 percent of the mined materials by volume. These materials would be separated and stockpiled in the two berms shown on Figures 10 thru 15 depending on the phase of mining.

1.5.2 Limits of Mining

The total potential mining area is approximately 238 acres. The proposed limits of mining are shown on Figure 9.

1.5.3 Phasing of Mining

Mining would occur in four phases.

Phase 1 and 2 Mining

Phases 1 and 2 mining are shown on Figure 13. These deposits are located in two hills on both the east and west side the Sargent Creek. A conveyor belt will be used for transporting the aggregate and will be constructed along the west side of the Sargent Valley. .A small access road will be constructed along side of the conveyor belt for maintenance purposes. The conveyor belt and road alignment is shown on Figures 9a and b. This alignment will run along the west side of the Sargent Valley and will stay above the valley floor and the creek and pond areas. Based on initial sales estimates, Phase 1 and 2 mining will last for approximately 10 to 15 years after operational start up. Material would be mined from the designated pit areas. The 1.6 mile long conveyor belt will be used to transport the material to the processing plant site. Phases 1 and 2 should be almost entirely hidden from view, shielded by a prominent ridgeline running along the east side of the Sargent Valley, and blocking views from Highway 101 and the rest of South County.

A berm will be constructed to serve as a visual shield to hide the processing area from drivers on Highway 101. The berm will be constructed with overburden from the Phase 1 area. Any topsoil will be stockpiled in a one separate location. This berm and topsoil stockpile are shown on Figure 9. Overburden or unsuitable materials from Phase 1 would be used to build the berm located to the east of the property boundary closest to Highway 101. At its highest point the berm will be 50 feet high and will serve to shield the processing plant site and operations from view from Highway 101. The berm will be designed to be natural in appearance and blend in with the native landforms. Once the front berm is built, a back berm will be constructed with any additional overburden. During the period of Phase 1 and 2 mining (10-15 years), trees and other view shed blocking vegetation will have time to grow and mature in time for the later phases of mining that have more visual impacts.

Topsoil will be kept separately and stockpiled in the areas shown on Figure __. Phase 1 pit will be constructed with side slopes of 2/1 with 10-foot benches every 40 vertical feet, resulting in an overall angle of 2.3/1 for the temporary slope.

Roughly 8,600,00 cubic yards will be excavated during Phase 1 and 2. Cross-sections of the mining plans are shown on Figure 14. The highest elevation of mining in the Phase 1 mining area is 360 feet above mean sea level (AMSL). The bottom of the lowest pit elevation will be 245 feet AMSL resulting in a maximum excavation depth of 125 feet.

Overburden from the Phase 1 and Phase 2 excavations will be hauled to the plant site area and used to build the visual screening berm along Highway 101 and the balance deposited in the western stockpile area. The topsoil stockpile from Phase 1 and Phase 2 will be stockpiled separately. Complete reclamation of the Phase 1 mining and Phase 2 areas will be completed after their excavations are completed. Some of the overburden from will be used to reconstruct the excavated slopes in Phase 1 and 2 to a 3:1 permanent slope. Once completed Phase 1 and the Phase 2 areas will be reclaimed completely.

Phase 3 Mining

Phase 3 mining is shown on Figure 12. Portions of Phase 3 mining may be visible from Highway 101. Phase 3 mining will begin approximately in year 14 – 16. By that time the landscaping on the front berm will have had time to grown in and will form a more effective shield from the views from driver on the highway. Hills will be mined from west to east creating a disappearing hillside effect to further to minimize visual impacts. Please refer to the visual simulations included with the figures.

Phase 4 Mining

Phase 4 mining is shown on Figure 13. Material will be mined in a similar manner as Phase 1, from the west side of the hills to the east. Overburden and topsoil from Phase 2 will be used to reclaim portions of Phase 3. The westerly portion of Phase 4 will be excavated first starting at the highest elevation of 600 feet (AMSL to a minimum pit level of 200 feet AMSL). Once this upper slope has been excavated, revegetation will be initiated in order to minimize the time that visible slopes do not blend in with the natural ones. Phase 4 will produce approximately 20 million cubic yards (36 million tons) from this portion of the mining site.

Overburden from Phase 4 mining will be placed in the Phase 3 pit and will also be used to reconstruct the Phase 3 slopes to 3:1..

1.6 PROJECT OPERATIONS

1.6.1 Site Plan and Operations Summary

Table 1-2 provides a summary of key details related to mining operations and reclamation activities.

TABLE 1-2
OPERATION AND RECLAMATION DATA SUMMARY

Operating Characteristics	Description
Operational Activities	
Aggregate Removal and Loading	Materials would be excavated using mobile equipment (e.g., scrapers, dozers, excavators) and loaded to haul trucks.
Transport	Conveyor belts, Haul trucks or Scrapers would transport materials to the on-site processing plant.
Processing	All processing would occur on-site.
Reclamation	Previously mined lands would be restored to an agricultural use (e.g., grazing,).
Quarry And Reclamation Data	
Areas Project Boundary Limits of Mining Processing Plant Site Roads and Other Disturbance Areas	 317 acres 238 acres 14 acres 65 acres
Total Disturbance Area	317 acres
Volume ***Annual Mining (max)***	 10,000 cy/day; 1,000,000 cy/year
Aggregate Processing Plant Maximum processed Maximum imported	 8,000 cy/day; 1,000,000 cy/year >500/cy/day
Operations Period Mining Season	 Year-round

Processing Plant Site	Year-round
Excavation Area Dimensions[1]	
Acreage	238 acres
Approximate Length	4,000 feet
Approximate Width	1,200 feet
Maximum Depth	550 feet
Hours and Work Force	
Processing Plant Hours of Operation (Loadout)	Monday–Saturday, 7:00 a.m. to 4:30 p.m.
Mining Hours of Operation	Monday–Saturday, 7:00 a.m. to 4:30 p.m.
Aggregate Processing	8 hrs per day; 2,000 hrs per year
Work Force (max.) Maximum	15 on-site employees
Aggregate Processing Plant	
Maximum processed	8,000 cy/day; 1,000,000 cy/year
Reclamation Areas	
Areas to be Reclaimed	0 acres now

1.6.2 Operating Schedule and Workforce

Mining operations would occur year-round. Mining and processing plant operations would typically occur from 7:00 a.m. to 4:30 p.m., Monday through Saturday. Extended processing plant operational hours would also be permitted to allow mining operations to operate at night, providing the mine operator the flexibility to respond to market conditions, nighttime public works projects, and emergency or special circumstances. Maintenance of mobile equipment and deliveries (e.g., fuels) would occur during normal operating hours.

The number of employees at the Project site would fluctuate based on extraction rates and processing plant production rates. Up to 15 full-time employees would be needed for mining and operations at the project site.

1.6.3 Mining and Processing Methods

Sand and gravel would be mined using conventional equipment, including excavators and scrapers. Excavated material would be hauled by truck, scraper, or overland conveyor to the processing plant site. Figure 8 illustrates the proposed layout of the processing plant site. There the material would be sized, washed, and sorted into stockpiles. Some materials may also be crushed and sorted into stockpile via radial stacker and conveyers. Materials would be kept wet to minimize dust emissions. Sprinklers and water trucks would be used to control dust at multiple locations at the processing plant and on stockpiles.

1.6.4 Access and On-Site Circulation

Access to the site would be from Old Monterey road through the gated entrance. Figure 8 illustrates the primary access routes that on-site vehicles would utilize for transporting materials between mining areas, the processing plant site, and the product stockpiles. Access roads may be paved and would be maintained for Project operations. Trucks leaving the site traveling southbound would continue back along Old Monterey Road and then onto southbound Highway 101 via the stacking lane already in place. Trucks traveling northbound would travel under the Sargent undercrossing and onto northbound Highway 101 via a new acceleration lane installed by the quarry operator. The northbound acceleration lane is shown on Figure 31.

1.6.5 Vehicle Trips

The Project would generate vehicle trips associated with workers, materials transport and supplies that would be delivered to the site. Table 1-3 presents peak daily one-way and round trips associated with the Project during a year of maximum production. Table 1-4 presents average daily one-way and round trips associated with the Project during a year of maximum production.

TABLE 1-3
PEAK DAILY VEHICLE TRIP GENERATION

Uses	Number of Axles	Maximum Daily Trips at Peak Day Production		AM (Daily Peak-Hour)		PM (Daily Peak-Hour)	
		One-Way Trips	*Two-Way (Round) Trips*	*Entering*	*Exiting*	*Entering*	*Exiting*
Facility Employees[1]	2	30	15	15	0	0	15
Aggregate Sales	5	870	435	250	250	185	185
Materials Delivery to Site	5	8	4	4	4	2	2
Maintenance Vehicles	5	2	1	1	1	1	1

Uses	Number of Axles	Maximum Daily Trips at Peak Day Production		AM (Daily Peak-Hour)		PM (Daily Peak-Hour)	
		One-Way Trips	*Two-Way (Round) Trips*	*Entering*	*Exiting*	*Entering*	*Exiting*
Maximum Trips	**N/A**	880	440	270	270	188	188

TABLE 1-4
AVERAGE DAILY VEHICLE TRIP GENERATION

Uses	Number of Axles	Maximum Daily Trips at Peak Day Production		AM (Daily Peak-Hour)		PM (Daily Peak-Hour)	
		One-Way Trips	*Two-Way (Round) Trips*	*Entering*	*Exiting*	*Entering*	*Exiting*
Facility Employees[1]	2	30	15	20	20	10	10
Aggregate Sales	5	340	170	180	180	160	160
Maintenance Vehicles	2	1	2	1	1	0	0
Maximum Trips	N/A	341	187	201	201	170	170

1.6.6 Drainage

During mining, runoff from quarry work areas would drain by sheet flow into drainage swales along the perimeter of the work area. Site drainage is shown on Figure 16. Storm drainage from the site would be conveyed to settling ponds shown on Figure 8. Stormwater in the settling pond would ultimately percolate on-site or be reused for plant operations. Swales will buffer the overburden stockpiles and the plant area from Tar Creek to the west, and contain stormwater from the Project site from entering the creek.

1.6.9 Water Supply and Use

Table 1-6 lists estimated annual water consumption by the Project. As shown, the daily and annual water consumption rates during a peak production year would be 86,300 and 17,260,000 gallons, respectively.

Aggregate processing would require water throughput of approximately 800 gallons per minute (384,000 gallons per day); however, 80 percent of the water would be recycled. Thus, 76,800 gallons would be pumped from the ground each day the plant is operating (up to approximately 200 days per year). A process water pond would be

constructed within the processing plant site and would be used to retain water for reuse in aggregate processing.

The new onsite well will provide water for operations and dust control. A water truck would be used as needed to control dust on access roads and processing areas within the site. Approximately 86,300 gallons of water per day, or 17,260,000 gallons per year, would be used to control dust.

TABLE 1-5
DAILY AND ANNUAL WATER CONSUMPTION

Project Component	Annual Water Consumption in Peak Production Year (gallons per year)	Maximum Daily Demand (gallons per day)
Aggregate Processing	15,360,000	76,800
Processing Plant Dust Suppression	100,000	500
Access Roads Dust Suppression	600,000	3000
Mining Area Dust Suppression	600,000	3000
Reclamation Area Dust Suppression	300,000	1500
Reclamation Areas Irrigation	100,000	500
Landscaping Irrigation	100,000	500
Total	17,260,000	**86,300**

1.6.10 Utilities and Lighting

Existing electric power and telephone lines would be used for power needs for the Project or new service may be brought in to the site. Water will be obtained from a new on-site well, for both plant operations and drinking water for employees. A new private septic system will provide sanitary sewer facilities for the Project site. The septic system will be designed for a daily wastewater generation of 400 gallons per day. This is based on the Uniform Plumbing Code estimated wastewater generation of 25 gallons per day per employee.

Most mining will occur during the day and no lighting will be installed in the pit areas. Lights will be installed at the plant site, per MSHA regulations. Lighting may be on in the early morning and later evening hours during the winter months if production is required. Lighting will be contained to the plant site and will not create glare onto neighboring properties or Highway 101.

1.6.11 Equipment

Mining equipment includes scrapers, excavators, dozers, loaders, and dump haul trucks. Scrapers would be used to remove the surface material. Scrapers will collect material into their hoppers by lowering their blades as they traverse the site. When their hoppers are full, the scrapers would transport the material via the designated access routes from the mining area to the processing area located outside of the mining area. Scrapers, or a loader, would be used to place the material onto haul trucks for transport to the processing site. On-site haul routes are shown on Figure 9.

Table 1-7 provides a listing of equipment and estimated average and maximum daily and annual durations of operation for each piece of equipment. Most equipment is diesel fueled, however natural gas powered equipment is now becoming available and may be purchased to lower overall greenhouse gas emissions and odors from the Project.

TABLE 1-6
EQUIPMENT LIST AND ANNUAL HOURS OF OPERATION

Number	Equipment	Hours/Day	Hours/Year
4	627 Scraper	8	2400
5	988 Loader	8	2400
2	D9N Dozer	8	2400
2	14 Blade	8	2400
2	Water Trucks	8	2400
3	324 Excavator	8	2400
4	Haul Trucks	8	2400

1.6.12 Noise

Sources of noise from the Project will be primarily the washing and screening plant and the construction equipment used for mining. There will be no blasting required for the mining and very little crushing done at the processing plant. The plant's main function is to separate the material by size using screens and to wash the material of its silts and clays. Rubber screens are used to minimize noise from the sizing operation and, in general, washing creates little noise. Noise from the back up horns and engines of the mining equipment does create noise that can carry. However, the nearest receptor for noise from the Project is a RV park more than a mile to the south and on the other side of a large hillside. Noise impacts will be studied as part of the project EIR.

1.6.13 Visual Impacts from the Project

Portions of the Project will be visible from both southbound and northbound Highway 101 at Sargent overcrossing. The visual impact to drivers can be seen for a few seconds while looking to the west from Highway 101. In order to minimize these impacts, two berms will be constructed to shield both the processing plant and the mining areas. The front berm will be built at the start of operations and is shown on Figure 8. This berm will be 50 feet high and serve to block both the views as well as dust and stormwater runoff from the Highway 101, Tar Creek undercrossing. The rear berm is shown on Figure 9 and will serve to block the views into the mining area from Highway 101. Both these berms will serve as overburden stockpile areas and will be seeded to blend in with the surround natural landscape.

1.6.14 Dust Control

Water will be the primary means of dust control at the quarry. Two water trucks will be used to keep both exposed areas of mining and the plant areas wet to contain dust. Sprinklers will be used at the plant site to contain dust from stockpiles and processing equipment. The prevailing wind is from the west to the east, so the buffer hills between the mining areas and the eastern edge of the Sargent Ranch boundary may be impacted on windy days. Measures to control dust in addition to the use of water include keeping the mining areas limited to only the working area and using early revegetation to cover up previously mined areas. Use of dust palliatives may also be considered on haul roads and unpaved plant areas.

1.6.15 Cultural Resources

William Self and Associates prepared a Cultural Resources report for the project area in July 2014. No evidence of archeological or historic resources was found in the Project area. The report is included in the submission package.

1.6.16 Conformance with the Santa Clara County HCP

To the greatest extent possible, the Project has been designed to conform to the standards outlined in the Santa Clara County Habitat Conservation Plan. 150-foot buffers have been maintained between the Project boundaries and the edge of Tar Creek. Unavoidable biological impacts are proposed to be mitigated by the dedication of a conservation easement area on the east side of the Sargent Valley. See the biological section of the Mining and Reclamation Plan and the Biological Evaluation by Live Oak Associates for more information on the proposed mitigation area. The Sargent Quarry project is not expected to be provided Take coverage from the HCP however, and will seek individual permits from the resource agencies for Take authority for the project impacts.

1.6.17 Slope Stability

Sierra Geotechnical Services performed a slope stability analysis that included recommendations for interim slopes of 2:1 with 10-foot benches every 30 vertical feet and 3:1 finished slopes upon reclamation of each mining phase. The report is included with the permit submission package, Appendix D. Recommendations have been included with the mine design.

1.7 MINING AND RECLAMATION PLAN

Reclamation of surface mines is required by SMARA (Surface Mining Area Recovery Act). SMARA requires mines to be reclaimed to a usable condition that is readily adaptable to a productive alternative land use and that creates no danger to public health or safety. Reclamation must be conducted consistent with the SMARA Article 9 Reclamation Standards (Title 14 California Code of Regulations [CCR] § 3700 et seq.) that contain specific performance requirements for various end uses (e.g., habitat, Prime Farmlands) and methods such as backfilling, revegetation, drainage, stream protection, topsoil salvage and tailing management. The Applicant prepared and will submit a

proposed Reclamation Plan to the County, and the plan is included with this application.

1.7.1 Phase 1 and 2 Mining and Reclamation

An aggregate processing plant will be set up as well as an office, scale and maintenance buildings and an unpaved equipment parking area. A sediment basin will be constructed to receive all surface water from the areas disturbed by mining via drainage ditches and swales. The first phase of mining work typically starts with stripping away surface vegetation and removing the topsoil and overburden in separate layers and stockpiling them separately. Phases 1 and 2 are approximately 1.5 miles from the processing plant so an overland conveyor will be constructed to transport material from these areas to the plant. The conveyor route is shown on figures 9 a and b. Overburden will be used to construct the berm near the property boundary with Highway 101. As sand and gravel are excavated from Phase 1 and 2 slopes, it will both be placed into the conveyor for transport to the plant. Temporary slopes and benches will be constructed as part of mining; the final slope configuration will be constructed during reclamation that will occur when mining operations are completed. Revegetation Test Plots will be set up at the beginning of Phase 1 and will be located in areas that will not be disturbed by mining activities.

1.7.2 Phase 3 Mining and Reclamation

Phase 3 mining is shown on figure 12. Total excavation amounts in Phase will be 13, 200,000 cubic yards Phase 3 mining will begin by stripping away surface vegetation and removing topsoil and overburden in separate layers and stockpiling them separately. Overburden from the Phase 3 mining area will be stockpiled for later use in the rear berm area. As sand and gravel are excavated from Phase 3 area, it will be placed into a truck or onto a shorter conveyor run. Temporary slopes and benches will be constructed as part of mining; the final slope configuration will be constructed during final reclamation at the end of Phase 3.

1.7.3 Phase 4 Mining and Reclamation

Phase 4 mining is shown on figure 13. Phase 4 will be the largest phase of the project with a total excavation of 16,300,000 cubic yards. Some of the overburden from Phase 4 will be used to construct the final slopes of Phase 3. The remainder of the Phase 4

overburden will be stockpiled and will be used to construct the final 3:1 slopes on both Phase 3 and the final reclamation of Phase 4.

1.7.4 Final Reclamation

When mining is completed in all Phases, then final reclamation of the quarry and plant site will commence. The stockpiled overburden and topsoil will be used to complete all final slopes for all phases and to refill the quarry floors. The remaining topsoil materials will be used to cap the quarry pits and to provide better soil for revegetation. Final elevations of the quarry pits will depend on the amount of fill material that is available. Benches no longer needed for protection of quarry workers will be removed and the slopes restored to a 3:1 overall slope. Contour grading will be used on quarried slopes to conform to the natural appearance of the surrounding landscape. A few benches will be retained in the areas for oak tree planting to provide stability for the trees to grow. The width of these remaining benches may be reduced to provide a more natural looking reclaimed area. The plant site will be reclaimed by removing all equipment then re-grading the site and spreading the landscape berm out over the disturbed plant site area.

The final drainage ditches on the benches will be installed as these reclaimed slopes and benches are completed. Final reclamation work may include installation of an irrigation system to water the Oak tree seedlings. However, irrigation will only be installed if the Test Plot planting program determines that supplemental water improves the survival rate of the Oak Trees. All areas disturbed by mining will be revegetated after final reclamation grading which will include, hydroseeding the slopes with a gradient of 3:1 or more; drill or imprint seeding flatter slopes and benches, and planting Oak tree masses in designated locations. The sediment basin will also be filled with the remaining soil material. The private driveway and internal access road will remain to provide access to the site. Other unnecessary haul roads and the quarry floor will be disked, graded to have positive drainage, resoiled and seeded.

1.8 Plant Establishment and Maintenance

1.8.1 Revegetation Performance Criteria

Revegetation performance would be measured in terms of percent cover and diversity as listed in Table 1-8. Planting, maintenance, and monitoring work would be directed toward achieving the following minimum success criteria by the end of the first 5 years.

For oak woodland/sage scrub plantings, at least 60 percent cover would exist, with at least four native species thriving. Invasive plant species would not be allowed to exceed 5 percent cover. Although minimum performance standards have been established only for the year 5 at each planting site, corrective action would be taken whenever the existing trend appears unlikely to produce the 5-year minimum criteria. Corrective action would take the form of replacing plants, installing additional biotechnical erosion control, and/or reseeding. If plant establishment is poor because of substandard planting techniques, inferior planting stock, or drought, the same species would be replaced. If a species does poorly in spite of favorable stock, technique, or weather conditions, plantings would be replaced by a more successful species within its plant association.

TABLE 1-8
REVEGETATION PERFORMANCE STANDARDS AT YEAR 5

Criteria	Riparian Woodland/Scrub
Vegetative cover (absolute)	≥60% (native species)
Invasive nonnative plant species	≤5%
Survival of container stock	60%

1.9 Financial Assurance

SMARA requires surface mining operators to obtain lead agency–approved financial assurances for the reclamation of mined lands. In the event of a default by the mine operator, financial assurance funds would be used by the County or the California Department of Conservation to reclaim the mine site. As a component of the Project, the Applicant would be required to provide the financial assurance necessary to reclaim disturbed surfaces within the Project site should operations end early.

Reclamation of the Project would be covered by financial assurances in accordance with the requirements of SMARA. The financial assurance cost estimate and the proposed financial assurance mechanism must be submitted to the County no later than 60 days

before project activities begin. A draft Financial Assurance Estimate is included with this application.

1.10 ENVIRONMENTAL PROTECTION MEASURES

The Applicant proposes to implement the measures discussed below as components of the Project.

1.10.1 Dust Control

To control dust associated with earthmoving activities, the following activities would be undertaken by the Operator:

- Active construction areas and access routes would be watered at least twice daily. Frequency would be based on the type of operation, soil, and wind exposure.
- Grading activities would be restricted during periods of high wind (over 25 miles per hour) as directed by the Monterey Bay Air Pollution Control District.
- Haul trucks would maintain at least 2 feet of freeboard.
- Inactive storage piles would be covered.
- Wheel washers would be installed at the entrance to the site.
- Access roads, parking areas and staging areas would be swept daily with water sweepers.
- A publicly visible sign would be posted specifying the telephone number and person to contact regarding dust complaints. This person would respond to complaints and take corrective action within 48 hours. The phone number of the Monterey Bay Unified Air Pollution Control District will be posted on the sign.

1.10.2 Stockpile Erosion Management

The stockpiled material would be located in the processing area, or in locations shown as overburden stockpile locations, (Figure 9). Stockpiles would be managed to minimize water and wind erosion.

1.10.3 Erosion Control Measures

Each season, before the winter rains, erosion control measures would be implemented to minimize erosion and vegetation loss during the winter rains. Inactive mining

slopes, not yet in their final reclaimed grade, would be stabilized with erosion control seeding, as described in Section 5, "Reclamation Plan."

1.11 Permits and Approvals

As the local land use authority, the County is the public agency with the greatest responsibility for approving the Project as a whole and is therefore the lead agency for purposes of environmental review under CEQA. The County has discretionary authority over the land use entitlements necessary to carry out the Project. Other local, state, and federal agencies may also have permitting or approval authority over various aspects of the Project. Table 1-11, "Potential Approvals, Permits, and Processes," identifies the agencies that may have authorization responsibilities associated with certain aspects of the Project and identifies the potential permits and approvals required by those agencies.

TABLE 1-11
POTENTIAL APPROVALS, PERMITS, AND PROCESSES

Agency/Department	Permit/Approval	Required for
FEDERAL AGENCIES		
U.S. Army Corps of Engineers	Individual Section 404 Discharge Permit (Clean Water Act, 33 USC 1341)	Discharge of dredge/fill material into waters of the United States, including wetlands
U.S. Fish and Wildlife Service	Section 7 Biological Opinion (federal Endangered Species Act)	Take of federally listed threatened or endangered species.
Mine and Safety Administration	Notice of Commencement of Operations	Noticing the ownership and location of the mine
	Emergency Fire, Evacuation, and Rescue Plan	Potential emergency situation plans required for surface operations
	Legal Identity Report	Noticing the ownership and location of the mine
	Miner Training Program	Mine safety training programs educating workers.
	MSHA Identification Number	Tracking all mine sites
	Standards for open pit and underground mines (30 CFR 56, 57)	Worker health and safety
STATE AGENCIES		
Regional Water Quality Control Board	National Pollutant Discharge Elimination System permit, Storm Water Pollution Prevention Plan General Construction Activity Storm Water Permit (§ 402 of the Clean Water Act)	Stormwater discharges associated with construction activity; must be prepared prior to construction activities; used to identify potential pollutants and to eliminate or reduce the amount of pollutants entering surface waters
	General Industrial Activity Storm Water Permit (§ 402 of the Clean Water Act)	Stormwater discharges associated with industrial activity
	Spill Prevention Control and Countermeasures Plan (Health and Safety Code 25270 et seq.; 40 CFR Part 112)	Underground storage of petroleum of 42,000+ gallons; aboveground storage with 10,000+ gallons, or any spill affecting surface waters, single tank of 600 gallons, or 1,320 total
	Waste Discharge Requirements (Water Code 13000 et seq.)	Discharge of waste that might affect surface or groundwater quality

Agency/Department	Permit/Approval	Required for
	Review of Groundwater Monitoring Plan	The RWQCB requests a review of the Groundwater Monitoring Plan prior to approval by the County
	Section 401 Water Quality Certification	Required for projects needing a U.S. Army Corps of Engineers Section 404 Permit; this certification must verify that the project does not violate state water quality standards
State Water Resources Control Board	Compliance with the California Aboveground Petroleum Storage Act	Requires owners or operators of aboveground petroleum storage tanks to file a storage statement and prepare a federal Spill Prevention and Control Countermeasure Plan
California Department of Transportation	Encroachment permit	Encroachments on state highway rights-of-way
California Department of Fish and Game	California Endangered Species Act (ESA) permit	Activity where a listed candidate, threatened, or endangered species under the ESA may be present on the project site
	Streambed Alteration Agreement (California Fish and Game Code § 1602)	Change in natural state of stream (includes road or land construction across a natural streambed)
California Occupational Safety and Health Administration	Construction permit	Worker safety/health.
Local Agencies		
Santa Clara County	CUP Mining permit and reclamation plan approvals	
	Hazardous Materials Business Plan	

REFERENCES

State Mining and Geology Board. 2004 (July 23). *Surface Mining and Reclamation Act Financial Assurance Guidelines*.

Soil Conservation Survey. 1969. Soil Survey of Santa Clara County, California.