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ASBS POLLUTION PREVENTION PLAN

ASBS 28-SUBAREA IV

Santa Catalina Island

Prepared in Accordance with:

STATE WATER RESOURCES CONTROL BOARD
RESOLUTION NO. 2012-0012

Prepared for:

Connolly-Pacific Company
901 Pebbly Beach Road
Avalon, CA 90704

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I. INTRODUCTION

The Connolly-Pacific Company (Connolly) quarry has been in operation since 1934 and is located at 901 Pebbly Beach Road, Avalon, CA 90704. This facility is a quarry located on Santa Catalina Island (Catalina) within the designated Area of Biological Significance (ASBS) Number 28, Subarea IV (Figure 1).

A. Facility Operations

The Connolly Quarry (Quarry) is an active mining operation. The site is improved with offices, parking areas for trucks and equipment, maintenance shops, aggregate stockpiles, aggregate transfer equipment, petroleum storage tanks and parts warehouses.

Material is mined from hillside areas using the shot method. Shot holes are drilled into the hillside and loaded with explosives. After detonation the released material is loaded into front end loaders and taken to the separator plants. The separator plants consist of belt conveyors, screens and other sorting equipment. The mined product is separated according to customer needs. The operation also includes a crushing operation to reduce the size of the product depending on the customer order. The separated product is then stockpiled using front end loaders and subsequently loaded onto barges for off-site delivery.

Tugboats are used to tow barges to the quarry from the Connolly maintenance facility located in the Port of Long Beach at 1925 West Pier D Street. Upon arrival at the quarry, tugboats operated by a certified crew, position the barge on moorings located adjacent to the shore in front of a Derrick Crane. Certified crane operators transfer the loaded skip box from the shore to the barge. The barge is slowly loaded from bow to stern. Crane operators carefully dump the skip box to mitigate potential aggregate loss overboard. Barge loading operations usually take about 4 hours. Tugboats tie off at the mooring and wait while the barges are being loaded. Once the barge is full, the tugboats return to the loaded barge to tow it to the job site where the aggregate is used for a construction project.

The Processing Area encompasses the waterfront and is subject to The Waterfront Plan developed in accordance with the Special Protections dated September 20, 2012. Those activities include barge loading using derrick cranes, aggregate transfers using mobile equipment, offshore mooring repair, offshore tugboat operations, vehicle maintenance, and equipment maintenance. Potential pollutants associated with these operations include but are not limited to: dust, petroleum products, paints, cleaning products, metals, sanitary waste, bilge water waste, trash, solvents, and acids. These non-storm water discharges have been addressed and mitigated within the context of the Water Front Plan implementation.

B. Special Protections: Regulatory Background

On October 18, 2004, the State Water Resources Control Board (State Water Board) notified Connolly, as a responsible party, to cease storm water and nonpoint source

waste discharges into Areas of Special Biological Significance (ASBS) or to request an exception from the California Ocean Plan ASBS waste discharge prohibition. On December 20, 2004, Connolly requested an exception. On March 20, 2012, the State Water Board adopted Resolution No. 2012-0012, approving an exception to the California Ocean Plan for the ASBS Waste Discharge Prohibition for Storm Water and Nonpoint Source Discharges, with Special Protections for beneficial uses (General Exception).

Connolly received notice in a letter dated May 30, 2012 of the State Water Quality Control Board's (SWRCB) adoption of the General Exception to the California Ocean Plan of Waste Discharge Prohibition for selected Storm Water and Nonpoint Source Discharges into Areas of Special Biological Significance (ASBS). In addition to the notification of adoption, the letter detailed information that must be submitted to the SWRCB as well as monitoring requirements.

The General Exception requires that Connolly submit to the State Water Board an ASBS Pollution Prevention Plan which is equivalent in contents to an ASBS Compliance Plan. The Pollution Prevention Plan contained herein has been prepared in accordance with the Special Protections for Areas of Special Biological Significance as required for State Water Quality Protection Areas pursuant to California Public Resources Code Sections 36700(f) and 36710(f).

The ASBS Pollution Prevention Plan is subject to approval by the Executive Director of the State Water Board (statewide permits) or Executive Officer of the Regional Water Board (for permits issued by Regional Water Boards).

C. Special Protections: Pollution Prevention Plan Requirements

The ASBS Pollution Prevention Plan must address storm water discharges (wet weather flows) and, in particular, describe how pollutant reductions in storm water runoff that are necessary to comply with the special conditions, will be achieved through Management Measures and associated Management Practices (Management Measures/Practices).

The ASBS Pollution Prevention Plan requires that the Management Measures to control storm water runoff during a design storm shall achieve on average the following target levels:

- Set as the Table 1 (Formerly Table B) Instantaneous Maximum Water Quality Objectives in Chapter II of the 2012 California Ocean Plan; or
- A 90% reduction in pollutant loading during storm events, for the applicant's total discharges,

In Addition, the Pollution Prevention Plan must:

1. Include a map of surface drainage of storm water runoff, showing areas of sheet runoff, prioritize discharges, and describe any structural Best Management Practices (BMPs) already employed and/or BMPs to be employed in the future. (Figure 2)
2. Describe the measures by which all non-authorized non-storm water runoff (e.g., dry weather flows) has been eliminated, how these measures will be maintained over time, and how these measures are monitored and documented.
3. Address storm water discharges (wet weather flows) and, in particular, describe how pollutant reductions in storm water runoff, that are necessary to comply with these special conditions, will be achieved through BMPs, and
4. Describe the non-structural BMPs currently employed and planned in the future (including those for construction activities), and include an implementation schedule.
5. Address erosion control and the prevention of anthropogenic sedimentation in ASBS. The natural habitat conditions in the ASBS shall not be altered as a result of anthropogenic sedimentation.
6. The ASBS Pollution Prevention Plan shall describe the non-structural BMPs currently employed and planned in the future (including those for construction activities), and include an implementation schedule.
7. The BMPs and implementation schedule shall be designed to ensure that natural water quality conditions in the receiving water are achieved and maintained by either reducing flows from impervious surfaces or reducing pollutant loading, or some combination thereof.
8. If the results of the receiving water monitoring described in the special conditions indicate that the storm water runoff is causing or contributing to an alteration of natural ocean water quality in the ASBS the discharger must evaluate the results as defined in the *Flowchart to Determine Compliance with Natural Water Quality* which is included as Attachment 1 of the Special Protections. The special protections require that the discharger submit a report to the State Water Board and Regional Water Board within 30 days of receiving the results.
 - (a) The report shall identify the constituents in storm water runoff that alter natural ocean water quality and the sources of these constituents;
 - (b) The report shall describe BMPs that are currently being implemented, BMPs that are identified in the SWMP or SWPPP for future implementation, and any additional BMPs that may be added to the SWMP or SWPPP to address the alteration of natural water quality. The report shall include a new or modified implementation schedule for the BMPs.

(c) Within 30 days of the approval of the report by the State Water Board Executive Director (statewide permits) or Regional Water Board Executive Officer (Regional Water Board permits), the discharger shall revise its ASBS Compliance Plan to incorporate any new or modified BMPs that have been or will be implemented, the implementation schedule, and any additional monitoring required.

(d) As long as the discharger has complied with the procedures described above and is implementing the revised SWMP or SWPPP, the discharger does not have to repeat the same procedure for continuing or recurring exceedances of natural ocean water quality conditions due to the same constituent.

These requirements are derived from The Public Resources Code which states that "waste discharges shall be prohibited or limited by the imposition of special conditions" in accordance with the California Water Code and implementing regulations, including, but not limited to, the California Ocean Plan (Ocean Plan). The Ocean Plan states "Waste shall not be discharged to areas designated as being of special biological significance," unless an "exception" is granted and Special Protections, as determined by the SWRCB and California Ocean Plan, are implemented. Stringent terms, prohibitions, and special conditions have been adopted by the SWRCB that comprise the limitations on point source storm water and nonpoint source discharges, providing Special Protections for marine aquatic life and natural water quality in ASBS.

D. Compliance Schedule

1. On the effective date of the Exception, all non-authorized non-storm water discharges (e.g., dry weather flow) are effectively prohibited.
2. Within eighteen (18) months from the effective date of the Exception, the discharger shall submit a draft written ASBS Compliance Plan to the State Water Board Executive Director (statewide permits) or Regional Water Board Executive Officer (Regional Water Board permits).
3. The final ASBS Compliance Plan, including a description and final schedule for structural controls based on the results of runoff and receiving water monitoring, must be submitted within thirty (30) months from the effective date of the Exception.
3. Within 18 months of the effective date of the Exception, any non-structural controls that are necessary to comply with these special conditions shall be implemented.
4. Within six (6) years of the effective date of the Exception, any structural controls identified in the ASBS Compliance Plan that are necessary to comply with these special conditions shall be operational.
5. Within six (6) years of the effective date of the Exception, all dischargers must comply with the requirement that their discharges into the affected ASBS maintain natural ocean water quality. If the initial results of post-storm receiving water quality testing indicate

levels higher than the 85th percentile threshold of reference water quality data and the pre-storm receiving water levels, then the discharger must re-sample the receiving water, pre- and post-storm. If after re-sampling the post-storm levels are still higher than the 85th percentile threshold of reference water quality data, and the pre-storm receiving water levels, for any constituent, then natural ocean water quality is exceeded. (Figure 3)

II. SITE CHARACTERISTICS

Santa Catalina Island is located at 33°22' north latitude, 118°25' west longitude and lies approximately 20 miles offshore of the Palos Verdes Peninsula. The island is 22 miles (35.4 km) long, 8 miles (12.9 km) across at its widest point, and is oriented in a general northwest to southeast direction. Santa Catalina Island is part of Los Angeles County. Avalon is the only city on the island, however there is a community located between Catalina Harbor and Isthmus Cove, known as Two Harbors. Approximately, 100 permanent residents of Two Harbors maintain this local recreational facility utilized by vacationers, the area's primary industry (SWRCB 1979).

ASBS No. 28, Subarea IV encompasses a portion of eastern Santa Catalina Island between Jewfish Point and Binnacle Rock. The seaward boundary extends from the intertidal zone to a depth of 300 feet or a distance of 1 nautical mile offshore, whichever is greatest. The ASBS contains approximately 2,756 acres of land, with approximately 2.7 miles of shoreline (SWRCB 1981). The Connolly quarry is located within to ASBS No. 28, Subarea IV, on Pebbly Beach Road, Avalon, CA 90704. Connolly Pacific Company operates the Quarry and Santa Catalina Island Company owns the surface and mineral rights.

The Pebbly Beach Quarry produces rock construction materials which range in size from sand-sized grains to boulders which measure several feet across and weigh upwards of several tons. The large products are used primarily in the construction of marine facilities (e.g. breakwaters and artificial islands), and the smaller materials can be used for a number of construction projects. The materials consist of volcanic breccias and sandstone conglomerates. The product is mined by tunneling into the cliff face, setting numerous explosive charges and blasting the material from the cliff. As the material falls, it breaks into varying sized boulders which may be broken down further during processing. A crusher and sorter are set up in the materials processing area located onsite, and these machines crush the rocks to ordered specifications. The finished products are stored onsite in stockpiles.

The quarry encompasses about 248 acres of sea cliff between Pebbly Beach and Seal Rocks. Private roadways from Avalon provide land access to the site and mooring buoys lying directly offshore permit barges to receive quarried materials from the site. Two large cranes operate at the loading areas near Jewfish Point. The materials processing area covers a graded bench just behind the primary loading area.

Surface drainage within the quarry is directed to the central processing area where low intensity rainfall percolates into the soil. Stormwater from medium intensity rain events will collect in the central location and sheet flow to on-site sediment basins. Each outfall is equipped with a sedimentation basin, which serves to reduce velocity of sheet flow and allow settling of particulates. Water from medium intensity rain events is detained in the basin and no discharge

of storm water will occur. The basins will reduce velocity and particulate content from the first flush of rain from high intensity rain events that may result in storm water discharge.

The site map shall be updated annually following the annual aerial photography performed on the mine site. The site mining plan requires that Connolly Pacific perform an annual flyover to detail site contours and active mining areas. Upon completion of the aerial photography, the site shall incorporate the revised site topography into the SWPPP map. Drainage catchments shall be re-evaluated to determine surface water flow volumes and direction. Diversion berm placement during storm events shall be aligned with new drainage patterns and incorporated into the site maps. Sediment basin sizing shall be assessed based on revised drainage patterns. If the catchment for the sediment is larger, the sediment basin shall be enlarged to meet the volume necessary to capture the 24 hour 85th percentile rain event.

Outfall #1 and Outfall #3 are the higher priority outfalls due to the potential for discharge during a rain event. The site is 100% pervious which results in rain infiltration. Once the ground is saturated, runoff is directed to sediment basins by a series of berms. Samples are collected upon discharge from the sediment basins. Outfall #1 and Outfall #3 are the most likely to discharge due to the diversion direction of the surface drainage within the mine.

The facility has prepared a Waterfront Plan (Attachment C) and a Storm Water Pollution Prevention Plan (SWPPP) that was prepared in accordance with the State of California General Permit Number CAS00001 for storm water discharges associated with industrial activities. The WDIID number for the facility is 4191011729. Refer to Attachment "E" for a copy of the SWPPP. Connolly maintains a Spill Prevention Countermeasure and Control (SPCC) plan in accordance with 40 CFR subpart 112 to ensure proper containment and storage of petroleum products (Attachment F). Facility personnel are trained in the appropriate response to spills or leaks in accordance with policies and procedures defined in the plans.

In addition, the Quarry must maintain a Reclamation Plan in accordance with the Surface Mining and Reclamation Act (SMARA) of 1975. Refer to Attachment "G" to review the Reclamation Plan. Connolly has a permit for their septic tank system through the Los Angeles County Department of Public Works (Permit No. SE 0301170004). This permit requires that the facility maintain the system to eliminate unauthorized non-stormwater discharges.

Land uses surrounding the quarry include industrial operations and open space areas. Properties to the north, near Pebbly Beach and outside the coverage of this plan, support several industrial uses, including the Southern California Edison power plant, the Avalon sewage treatment plant, a sanitary landfill and a freight barge loading terminal. The town of Avalon lies approximately one-half mile farther north. Lands to the south and west are within an Open Space and Conservation easement. The Pacific Ocean (San Pedro Channel) lies to the east.

A. Physical Description

The Waterfront Processing Area which is subject to the Waterfront Plan is composed of a relatively flat, pervious surface (See Figure 2). The waterfront area is equipped with a completely enclosed steel maintenance shop and office along the northern perimeter.

The shop is used for equipment repairs, parts storage, and battery storage. Utility truck

parking, loader parking and dump truck parking is located west of the main shop. The parking area is graded so that discharge flows easterly back toward the shop. There is a 3 foot aggregate/gravel berm along the shoreline to ensure that no materials are released to the ocean. A small wooden shed is located south of the main shop. The shed is used to store tires, anti-freeze and thinners. The CAT shop is a stainless steel building with a concrete floor located south of the wooden shed along the waterfront. The CAT shop is equipped with two roll-up doors on each end to allow for the easy movement of large quarry equipment. There are 8 portable horizontal oil tanks just east of the CAT shop. Each tank is within its own secondary containment. There are eight 55-gallon drums containing used oil filters along with one 500-gallon tank containing waste oil located south of the CAT shop. Twelve 55-gallon drums of oil are stored just north of the CAT shop. There is a 14,500-gallon diesel aboveground storage tank and a 4,000-gallon aboveground fuel transfer tank located along the shoreline south of the CAT shop. Both tanks are equipped with secondary containment and overfill protection. Two Derrick cranes used for loading aggregate onto barges are located further south along the shoreline. The cranes are electric and the motors for the cranes are housed within a brick building. The brick building contains hydraulic fluid for the cranes as well as eyewash stations and small amounts of other chemicals.

B. Geology

The geology of Santa Catalina Island consists of Mesozoic metamorphic basement rocks intruded by Miocene igneous rocks. Tertiary sedimentary rocks are scattered across the island. The island generally is regarded as a southward extension of the Franciscan formation, although the schist lithologies found on Catalina differ slightly from the typical Franciscan schists. A variety of schists, breccias and sedimentary marine layers form the complex geologic structure of Catalina.

Extensive thrust and reverse faulting has occurred on the island, and evidence of this faulting is revealed along the exposed cliffs of the Pebbly Beach Quarry. Fault activity has obscured the true stratigraphic columns, therefore the continuity of individual beds cannot be discerned readily and neither can a regional strike trend be discovered. The exposed inter-bedded sequence of rocks consists primarily of sandstones and massive conglomerates. More specifically, three sedimentary units have been intruded by Miocene dacitic and gabbroic dikes and sills, and overlying these disrupted marine sediments is a sequence of non-marine sandstones, pebble-cobble conglomerates and minor mudstones. The intruded sedimentary layers consist of interbedded siltstone, quartzofeldspathic sandstone and conglomerate. Individual lithic fragments include rocks of granitic, volcanic and metamorphic origin. The graywackes are fine grained and massive bedded, and the conglomerates consist of a fine-grained matrix surrounding irregular (1/2 inch to 18 inches) chunks of the abovementioned lithic fragments.

C. Vegetation

The quarry site lies in the coastal plant community known as Coastal Sage Scrub. Coastal Sage Scrub occurs on dry rocks and gravelly slopes in the coastal range, and these areas receive ten to twenty inches of rainfall per year.

A variety of plant species comprise the Coastal Sage Scrub community, including California sagebrush, buckwheat brush, lemonade sumac and goldenweeds. These plants grow from one to six feet tall, and the brush is less dense than true chaparral. Additionally, several other similar plant species thrive within the Coastal Sage Scrub community, and some of these species can be found only on Santa Catalina Island and other islands within the Channel Islands chain. The Santa Catalina Island Local Coastal Plan lists several rare species found on the island.

Quarrying operations have removed most of the on-site vegetation. Those slopes within the lease boundaries which have yet to be mined still contain native plant materials and in fact, quarry areas which have been mined previously or presently support quarry related land uses show signs of natural revegetation processes. The active quarry site can be classified into four distinct zones, and some of these zones reveal plant growth. The four zones are:

1. Production work areas or benches (unconsolidated crushed rock subbase)
2. Unconsolidated bench slope faces
3. Shoreline slope face comprised of armor rock sea walls
4. Production high wall and slump pile at base

Grass type plant growth has occurred at the upper production areas and at the base of the slump pile. The toes of muck piles and the bases of undisturbed stockpiles exhibit woody plant growth. This revegetation results from deposition of windborn seeds and seeds deposited in animal fecal matter. Further revegetation of bare slopes and abandoned areas will occur via the quarry reclamation process. These revegetation strategies are discussed in the section of the Reclamation Plan titled "Revegetation".

D. Climate

Santa Catalina Island is characterized by a semi-arid Mediterranean climate with mild, wet winters and warm, dry summers. Skies are generally clear, however heavy cloudiness occurs primarily in the early spring months when stratus clouds drifting in from the sea may cause low ceilings or fog (SWRCB 1981). Weather in this area is largely controlled by the Eastern Pacific high, which is located off the coast of Northern California during the spring and summer months; this high pressure cell prevents low pressure systems from moving down the coast into Southern California (SWRCB 1979).

ASBS No. 28, Subarea IV consist of both leeward and windward aspects and each can experience different climates. Summer and winter temperatures in the southwestern portion are usually around 80°F and 50°F, respectively. Weather for the northeastern portion can be estimated from the City of Avalon data, however slight differences may occur as Avalon is semi-protected in a canyon.

E. Physiography/Geomorphology

Santa Catalina Island is located on the coastal borderland of the Southern California Bight (SCB), a wide continental shelf characterized by ridges (the Channel Islands are ridges that extend above sea level) and basins. The SCB is a marine province stretching from Point Conception in central California to the area between Punta Colnett and Punta Eugenia in Baja California. It is part of a gently sloping southeasterly facing

shelf extending for an average distance of approximately 5 miles from the east end of Santa Catalina Island.

The land mass within ASBS 28, Subarea IV is extremely rugged and mountainous, and is intersected by five narrow and steep-sided canyons leading to the sea. The canyons discharge only 3% of all surface drainage on Catalina. Intertidal and subtidal geomorphology ranges from fine sand to variable densities of concentrations of boulders and occasional bedrock outcrops or pinnacles. Sandy sediments and rocky substrates account for approximately 40 and 60% of the intertidal zone, and, 80 and 20% of the subtidal zone, respectively. Subtidal areas near headlands are characterized by exposed bedrock, either with interspersed pockets of coarse sand or covered by variable quantities and sizes of gravity-transported boulders. Most boulders are medium-sized, (2-5 feet, 0.6-1.5 m), resulting in areas of medium physical relief. Exposed bedrock and boulders become less common with increasing depth as the substrate changes to fine sand beyond a depth of 35-40 feet (10-12 m). Sediments in subtidal areas offshore of the beaches grade from coarse to fine as depth increases. Most of the subtidal substrate is sand, therefore forests of giant kelp are not present. Within the quarry region, the subtidal area has been modified by quarry operations. Large intertidal boulders occasionally are dislodged by storm swells, and roll down the subtidal slopes. Similar-sized boulders then are placed in the intertidal zone to preserve the original coastline as required by their Mining and Reclamation Plan developed in accordance with the Surface Mining And Reclamation Act (SMARA). (SWRCB 1981).

F. Hydrology

Oceanic seasonal changes in wind direction commonly create seasonal patterns for the currents off of the California Coastline. For much of the year, the California current brings colder northern waters southward along the shore as far as Southern California (MLPA 2006). The California current is the eastern leg of the North Pacific Gyre, a massive, clockwise moving current system which encompasses the entire North Pacific Ocean (SWRCB 1979).

The Southern California Bight is the 300 km of recessed coastline between Point Conception in Santa Barbara County and Cabo Colnett, south of Ensenada, Mexico. The dramatic change in the angle of the mainland coastline creates a large backwater eddy in which equatorial waters flow north near shore and subarctic waters flow south offshore. This unique oceanographic circulation pattern creates a biological transition zone between warm and cold waters that contains approximately 500 marine fish species and more than 5,000 invertebrate species (SWRCB 1979). The hydrological variation resulting from winds and currents create a wide range of ecological environments.

G. Biology

Quantifying the chemical components of an effluent only partially assesses the potential of waste discharge to ASBS. Ultimately, the biological integrity of marine communities residing in ASBS also need to be assessed to determine if the human influence on water quality is hindering the ability of marine life to respond to natural cycles and processes. Biological surveys were conducted and reported in the State Water Board's California

Marine Waters, Areas of Biological Significance Reconnaissance Survey Reports (1979-1981). The results indicate that 44 different species of flora, 260 invertebrate species, and 27 fish species ASBS 28.

During the Southern California Bight '08 rocky intertidal survey, Twenty-one rocky intertidal sites were quantitatively sampled for habitat quality, invertebrate and algal abundance and composition by Raimondi's UC Santa Cruz Coastal Biodiversity research team. The monitoring focused on differences between reference and ASBS discharge sites. Preliminary results indicated that: 1) there were no significant differences in macro-invertebrate or algal species richness based on geographic grouping or type of site (discharge vs. reference); 2) there were large geographic differences in algal and sessile invertebrate species composition, likely reflecting natural biogeography, but no statistically significant differences between reference sites and ASBS discharge sites; and 3) there were large geographic differences in mobile invertebrate species composition, once again reflecting natural biogeography, but no statistically significant differences between reference sites and ASBS discharge sites.

The sample locations for The Bight '13 Rocky Intertidal study are the same locations for the quarry as the Bight '08 study. The data has not been compiled as of the preparation of this document, therefore any impacts on the biological integrity of the marine communities cannot be evaluated at this time. Results from the study shall be incorporated as addenda to this plan when required to meet compliance requirements of the special protections.

The Bight '13 study includes another study to determine if there is an impact on the biological integrity of the ASBS as a result of stormwater discharge into the ASBS. The standard for protection is that discharges "shall not alter natural ocean water quality in an ASBS" [1]. As part of assessing if the water quality is protected, the SWRCB has requested a study to determine the concentration of bioaccumulating metals and synthetic organic contaminants at representative discharge and reference sites. The discharge sites receive NPDES permitted point source discharge. The reference sites receive drainage from a watershed that has been determined to represent natural water quality. The goal is to determine if the water quality at each discharge station is equivalent to that at the reference stations. In the Bight'13 study, water quality is defined as the concentrations of bioaccumulative contaminants in mussel (*Mytilus californianus*) tissue. The data has not been compiled as of the preparation of this document, therefore any impacts on the biological integrity of the marine communities cannot be evaluated at this time. Results from the study shall be incorporated as addenda to this plan when required to meet compliance requirements of the special protections.

H. Natural Water Quality

In response to the regulatory concerns about Areas of Special Biological Significance (ASBS), the California State Water Resources Control Board (State Water Board) empanelled eight experts from different scientific disciplines to develop a functional definition of "natural water quality." The findings of this group are summarized below and

excerpted from the report titled "Summation of Findings, Natural Water Quality Committee, 2006-2009", Technical Report 625, September 2010.

Natural ocean water quality: That water quality (based on selected physical chemical and biological characteristics) that is required to sustain marine ecosystems, and which is without apparent human influence, i.e., an absence of significant amounts of:

- a) man-made constituents (e.g., DDT),
- b) other chemical (e.g., trace metals), physical (temperature/thermal pollution, sediment burial) and biological (e.g., bacteria) constituents at levels that have been elevated due to man's activities above those resulting from the naturally occurring processes that affect the area in question; and
- c) non-indigenous biota (e.g., invasive algal bloom species) that have been introduced either deliberately or accidentally by man.

Natural ocean water would be expected to vary noticeably both from place to place, and from time to time. For example, there are significant variations in the composition of minor constituents of seawater (e.g., nutrients, oxygen, trace metals) with depth in the ocean, as well as with distance from land and even between ocean basins. Furthermore, significant ocean properties such as salinity, temperature, and pH vary appreciably with location, season, and year to year due to natural oceanographic processes. Even within California's coastal ocean, spatial differences exist as a result of regional differences in solar radiation, precipitation, and naturally occurring fresh water. Coastal seawater will differ measurably in trace element composition as a consequence of local watershed geology. Various places on the California shelf have naturally occurring hydrocarbon and groundwater seepage. In near-shore seawater, temporal and seasonal differences in suspended sediments result from variations in wave action. Naturally occurring marine life itself also alters water quality by various processes. For example, seawater near a sea lion haul-out may be high in fecal bacteria levels. In addition, there are naturally occurring large-scale ocean cycles that dramatically influence the physical, chemical and biological components that support marine life along the California coast. For example, El Niño and La Niña oceanographic events can significantly alter the surface water temperature along the California coast thus extending or diminishing the range and abundance of cold versus warm water species. Rainfall during such El Niño events can also exert large influences on coastal water quality due to significant flood events that deliver (natural) sediments from undeveloped watersheds. Turbidity events associated with California river systems during large flood events have been observed from space.

According to the expert committee, truly natural water quality probably does not now exist in California's coastal ocean, and may be rare throughout the world. For example, plastic debris can be found in remote areas of the ocean thousands of miles from continents, and persistent organic pollutants may be found in marine life inhabiting equally remote regions. Even if anthropogenic land-based waste discharges were to be completely eliminated from a section of coastline, there is no guarantee that natural water quality would be reestablished there. Aerial deposition, pollutants carried by

oceanic currents from distant sources, and vessel discharges may influence water quality conditions.

As a result, it is not practical to identify a unique seawater composition as exhibiting natural water quality. Nevertheless, the committee believes that it is practical to define an operational natural water quality for an ASBS, and that such a definition must satisfy the following criteria:

- It should be possible to define a reference area or areas for each ASBS that currently approximate natural water quality and that are expected to exhibit the likely natural variability that would be found in that ASBS,
- any detectable human influence on the water quality must not hinder the ability of marine life to respond to natural cycles and processes.

Such criteria will ensure that the beneficial uses identified by the Ocean Plan are protected. The reference drainage sites are used to for establishing natural water quality thresholds.

The 85th percentile of the reference site distribution was selected as a primary threshold that the discharge receiving water must meet to ensure there are no anthropogenic impacts.

I. Water Chemistry

Bight '08

Receiving water samples were collected during storm events and analyzed for Ocean Plan water quality parameters as part of the Bight '08 survey and the Exception application. Two Ocean Plan parameters; copper and nickel, exceeded the Ocean Plan Objectives.

California Ocean Plan water quality objectives for copper include an instantaneous maximum of 30 ug/l, a daily max of 12 ug/l and a six month median of 3 ug/l. California Ocean Plan water quality objectives for nickel include an instantaneous maximum of 50 ug/l, a daily max of 20 ug/l and a six month median of 5 ug/l. ASBS 28 reported levels of copper above the Table B limits in three locations, the highest reported copper level was 40.5 ug/l, and an elevated level of nickel from storm water run-off at one location at 54 ug/l.

Reference site results indicated no detectable trace synthetic organic compounds (i.e., DDT, PCB) or toxicity, and generally low concentrations of naturally occurring constituents (trace metals, PAH). With one minor exception, all of the constituents had median values below the strictest Ocean Plan objectives. However, there were times at reference stations when maximum concentrations of several naturally occurring constituents exceeded Ocean Plan Table B thresholds. Values for many constituents in the reference data set exceeded Table C ("Background Seawater Concentrations") in the Ocean Plan. Most southern California ASBS discharge sites and monitored parameters behaved similarly to reference site conditions. (NWQC summation findings)

Bight '13

Receiving water samples and stormwater samples were collected and analyzed as part of the receiving water, Two separate storm events were captured during the 2012-2013 storm season and a third storm event was collected during the 2013-2014 storm season. Chemistry analytical results for core samples and receiving water samples are below the California ocean Plan Table 1 limits. The final results for the 2012-2014 storm season sampling indicate that at least one sample collected in the ASBS reference location did exceed natural water quality standard for ammonia, pyrethroids and PAHs. (*South Coast Areas of special Biological Significance Regional monitoring Program Year 2 results.*)

Connolly Pacific is still assessing analytical results from core monitoring samples collected during 2012-2013, 2013-2014, and 2014-2015 storm season. As determinations regarding sample results in comparison to Natural Water Quality Guidelines are assessed, additional and improved BMPs shall be selected and implemented as necessary.

There are inconsistencies in results. Metals results were below the Natural Water Quality Guidelines for samples collected in February and March 2013 storm season but then elevated slightly in samples collected during the March 2014 sampling event. Core Sample results shall be compared to Numeric Action Levels defined in **Order 2014-0057-DWQ**

Analyte	85 th percentile	Ocean Plan (Daily Max)	Ocean Plan (303d Ave)	NAL
General (mg/L)	Mg/l			
Ammonia as N	0.015	2.4	0.6	2.14
Nitrate as N	0.374	-	-	0.68
Oil and Grease	0.5	75	25	15
Orthophosphate as P	0.114	-	-	-
Total Suspend Solids	55.4	-	-	100
Metals (µg/L)	(µg/L)			
Arsenic	1.72	32	8	-
Cadmium	0.16	4	1	5.3
Chromium	2.6	8	2	-

Analyte	85 th percentile	Ocean Plan (Daily Max)	Ocean Plan (303d Ave)	NAL
Copper	1.9	12	2	33.2
Lead	0.72	8	2	262
Mercury	0.0006	0.16	0.04	1.4
Nickel	2.2	20	5	1020
Selenium	0.017	60	15	5
Silver	0.08	2.8	0.7	18.3
Zinc	19.0	80	20	260
Organics (µg/L)	(µg/L)			
Total PAHs	0.0125	-	0.0088	-
Total OP pesticides	0.006	-	-	-
Total Pyrethroids	0.00675	-	-	-

The BMPs to be implemented will be a series of sedimentation and filtration to remove solids and metals if necessary. The analysis shall be completed by January 30, 2015 with the implementation schedule in place by July 1, 2015.

In addition, preliminary Natural Water Quality Guidelines have been defined by the Regional Study and none of the metal concentrations in the discharge or the receiving water within ASBS 28 show concentrations above the 85th percentile of the Preliminary Natural Water Quality Guidelines as defined by the Special Protections. Furthermore, the 85th percentile Preliminary Natural Water Quality Guidelines are lower than the Ocean Plan objectives for all metals.

The Regional Monitoring assessment of ASBS 28 included a bioaccumulation study. This study was designed to further define “natural” water quality and determine biological impacts of discharges within the ASBS. The Regional Monitoring bioaccumulation study further defined “natural” water quality for bioaccumulative compounds as defined by mussel tissue sampled from reference locations and discharges to the ASBS. Three methods were used to analyze the contaminant data: 1) compare the concentration magnitudes at reference and discharge locations, 2) compare the relative profiles using clustering algorithms, and 3) determine if the discharge station concentration exceeds a reference threshold. The preliminary results indicate that some of the metal

concentrations in mussel tissue from mussels collected within the ASBS 28 site are slightly above the mussel tissue metal concentrations from the reference sites. Metal concentration that exceeded the reference thresholds for all measured ASBS's are highlighted in blue in the table below.

Metal	Reference Threshold	Avalon Quarry	Barge Landing	Big Fisherman Cove	Boy Scout Camp	Buck Gully South	Crystal Cove	Deer Creek	Heisler Park	Lechuza Point	Muddy Canyon	Paradise Cove	Scripps Reef	Two Harbors
Aluminum	431	186	183	148	284	261	275	334	154	196	157	315	487	202
Arsenic	17.3	14.0	22.4	12.0	11.4	22.0	14.3	11.8	17.7	12.9	16.5	16.2	9.8	10.0
Cadmium	7.81	6.4	5.9	10.1	17.6	4.5	2.3	6.0	2.6	4.5	3.8	2.9	1.7	11.6
Chromium	2.30	2.22	1.57	1.84	1.76	2.27	1.60	1.79	2.26	1.35	1.90	2.50	1.32	2.21
Copper	6.55	8.03	5.52	9.35	9.58	7.45	6.12	6.00	6.08	6.47	5.36	5.99	6.64	6.61
Lead	3.69	2.68	1.47	1.43	8.31	3.58	1.55	3.09	2.46	1.69	2.08	1.83	1.05	1.68
Manganese	6.01	10.4	3.7	4.3	8.6	7.0	4.8	5.9	4.5	4.6	3.6	5.7	6.4	5.9
Molybdenum	1.45	1.78	0.70	1.07	1.20	1.02	0.79	0.61	0.97	0.57	0.99	0.67	0.60	1.10
Nickel	2.35	2.07	1.61	1.35	1.87	2.36	1.40	1.93	1.97	1.37	1.76	2.13	1.08	1.94
Selenium	3.12	3.66	2.55	3.66	3.92	2.69	2.67	2.52	2.38	2.85	2.67	3.07	2.77	3.32
Silver	1.63	5.46	0	0	0	0.47	0	0.58	0.71	1.00	0.32	2.45	0	0
Zinc	208	209	186	158	133	253	164	198	197	153	224	173	129	137

Reference site concentrations are included in the table below. Blue highlighted concentrations are the highest value measured for that analyte. Upon comparing the Avalon Quarry (ASBS 28) with the Catalina Island reference station "Italian Gardens", it is apparent that some of the concentrations within the ASBS are below the reference station or very close to the concentrations identified from the reference station. When comparing the relative profile and a cluster analysis, there is no difference between discharge ASBS 28 and reference station Italian Gardens.

Metal	Bird Rock	Dana Point	Eel Point	Italian Gardens	Old Stairs	Point Dume	Sequit Point	Thousand Springs
Aluminum	37	346	57	488	315	259	210	435
Arsenic	11.6	16.9	20.2	15.5	11.4	11.9	13.7	38.7
Cadmium	10.55	2.52	7.82	5.64	5.43	5.19	5.19	7.64
Chromium	0.71	2.50	1.67	1.65	2.13	2.12	1.58	2.31
Copper	6.08	5.86	4.41	6.55	6.58	6.27	6.49	5.69
Lead	0.96	1.35	1.62	5.33	1.99	3.73	2.92	2.60
Manganese	3.22	5.95	2.30	14.22	6.54	5.06	4.95	5.45
Molybdenum	0.99	0.91	1.01	1.48	0.63	0.64	0.62	1.65

Nickel	1.11	2.25	2.35	2.01	1.54	1.82	1.60	2.60
Selenium	3.13	2.43	2.82	3.22	2.47	2.76	2.85	2.58
Silver	0	0.180	0	2.65	0.34	1.68	0.53	0
Zinc	131	204	213	126	173	207	176	208

The organic bioaccumulation analysis showed no difference between ASBS 28 and all reference stations.

The biodiversity surveys that identify and enumerate rocky intertidal biological communities performed at reference sites and discharge sites showed no difference between them.

Potential Impacts from discharge to the biological community within ASBS 28 are assessed using water chemistry, bioaccumulation studies and biodiversity studies. Based on these findings, BMP performance and improvements shall be assessed 2012-2013 Rain water core sample collected for chronic toxicity testing results indicate that the rain water is toxic for sea urchin fertilization.

Bight '13 core sampling results and natural water demonstrated some elevated concentrations of metals, organo-phosphates and PAHs in the core samples. continue through the 2013-2014 rainy season to develop comparison data.

Bight '08 reference point sampling results indicated no detectable trace synthetic organic compounds (i.e., DDT, PCB) or toxicity, and generally low concentrations of naturally occurring constituents (trace metals, PAH). With one minor exception, all of the constituents had median values below the strictest Ocean Plan objectives. However, there were times at reference stations when maximum concentrations of several naturally occurring constituents exceeded current Ocean Plan Table 1 thresholds. Most southern California ASBS discharge sites and monitored parameters behaved similarly to reference site conditions.

J. Land Use

The Pebbly Beach Quarry produces rock construction materials which range in size from sand-size grains to boulders which measure several feet across and weigh upwards of several tons. The City of Avalon is located on Santa Catalina Island and is relatively close to but not immediately adjacent to the ASBS. The facility is approximately 248 acres and is completely pervious (i.e., no paved roads or parking areas). The watershed has two direct discharges and three natural streams draining to the ASBS. The facility is located in the Pebbly Beach Extractive Use Zone of the Santa Catalina Island Local Coastal Plan. Connolly must maintain the natural shoreline contours, therefore rocks are added periodically to areas where storms have caused slippage. There is a jetty and a pier constructed at the quarry. Connolly is also required to reconstruct a "natural" hillside topography upon reclamation.

III. RECLAMATION PLAN

The nature of the quarry operation is such that the site will not be reclaimed until the source materials are depleted or until the landowner chooses not to lease the property for quarrying purposes. Source materials are extracted directly from the cliff face, and quarrying proceeds into and along the cliff face. Therefore, final grading and revegetation will not occur until quarrying activities cease altogether. The method of reclamation via final grading and revegetation is described, in detail in this section. In general, reclamation will occur in four zones as follows:

Zone 1: Production Areas Production areas will be graded to direct surface water runoff toward swales along the inner edge of the beach. The swales will serve to slow surface flow and thereby minimize surface runoff into the ocean.

Zone 2: Unconsolidated Bench Faces The outer edges of slope faces will be graded at a 1:1 slope and planted with native vegetation. Slopes steeper than 2:1 will be bordered at the tops and toes by armor rocks and thorny barrier plants, and the slopes themselves will be revegetated.

Zone 3: Shoreline Slopes will be protected from erosion and unwarranted trespass by larger armor rocks.

Zone 4: Production High Walls

Upon cessation of mining, a final blast will be taken to loosen debris, and the high wall will be scaled to remove any loose rocks or overhangs. The resultant muck pile will be left at the base of the high wall at its natural angle of repose. Both the high wall and muck pile will be revegetated, and thorny barrier plants may be used along the muck pile base to discourage access.

The Santa Catalina Island Local Coastal Plan, a Los Angeles County document which guides island development, calls for quarry operations to continue on the site. This plan has no specific target date, but it could be amended at any time.

The reclamation plan has been designed to return the site to its original condition and to incorporate the site into the adjacent Open Space and Conservation Easement area. Any other land uses proposed in the future would need to conform to land use policies and restrictions in effect at that future date.

Hydroseeding is the proposed method of revegetation. The hydroseeding process mixes fertilizers and legumes with plant seed material so that new plants on infertile areas are provided with vital nutrients. These nutrients enable the plants to establish themselves more rapidly and thereby begin the process of soil reconstruction.

The standard method of operation is to create benches or shelves as the quarrying operation progresses inland. This results in a stair-step effect which can be utilized in the ultimate reclamation of the land at the termination of the quarry operation. Nominal grading of these benches or shelves will be required to establish a more natural appearance and to control runoff from the slopes and benches.

Stabilization of the site will be undertaken in two basic ways. First, the production high walls will be subjected to a final blast at the termination of the operation. This final blast will result in a natural rockfall which can be anticipated to have an angle of repose of approximately 1.5:1. This action will remove any overhangs and will create a face somewhat akin to that found in the natural terrain adjacent to the site. Other areas will be stabilized through grading to accomplish basic slopes no steeper than 2:1 . Where slopes of necessity may exceed 2:1, special armor rock barriers will be positioned to discourage access and reduce hazard.

The quarry will be reclaimed as undeveloped open space to make it topographically and vegetatively compatible with the surrounding natural sea coast environment of this portion of Santa Catalina Island.

Revegetation

Several factors must be taken into consideration in the selection of plant materials and planting methods for the five zones described above. The climate exposure zones, soils characteristics and planting objectives all help to determine the revegetation strategies to be used.

Climate Exposure Zones

The site can be separated into two distinct plant climates. These plant climates include:

- The Thermal Belt Coastal Line lies inland of the coast, above the seacliffs, and it is influenced by inland conditions 15 percent of the time.
- The Marine Influence Coastal Climate ranges from tide line to the base of the high wall, and this area is subject to ocean breezes and high winds.

The Plant climates are divided into three exposure zones which are defined as follows:

- First Zone: This is the shoreline zone . Plants within this zone must be able to adapt in salty soil and must be able to withstand salty driven spray.
- Second Zone: This zone lies inland from the surf line and is protected from ocean spray. Both soil and air, however, contain considerable salt.
- Third Zone: This zone lies above the surf yet still contains alkaline soils. Humidity prevails.

Soil Characteristics

The quarrying activities and final grading operations will leave a variety of soil types which individually will be able to support only certain plant materials. Alkaline soils will prevail along the coastal zone. The unconsolidated benches, production areas and muck piles will consist of gravelly materials. These new soils will be sterile and in need of balanced nutrients.

Planting Objectives

Certain plant materials will be needed to bind gravelly soils and prevent erosion. Other plants will be planted to discourage trespass. In all cases plants will be chosen for their ability to grow quickly and to blend in with the surrounding native vegetation.

Method Proposed

Hydroseeding would be the most efficient and cost-effective means of revegetating the various slope areas. Hydroseeding is a process in which plant seeds, hormones, fertilizers, wood fiber and water are combined into a slurry which is sprayed onto the benches and slopes, thereby insuring even distribution of seeds, available plant nutrients and some protection from erosion. Hydroseeding could be supplemented with some planting. It should be noted that the potential life of the quarry and the projected date for reclamation prevent precise hydroseeding procedures from being detailed at this point in time. Replanting techniques may become more sophisticated over time. It may be stated, however, that the best method of hydroseeding will be used at the time of reclamation.

IV. POLLUTION PREVENTION PLAN DEVELOPMENT AND IMPLEMENTATION

Mitigation of unauthorized non-stormwater discharges

Quarrying activity is performed above the high tide elevation to prevent the discharge of quarried material directly into the ocean. Unauthorized non-stormwater discharges have been eliminated through the implementation of the SPCC plan, Waterfront Plan, SCAQMD Rule 403 plan (Attachment D) and vessel management plan. In addition, the interface between land and water is protected through the placement of heavy revetment stone. Production areas are graded to direct surface water runoff back from the outer edges of the benches into swale areas constructed along the inner edge of the benches. The swale areas are depressed about 12 inches and filled with a layer of graded (3 inch to 12 inch) crushed rock. (See Figure 3) Surface runoff flowing through the swales will be slowed. This will result in longer detention time with correspondingly greater downward percolation into the unconsolidated material of the benches, thereby minimizing surface runoff.

Stormwater Best Management Practices

Facility operations cease during rain events. Equipment is stored under cover as appropriate and specific rain event best management practices are implemented. In order to further control the conduct of sediment into the ocean during storm events, special check dams will be constructed using low-level rock berms within the active processing areas. Rock weir structures are placed along the flow lines of surface drainage to slow the velocity of surface runoff as well as increasing the downward percolation of stormwater (see Figure 2). The structures are constructed when the NOAA website predicts a 50% chance of rain for the City of Avalon.

During unusually high intensity rain events greater than the 25 year 24 hour storm event, stormwater will reach the waterfront area. This area is equipped with three sediment detention basins. Sediment Basin #1 is located to capture discharge from the southern portion of the active mining area. This sediment basin has a capacity of 1.54 acre feet.

The watershed draining to this basin is approximately 31 acres and is composed of pervious haul roads, unconsolidated rock and areas of with slight vegetation. Using the TC-Calculator from the LA County 2006 Hydrology and Sedimentation Manual the calculated peak runoff rate and 24 hour volume of the 25 year 24 hour rain event is 5.56 cubic feet per second and 1.43 acre-feet respectively. Therefore, it is unlikely that there will be discharge from this sediment basin until the rain intensity exceeds the 25 year 24 hour event.

The northern portion of the quarry is not being actively mined. Discharge from the 250 foot elevation is directed down the benches to the catch basin located near the Cat repair shop. The area of this portion of the quarry from the waterfront up to the 250 foot elevation is approximately 2 acres. The catch basin located in this area has a capacity of 0.19 acre-feet. The calculated peak flow rate is 5.86 cubic feet per second and the 24 hour runoff volume is 0.09 acre-feet. Based on these calculations, the sediment basins are sized to approximately three times the 85th percentile rain event. Stormwater will not overflow from this basin to the ocean until the rain intensity exceeds the 25 year 24 hour event.

The basic purpose of the basins is to allow sediment contained in the water to drop out of suspension and control runoff from the slopes and benches. Water retained in the basins will eventually percolate down into the pond linings and discharge through the revetment to the ocean days after the storm event is over. The velocity of flow of the runoff on the benches will be controlled through the gradient or through the creation of cross berms on the benches designed to reduce the velocity of water running down these benches. Where the gradient of the bench will permit, swales will be installed on the inner edge of the bench. Since these swales will be filled with a layer of 3 to 12 inches of crushed rock as described above, little sediment is expected to reach the lower benches. However, any sediment which does reach the lower benches will be contained within the basins described above and the sediment allowed to settle before the water is overflowed into the ocean. A typical basin cross-section is shown in Figure 4.

In order to control the conduct of sediment into the ocean, special retention areas will be created using low-level berms. Rock weir structures will provide for overflow of the retention basins. The basic purpose of the pond is to allow sediment contained in the water to drop out of suspension as the water is stilled in the pond. The velocity of flow of the runoff on the benches will be controlled through the grading or through the creation of cross berms on the benches designed to reduce the velocity of water running down these benches. Where the gradient of the bench will permit, swales will be installed on the inner edge of the bench. Since these swales will be filled with a layer of 3 to 12 inches of crushed rock, little sediment is expected to reach the lower benches. The benches and shelves will be in place as the quarry operation continues to reduce sediment and erosion. Any sediment which does reach the lower benches will be contained within the basins and the sediment allowed to settle before the water is overflowed into the ocean.

During quarrying operations, the interface between land and water is protected through the placement of heavy revetment stone. The stone will remain in place following the termination of quarry operations.

Non-Structural Best Management Practices

Non-Structural BMPs are included in tables within the waterfront plan which is an attachment to this document. The tables presented within waterfront plan assess pollutants from the industrial activities; identify potential pollutants, BMPs and training requirements. The tables have been included as an attachment to this response. The quarry operation is a private industrial activity. There are no public outreach activities associated with this operation as it is subject to strict Mine Safety standards and public is specifically prohibited from entering the property.

In addition to the non-structural BMPs defined in the waterfront plan, Connolly Pacific shall develop and implement a site-specific SWPPP covered by this General Permit **Order 2014-0057-DWQ** that shall contain the following elements,

1. Facility Name and Contact Information;
2. Site Map;
3. List of Industrial Materials;
4. Description of Potential Pollution Sources;
5. Assessment of Potential Pollutant Sources;
6. Minimum BMPs;
7. Advanced BMPs, if applicable;
8. Monitoring Implementation Plan;
9. Annual Comprehensive Facility Compliance Evaluation (Annual Evaluation); and,
10. Date that SWPPP was Initially Prepared and the Date of Each SWPPP Amendment, if Applicable.

Connolly Pacific shall implement their SWPPP by July 1, 2015 and

1. Revise their on-site SWPPP whenever necessary;
2. Certify and submit via SMARTS their SWPPP within 30 days whenever the SWPPP contains significant revision(s); and,
3. With the exception of significant revisions, the Discharger is not required to certify and submit via SMARTS their SWPPP revisions more than once every three (3) months in the reporting year.

Plan Implementation Team and Schedule

David Scott – Director of Safety and Compliance (562) 437-2831 Ext. 223
Cell (562) 577-0725

Robert Machado – Plant Manager (310) 510-0626

Laura Machado – Administrative (310) 510-0626

Paul Romo – Superintendent (310) 510-0626 Cell (562) 577-0721

Responsibility	Team Member
Plan Responsible Person	David Scott
Best Management Practices	Robert Machado/Paul Romo
Inspection/Observation	Robert Machado/Paul Romo
Training	David Scott
Reporting	David Scott/Laura Machado
Recordkeeping	Laura Machado

Unauthorized non-stormwater Best management Practice Implementation Schedule: All BMPs have been instituted and are inspected monthly during the rainy season and quarterly during the dry season. All BMP inspection protocols and procedures shall be revised as required by the new permit or other legislation.

Stormwater Best Management Practices have been implemented. Upon receipt of final analytical results from the 2013-2014 additional storm water BMPs may be required if the sample results indicate that concentrations exceed the 85% natural water quality target.

ATTACHMENT A –

TABLES

Table 1 - 2012 California Ocean Plan Water Quality Objectives

Table 2 – Site Specific Permits and Plans

Agency	Permit Number	Description	Regulations	Recordkeeping/Reporting
SWRCB	WDID # 4191011729	SWPPP	Stormwater NPDES CAS000001	- Annual Sampling - Monthly Monitoring - Annual Report
SCAQMD	F94220	Aggregate Receiving, Screening , Riprap Production System	Rule 201 – Equipment Requiring a Permit	- Monthly Aggregate Processing
Department of Conservation State Mining and Geology Board and Los Angeles County Department of Regional Planning/DPW	Mine ID# 91-19- 0010 SMP Case No. 86136 – (4)	Mining and Reclamation Plan	SMARA	- Annual Report of Compliance - Annual Financial Assurances - AB3098 Listing
LA County Fire Department	FA0020435	Hazardous Materials Business Plan	CUPA	- Annual Inventory Update - Business Emergency Plan Every 3 Years - SPCC Every 5 Years, - Monthly Petroleum Storage Inspection - Hazardous Waste Weekly Inspection
DTSC	CAL000223892	Hazardous Waste Generator	CCA Title 22	- Waste Manifest Documentation
CalRecycle	TPID # 1509384- 01	Waste Tire Generator	Title 14	- Comprehensive Trip Log 3 Years
SCAQMD	Facility ID # 82149	Rule 403 Plan	Rule 403 Fugitive Dust	Rule 403 recordkeeping Table 2 and 3 log retained on-site for 6 months

ATTACHMENT B

FIGURES

Figure 1 – Site location map

Figure 2 – Site Layout Map

Figure 3 – Swale Cross Section

Figure 4 – Sediment Basin

ATTACHMENT C

WATERFRONT PLAN

ATTACHMENT D

**AIR PERMITS AND AIR PROGRAM
SEE ATTACHMENT D OF WATERFRONT PLAN**

ATTACHMENT E

SWPPP

SEE ATTACHMENT E OF WATERFRONT PLAN

ATTACHMENT F

SPCC

SEE ATTACHMENT F OF WATERFRONT PLAN

ATTACHMENT G

RECLAMATION PLAN

ATTACHMENT H

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REFERENCES

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The American Waterways Operators. 2012. Responsible Carrier Program.

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ATTACHMENT I

AMENDMENTS

AMENDMENTS

This Pollution Prevention Plan will be reviewed and recertified by the Responsible Person (as indicated in the implementation team) annually and whenever it is amended. Recertification will be documented below.

Amendment No.	Summary of Amendment	Name/Title	Signature/Date
1	Determination of compliance with Natural Water quality as well as respond to SWRCB Compliance Plan review letter	David Scott/Safety and Compliance Director	
2	Include 2013-2014 Regional monitoring data and finalize report	David Scott/Safety and Compliance Director	



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ASBS 28 Subarea IV WATERFRONT PLAN

Prepared in Accordance with:

**STATE WATER RESOURCES CONTROL BOARD
RESOLUTION NO. 2012-0012**

Prepared for:

Connolly-Pacific
901 Peppy Beach Road
Avalon, CA 90704

Project No.: CNLP-12-12367

Date: September 18, 2012

Prepared By: Kathy Hubbard

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DRAFT

I. INTRODUCTION

The Connolly-Pacific Company (Connolly) quarry has been in operation since 1934 and is located at 901 Pebbly Beach Road, Avalon, CA 90704. This facility is a quarry located on Santa Catalina Island (Catalina) within the designated Area of Biological Significance (ASBS) Number 28, Subarea IV (Figure 1).

A. Facility Operations

The Connolly quarry is an active mining operation. The site Processing Area is improved with offices, parking areas for trucks and equipment, maintenance shops, aggregate stockpiles, aggregate transfer equipment, petroleum storage tanks and parts warehouses.

Material is mined from hillside areas using the shot method. Shot holes are drilled into the hillside and loaded with explosives. After detonation the released material is loaded into front end loaders and taken to the separator plants. The separator plants consist of belt conveyors, screens and other sorting equipment. The mined product is separated according to customer needs. The operation also includes a crushing operation to reduce the size of the product depending on the customer order. The separated product is then stockpiled using front end loaders and subsequently loaded onto barges for off-site delivery.

Tugboats are used to tow barges to the quarry from the Connolly Maintenance facility located in the Port of Long Beach at 1925 W. Pier D Street. Upon arrival at the quarry, tugboats operated by a certified crew position the barge on moorings located adjacent to the shore in front of a Derrick Crane. Certified crane operators transfer the loaded skip box from the shore line to the barge. The Barge is slowly loaded from bow to stern. Crane operators carefully dump the skip box to mitigate potential aggregate loss overboard. Barge loading operations usually take about 4 hours. Tugboats tie off at the mooring and wait while the barges are being loaded. Once the barge is full, the tugboats return to the loaded barge to tow it to the job site where the aggregate is used for a construction project.

The Processing Area encompasses the waterfront and marine activities subject to this waterfront plan. Those activities include barge loading using derrick cranes, aggregate transfers using mobile equipment, offshore mooring repair, offshore tugboat operations, vehicle maintenance, and equipment maintenance. Potential pollutants associated with these operations include but are not limited to: dust, petroleum products, paints, cleaning products, metals, sanitary waste, bilge water waste, trash, solvents, and acids.

B. Special Protections: Regulatory Background

Connolly received notice in a letter dated May 30, 2012 of the State Water Quality Control Board's (SWRCB) adoption of the General Exception to the California Ocean Plan of Waste Discharge Prohibition for selected Storm Water and Nonpoint Source Discharges into Areas of Special Biological Significance (ASBS). In addition to the notification of adoption, the letter detailed information that must be submitted to the SWRCB. The letter outlined that the General Exception requires parties with Waterfront and Marine Operations to develop a Waterfront and Marine Operations Plan (Waterfront Plan). The Waterfront Plan must be provided to the SWRCB, with a copy to the Regional Water Quality Control Board by September 20, 2012. The Waterfront Plan must include mitigation measures and best management practices that reduce the potential for pollutants associated with waterfront activities from entering the adjacent ASBS water body.

These requirements are derived from The Public Resources Code which states that “waste discharges shall be prohibited or limited by the imposition of special conditions” in accordance with the California Water Code and implementing regulations, including, but not limited to, the California Ocean Plan (Ocean Plan). The Ocean Plan states “Waste shall not be discharged to areas designated as being of special biological significance,” unless an “exception” is granted and Special Protections, as determined by the SWRCB and California Ocean Plan, are implemented. Stringent terms, prohibitions, and special conditions have been adopted by the SWRCB that comprise the limitations on point source storm water and nonpoint source discharges, providing Special Protections for marine aquatic life and natural water quality in ASBS.

These Special Protections are defined in Attachment B of the General Exception resolution No. 2012-0012. The requirements in the resolution can be summarized generally to eliminate dry weather run-off, ensure that wet weather run-off does not alter natural water quality in the ASBS, and that adequate monitoring be conducted to determine if natural water quality and the marine life beneficial use is protected.

The Order also states that the exception to the Ocean Plan prohibition against waste discharges to the ASBS is granted to Connolly Pacific provided that:

1. The discharges are covered under an appropriate authorization to discharge waste to the ASBS, such as an NPDES permit and/or waste discharge requirements;
2. The authorization incorporates all of the Special Protections, contained in Attachment B to the resolution, which are applicable to the discharge; and
3. Only storm water and nonpoint source waste discharges are covered by this resolution. All other waste discharges to ASBS are prohibited, unless they are covered by a separate, applicable Ocean Plan exception.

C. Special Protections: Waterfront Plan Provisions

The Special Protections require that a discharger with waterfront and marine operations comply with the following:

1. For discharges related to waterfront and marine operations, the discharger shall develop a Waterfront Plan.
2. This plan shall contain appropriate Management Measures/Practices to address nonpoint source pollutant discharges to the affected ASBS. The applicable specific elements that must be included in the waterfront plan are:
 - a. The Waterfront Plan shall contain appropriate Management Measures/Practices for any waste discharges associated with the operation and maintenance of vessels, moorings, piers, launch ramps, and cleaning stations in order to ensure that beneficial uses are protected and natural water quality is maintained in the affected ASBS.

- b. The Waterfront Plan shall include Management Practices to address the prohibition.
- c. The discharge of chlorine, soaps, petroleum, other chemical contaminants, trash, fish offal, and human sewage to ASBS is prohibited.
- d. Limited-term activities, such as the repair, renovation, or maintenance of waterfront facilities, including, but not limited to, piers, docks, moorings, and breakwaters, are authorized only in accordance with Chapter III.E.2 of the Ocean Plan.

D. Special Protections: Waterfront Plan Objectives

The objective of the plan is to eliminate or mitigate non-point source waste discharges from waterfront operations that could potentially impact the Natural Water Quality in the ASBS. Natural ocean water quality is defined as: That water quality (based on selected physical chemical and biological characteristics) that is required to sustain marine ecosystems, and which is without apparent human influence, *i.e.*, an absence of significant amounts of:

1. Man-made constituents (e.g., DDT),
2. Other chemical (e.g., trace metals, particulates), physical (temperature/thermal pollution, sediment burial) and biological (e.g., bacteria) constituents at levels that have been elevated due to man's activities above those resulting from the naturally occurring processes that affect the area in question, and
3. Non-indigenous biota (e.g., invasive algal bloom species) that have been introduced either deliberately or accidentally by man.

II. SITE CHARACTERISTICS

Santa Catalina Island is located at 33°22' north latitude, 118°25' west longitude and lies approximately 20 miles offshore of the Palos Verdes Peninsula. The island is 22 miles (35.4 km) long, 8 miles (12.9 km) across at its widest point, and is oriented in a general northwest to southeast direction. Santa Catalina Island is part of Los Angeles County. Avalon is the only city on the island, however there is a community located between Catalina Harbor and Isthmus Cove, known as Two Harbors. Approximately, 100 permanent residents of Two Harbors maintain this local recreational facility utilized by vacationers, the area's primary industry (SWRCB 1979).

ASBS No. 28, Sub-area IV encompasses a portion of eastern Santa Catalina Island between Jewfish Point and Binnacle Rock. The seaward boundary extends from the intertidal zone to a depth of 300 feet or a distance of 1 nautical mile offshore, whichever is greatest. The ASBS contains approximately 2,756 acres of land, with approximately 2.7 miles of shoreline (SWRCB 1981). The Connolly quarry is located adjacent to ASBS No. 28, Sub-area IV, on Pebbly Beach Road, Avalon, CA 90704.

The quarry encompasses about 208 acres of seacliff between Pebbly Beach and Seal Rocks. Graded, but unimproved private roadways from Avalon provide land access to the site and mooring buoys lying directly offshore permit barges to receive quarried materials from the site. Two large cranes operate at the loading areas near Jewfish Point, and a materials processing area covers a graded bench just behind the primary loading area.

Land uses surrounding the quarry include industrial operations and open space areas. Properties to the north, near Pebbly Beach and outside the coverage of this plan, support several industrial uses, including the Southern California Edison power plant, the Avalon sewage treatment plant, a sanitary landfill and a freight barge loading terminal. The town of Avalon lies approximately one-half mile farther north. Lands to the south and west are within an Open Space and Conservation easement. The Pacific Ocean (San Pedro Channel) lies to the east.

A. Physical Description

The waterfront Processing Area subject to this plan is composed of a relatively flat, pervious surface (See Figure 1). The waterfront area is equipped with a completely enclosed steel maintenance shop and office along the northern perimeter. The shop is used for equipment repairs, parts storage, and battery storage. Utility truck parking, loader parking and dump truck parking is located West of the main shop. The parking area is graded so that discharge flows easterly back toward the shop. There is a 3 foot aggregate/gravel berm along the shoreline to ensure that no materials are released to the ocean. A small wooden shed is located south of the main shop. The shed is used to store tires, anti-freeze and thinners. The CAT Shop is a stainless steel building with a concrete floor located south of the wooden shed along the waterfront. The CAT shop is equipped with two roll up doors on each end to allow for the easy movement of large quarry equipment. There are 8 portable horizontal oil tanks just east of the CAT shop. Each tank is within its own secondary containment. There are eight 55-gallon drums containing used oil filters along with one 500-gallon tank containing waste oil located south of the CAT shop. Twelve 55-gallon drums of oil are stored just north of the CAT shop. There is a 14,500-gallon Diesel aboveground storage tank and a 4,000-gallon aboveground fuel transfer tank located along the shoreline south of the CAT Shop. Both tanks are equipped with secondary containment and overfill protection. Two Derrick cranes used for loading aggregate onto barges are located further south along the shoreline. The cranes are electric and the motors for the cranes are housed within a brick building. The brick building contains hydraulic fluid for the cranes as well as eyewash stations and small amounts of other chemicals.

B. Geology

The geology of Santa Catalina Island consists of Mesozoic metamorphic basement rocks intruded by Miocene igneous rocks. Tertiary sedimentary rocks are scattered across the island. The island generally is regarded as a southward extension of the Franciscan formation, although the schist lithologies found on Catalina differ slightly from the typical Franciscan schists. A variety of schists, breccias and sedimentary marine layers form the complex geologic structure of Catalina.

C. Vegetation

The quarry site lies in the coastal plant community known as Coastal Sage Scrub. Coastal Sage Scrub occurs on dry rocks and gravelly slopes in the coastal range, and these areas receive ten to twenty inches of rainfall per year. Quarrying operations have removed most of the on-site vegetation. Those slopes within the lease boundaries which have yet to be mined still contain native plant materials and in fact, quarry areas which have been mined previously or presently support quarry related land uses show signs of natural revegetation processes. The active quarry site can be classified into four distinct zones, and some of these zones reveal plant growth. The four zones are:

1. Production work areas or benches (unconsolidated crushed rock subbase)
2. Unconsolidated bench slope faces
3. Shoreline slope face comprised of armor rock sea walls
4. Production high wall and slump pile at base

Grass type plant growth has occurred at the upper production areas and at the base of the slump pile. The toes of muck piles and the bases of undisturbed stockpiles exhibit woody plant growth. This revegetation results from deposition of windborn seeds and seeds deposited in animal fecal matter. Further revegetation of bare slopes and abandoned areas will occur via the quarry reclamation process. These revegetation strategies are discussed in the section of the Reclamation Plan titled "Revegetation".

D. Climate

Santa Catalina Island is characterized by a semi-arid Mediterranean climate with mild, wet winters and warm, dry summers. Skies are generally clear, however heavy cloudiness occurs primarily in the early spring months when stratus clouds drifting in from the sea may cause low ceilings or fog (SWRCB 1981). Weather in this area is largely controlled by the Eastern Pacific high, which is located off the coast of Northern California during the spring and summer months; this high pressure cell prevents low pressure systems from moving down the coast into southern California (SWRCB 1979).

ASBS No. 28, Sub-area IV consist of both leeward and windward aspects and each can experience different climates. Summer and winter temperatures in the southwestern portion are usually around 80°F and 50°F, respectively. Weather for the northeastern portion can be estimated from the City of Avalon data, however slight differences may occur as Avalon is semi-protected in a canyon.

E. Physiography/Geomorphology

Santa Catalina Island is located on the coastal borderland of the Southern California Bight (SCB), a wide continental shelf characterized by ridges (the Channel Islands are ridges that extend above sea level) and basins. The SCB is a marine province stretching from Point Conception in central California to the area between Punta Colnett and Punta Eugenia in Baja California. It is part of a gently sloping southeasterly facing shelf extending for an average distance of approximately 5 miles from the east end of Santa Catalina Island.

The land mass within ASBS 28, Subarea IV is extremely rugged and mountainous, and is intersected by five narrow and steep-sided canyons leading to the sea. The canyons discharge only 3% of all surface drainage on Catalina. Intertidal and subtidal geomorphology ranges from fine sand to variable densities of concentrations of boulders and occasional bedrock outcrops or pinnacles. Sandy sediments and rocky substrates account for approximately 40 and 60% of the intertidal zone, and, 80 and 20% of the subtidal zone, respectively. Subtidal areas near headlands are characterized by exposed bedrock, either with interspersed pockets of coarse sand or covered by variable quantities and sizes of gravity-transported boulders. Most boulders are medium-sized, (2-5 ft, 0.6-1.5 m), resulting in areas of medium physical relief. Exposed bedrock and boulders become less common with increasing depth as the substrate changes to fine sand beyond a depth of 35- 40 ft (10-12 m). Sediments in subtidal areas offshore of the beaches grade from coarse to fine as depth increases. Most of the subtidal substrate is sand, therefore forests of giant kelp are not present. Within the quarry region, the subtidal area has been modified by quarry operations. Large intertidal boulders occasionally are dislodged by storm swells, and roll down the subtidal slopes. Similar-sized boulders then are placed in the intertidal zone Connolly, to preserve the original coastline as required by their Mining and Reclamation Plan developed in accordance with the Surface Mining And Reclamation Act (SMARA). A small amount of rocks are introduced into the subtidal inadvertently during barge-loading operations. (SWRCB 1981).

F. Hydrology

Oceanic Seasonal changes in wind direction commonly create seasonal patterns for the currents off of the California Coastline. For much of the year, the California Current brings colder northern waters southward along the shore as far as southern California (MLPA 2006). The California current is the eastern leg of the North Pacific Gyre, a massive, clockwise moving current system which encompasses the entire North Pacific Ocean (SWRCB 1979).

The Southern California Bight is the 300 km of recessed coastline between Point Conception in Santa Barbara County and Cabo Colnett, south of Ensenada, Mexico. The dramatic change in the angle of the mainland coastline creates a large backwater eddy in which equatorial waters flow north near shore and subarctic waters flow south offshore. This unique oceanographic circulation pattern creates a biological transition zone between warm and cold waters that contains approximately 500 marine fish species and more than 5,000 invertebrate species (SWRCB 1979). The hydrological variation resulting from winds and currents create a wide range of ecological environments.

G. Biology

Biological surveys were conducted and reported in the State Water Board's California Marine Waters, Areas of Biological Significance Reconnaissance Survey Reports (1979-1981). The results indicate that 44 different species of flora, 260 invertebrate species, and 27 fish species ASBS 28.

During the Southern California Bight '08 rocky intertidal survey, Twenty one rocky intertidal sites were quantitatively sampled for habitat quality, invertebrate and algal abundance and composition by Raimondi's UC Santa Cruz Coastal Biodiversity research team. The monitoring focused on differences between reference and ASBS discharge sites. Preliminary results indicated that: 1) there were no significant differences in macro-invertebrate or algal species richness based on geographic grouping or type of site (discharge vs. reference); 2) there were large geographic differences in algal and sessile invertebrate species composition, likely reflecting natural biogeography, but no statistically significant differences between reference sites and ASBS discharge sites; and 3) there were large geographic differences in mobile invertebrate species composition, once again reflecting natural biogeography, but no statistically significant differences between reference sites and ASBS discharge sites.

H. Water Chemistry

Receiving water samples were collected during storm events and analyzed for Ocean Plan water quality parameters as part of the Bight '08 survey and the Exception application. Two Ocean Plan parameters, Copper and Nickel, exceeded the Ocean Plan Objectives.

California Ocean plan water quality objectives for copper include an instantaneous maximum of 30 ug/l, a daily max of 12 ug/l and a six month median of 3 ug/l. California Ocean plan water quality objectives for nickel include an instantaneous maximum of 50 ug/l, a daily max of 20 ug/l and a six month median of 5 ug/l. ASBS 28 reported elevated levels of copper in three locations, the highest reported copper level was 40.5 ug/l, and an elevated level of nickel from storm water run-off at one location at 54 ug/l.

I. Land Use

The Pebbly Beach Quarry produces rock construction materials which range in size from sand-size grains to boulders which measure several feet across and weigh upwards of several tons. The City of Avalon is located on Santa Catalina Island and is relatively close to but not immediately adjacent to the ASBS. The facility is approximately 248 acres (1 km²) and is completely pervious (i.e., no paved roads or parking areas). The watershed has two direct discharges and three natural streams draining to the ASBS. The major source of anthropogenic impact is associated with the approximately 248-acre quarry operated by Connolly located in the Pebbly Beach Extractive Use Zone of the Santa Catalina Island Local Coastal Plan. Connolly leases the property from the Santa Catalina Island Company. Connolly must maintain the natural shoreline contours, therefore rocks are added periodically to areas where storms have caused slippage. There is a jetty and a pier constructed at the quarry. Connolly is also required to reconstruct a "natural" hillside topography upon reclamation.

J. Economic, Social, Cultural Background

According to the Santa Catalina Island Local Coastal Plan, the rock quarry operation is an important resource of breakwater armor rock and rubble used in construction of island and mainland break waters and shoreline protection facilities. Public access to the quarry is not permitted.

III. APPLICABLE REGULATIONS

Activities at the Connolly waterfront are controlled by an overlapping network of Local, State, and Federal laws and regulations. As a result, the authority to address a given discharge or activity is not always clear. Many of these regulations include implementation of inspections and Best Management Practices. Applicable regulations are outlined below.

A. Federal Laws and Regulations

Clean Water Act: The CWA (92-500), which is administered primarily by the EPA, governs the discharge of pollutants to waters of the United States through the National Pollutant Discharge Elimination System (NPDES) permit system.

Coastal Zone Act Reauthorization Amendments: Section 6217 jointly administered by NOAA and EPA, The application of management measures by States is described more in *Coastal Nonpoint Pollution Control Program: Program Development and Approval Guidance*,

Endangered Species Act: provides a program for the conservation of threatened and endangered plants and animals and the habitats in which they are found. The lead federal agencies for implementing ESA are the US Fish and Wildlife Service and NOAA Fisheries Service

Executive Order 13547 -- Stewardship of the Ocean, Our Coasts, and the Great Lakes: This order adopts the recommendations of the Interagency Ocean Policy Task Force, except where otherwise provided in this order, and directs executive agencies to implement those recommendations under the guidance of a National Ocean Council

The Marine Protection Research, and Sanctuaries Act: (MPRSA - also known as the Ocean Dumping Act) prohibits the dumping of material into the ocean that would unreasonably degrade or endanger human health or the marine environment.

16 USC 1431 and 15 CFR Part 922 and 50 CFR Part 404: National Marine Sanctuaries Act and implementing regulations.

Navigation and Navigable Waters, primarily administered by the Coast guard and the Department of Homeland Security, Vessel operators must also comply with those provisions of the following laws and regulations applicable to specific vessels (not intended to be an exhaustive list).

33 CFR Parts 151 and 401: Coast Guard ballast water management, discharge, and exchange requirements.

33 CFR Part 155 Subparts B and C: Coast Guard oil pollution prevention requirements.

33 CFR Part 159: Coast Guard sewage discharge requirements.

40 CFR Part 110, 117, and 302: EPA oil or hazardous substance discharge reporting requirements.

40 CFR 122.44(p): Coast Guard requirements for safe storage and transportation of pollutants.

40 CFR Part 140: EPA sewage discharge requirements.

33 USC 190-1915: Act to prevent pollution from ships.

33 USC 2701-2720: Oil pollution act of 1990

Clean Air Act: 40 CFR part 60 subpart OOO – New Source Performance Standards

B. State Laws and Regulations

California State Lands Commission: Article 4.7 – Performance Standards for the Discharge of Ballast Water for Vessels Operating in California Waters:

Porter-Cologne Water Quality Control Act and the State Water Resources Control Board: The SWRCB and Porter Cologne are the State's primary water quality control law to prevent nonpoint source pollution. Waste discharge requirements issued under Porter-Cologne prevent Non-Point Source (NPS) pollution by implementing applicable water quality control plans and policies such as the California Ocean Plan, Special protections and ASBS.

State Water Board has adopted a Nonpoint Source Management Plan that describes a three-tiered management approach to address NPS pollution. The plan focuses on implementation of BMPs as the primary way to meet water quality standards. Water Code section 13360 as a way to directly require implementation of management measures through discharge requirements

California Clean Coast Act of 2005: This statute (PRC 72400) authorizes the SWRCB and the SLC to regulate the release of graywater, sewage treated or untreated, sewage sludge, oily bilgewater, and hazardous waste.

California Department of Fish and Game Code 5650: Under Fish and Game Code 5650, it is unlawful to deposit in, permit to pass into, or place where it can pass into the waters of California any of the following:

- Any petroleum, acid, coal or oil tar, lampblack, aniline, asphalt, bitumen, or residuary product of petroleum, or carbonaceous material or substance.
- Any refuse, liquid or solid, from any refinery, gas house, tannery, distillery, chemical works, mill, or factory of any kind.
- Any sawdust, shavings, slabs, or edgings.
- Any factory refuse, lime, or slag.
- Any cocculus indicus.
- Any substance or material deleterious to fish, plant life, mammals, or bird life.

California Endangered Species Act: Pursuant to the California Endangered Species Act (CESA), a permit from the California Department of Fish and Game (DFG) is required for projects that could result in take of a plant or animal species that is state listed as threatened or endangered.

California No Discharge Zone: On February 9, 2012, the U.S. EPA signed and approved a State of California proposal to ban the discharge of sewage (both treated and untreated) within California waters. This rule covers all California waters within 3 miles of the coastline.

Surface Mining and Reclamation Act (SMARA): The Surface Mining and Reclamation Act (SMARA), Chapter 9, Division 2 of the Public Resources Code, requires the State Mining and Geology Board to adopt State policy for the reclamation of mined lands and the conservation of mineral resources. The Office of Mine Reclamation (OMR) provides assistance to cities, counties, state agencies and mine operators for reclamation planning.

C. Local Laws and Regulations

Title 22 Planning and Zoning: Los Angeles County Department of Regional Planning implements the land use policy as defined by the General Plan for each land use category.

Title 12 Environmental Protection: Los Angeles County CUPA implements Chapter 6.5 Division 20 of California Health and safety Code for Hazardous Waste, Chapter 6.67 of Division 20 of the H&SC for Aboveground Petroleum Storage, Chapter 6.95 of Division 20 of the H&SC for Hazardous Materials Release Response Plan and Inventory program and H&SC Section 13143.9 Hazardous Materials Management Plan and Inventory Statement

Ordinance No. 92-0032 Los Angeles County Surface Mining & Reclamation Ordinance: Los Angeles County Department of Regional Planning is the lead agency along with the Department of Conservation for approval and permitting of excavation and mining activities. Annual reports, financial assurances and inspections are required under these regulations.

PM₁₀ emission reductions from aggregate and related operations: South Coast Air Quality management District – Rule 1157 applies to all permanent and temporary aggregate and related operations and Rule 403 for fugitive dust.

NPDES General Permit No. CAS000001 for Waste Discharge Requirements for Discharges of Storm Water associated with industrial Activities - This General Permit generally requires facility operators to:

1. Eliminate unauthorized non-storm water discharges;
2. Develop and implement a storm water pollution prevention plan (SWPPP); and
3. Perform monitoring of storm water discharges and authorized non-storm water discharges. All facility operators must prepare, retain on site, and implement an SWPPP emphasizing BMPs.

D. Other

American Waterways Operators (AWO) Responsible Carrier Program

The program is intended to serve as a template for AWO member companies to use in developing company-specific safety programs that are consistent with applicable law and regulation, that incorporate sound operating principles and practices not currently required by law or regulation, and that are practical and flexible enough to reflect a company's unique operational needs.

- A. Vessel Operating Policies and Procedures
- B. Safety Policy and Procedures
- C. Security Policy and Procedures
- D. Environmental Policy and Procedures
- E. Incident Reporting Procedure
- F. Emergency Response Procedures
- G. Internal Audit and Review Procedures
- H. Vendor Safety
- I. Organization and Levels of Authority
- J. Personnel Policies and Procedures

IV. WATERFRONT PLAN IMPLEMENTATION

The Special Protections outlined in the General Exception are the principal vehicle for the implementation of the waterfront plan. However, numerous other programs directly and indirectly deal with the control of non-point source discharges from the quarry operations. Those programs are summarized in Section III and Tables 1 and 2. The implementation of the waterfront plan takes place at the federal, state and local levels. It is critical that the team members responsible for implementing the plan understand the relationship between the agencies, their jurisdictions and the requirements defined in these documents.

A. Waterfront Plan Development Process.

1. Mining and processing activities were assessed through site inspection and document review to identify non-point source waste discharges.
2. Applicable regulations for the priority activities and pollutants were identified.
3. Management measures and Best Management Practices were identified using existing plans and permits.
4. Supplementary Best Management Practices were identified as necessary to correspond to the additional requirements necessary for the waterfront plan. A summary of the applicable regulations and requirements are included in Table 1 and Table 2.

B. Waterfront Plan Implementation

1. The monitoring, inspection and training requirements necessary to implement the waterfront plan are defined by the applicable regulations and requirements. They are included in Tables 3 and 4.
2. Each table includes the regulatory requirements, inspection requirements, inspection frequency, training requirements and training frequency. Tables 3 and 4 are the waterfront plan implementation tools.
3. Items that are highlighted in red in Tables 3 and 4 will be developed and implemented by September 20, 2013.
4. The Waterfront Plan will be audited annually to evaluate implementation of the Best Management Practices. In the event it is determined that BMPs should be added to meet the objectives of the waterfront plan, the plan will be revised and the amendment log will be updated to reflect the revisions.

C. Waterfront Plan Implementation Team

David Scott – Director of Safety and Compliance (562) 437-2831ext.223 (562)577-0725

Robert Machado

Laura Machado

Paul Romo

(310) 510-0626

Responsibility	Team Member
Best Management Practices	Robert Machado/Paul Romo
Inspection/Observation	Robert Machado/Paul Romo
Training	David Scott
Reporting	David Scott/Laura Machado
Recordkeeping	Laura Machado

Attachment 1- Tables

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TABLE 1 – SITE SPECIFIC PERMITS AND PLANS

Agency	Permit Number	Description	Regulations	Recordkeeping/Reporting
SWRCB	WDID # 4191011729	SWPPP	Stormwater NPDES CAS000001	<ul style="list-style-type: none"> - Annual Sampling - Monthly Monitoring - Annual Report
SCAQMD	F94220	Aggregate Receiving, Screening, Riprap Production System	Rule 201 – Equipment Requiring a Permit	<ul style="list-style-type: none"> - Monthly Aggregate Processing
Department of Conservation State Mining and Geology Board and Los Angeles County Department of Regional Planning/DPW	Mine ID# 91-19-0010 SMP Case No. 86136 – (4)	Mining and Reclamation Plan	SMARA	<ul style="list-style-type: none"> - Annual Report of Compliance - Annual Financial Assurances - AB3098 Listing
LA County Fire Department	FA0020435	Hazardous Materials Business Plan	CUPA	<ul style="list-style-type: none"> - Annual Inventory Update - Business Emergency Plan Every 3 Years - SPCC Every 5 Years, - Monthly Petroleum Storage Inspection - Hazardous Waste Weekly Inspection
DTSC	CAL000223892	Hazardous Waste Generator	CCA Title 22	<ul style="list-style-type: none"> - Waste Manifest Documentation
CalRecycle	TPID # 1509384-01	Waste Tire Generator	Title 14	<ul style="list-style-type: none"> - Comprehensive Trip Log 3 Years
SCAQMD	Facility ID # 82149	Rule 403 Plan	Rule 403 Fugitive Dust	Rule 403 recordkeeping Table 2 and 3 log retained on-site for 6 months

Attachment 2- Figures

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Attachment 3 – Forms

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Attachment 5 – SWPPP

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Attachment 6 – SPCC

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Attachment 7 - HMBP

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FA0020435

Owner/Operator Identification

Report #5314

Beginning Date: 1/1/2012 Ending Date: 12/31/2012

V111021

OWNER FILE INFORMATION

Please clearly make changes/corrections.

Owner ID: OW0020435
 Owner Name: CONNOLLY-PACIFIC CO. Dvr Lic No: State:
 Owner DBA: PEBBLY BEACH QUARRY Tax ID : 46-0349158
 Owner Address: 1925 PIER D ST, BERTH D40 Owner Date of Birth:
 LONG BEACH, CA 90802
 Work/Business Phone: 562-437-2831
 Billing/Mailing Address: 1925 PIER D STREET
 LONG BEACH, CA 90802
 ATTN/Care of:

FACILITY FILE INFORMATION

On Site Regulated Substances : Yes ___ No ___

Facility ID: FA0020435
 Facility Name: PEBBLY BEACH QUARRY
 Site Location: 901 PEBBLY BEACH RD
~~CATALINA, CA 90704~~ Avalon, CA 90704
 Phone: 310-510-0626
 Mailing Address: 1925 PIER D ST
 LONG BEACH, CA 90802
 Operator/Care of: SUPERINTENDENT E-Mail Address:
 SIC Code: 1429
 Operating Hours: Days: M-F Hours: 6:30-15:00
 Station: 055

Date First Became Operational:

ENVIRONMENTAL CONTACT INFORMATION

Contact Name: DAVE SCOTT Phone : 562-437-2831
 1925 PIER D. STREET
 LONG BEACH CA 90802

Dun & Bradst.: 10-816-8485

EMERGENCY CONTACT INFORMATION

PRIMARY CONTACT:

SECONDARY CONTACT:

Name :	PAUL ROMO	STEVEN A SCHRYVER
Title :	SUPERINTENDENT	VICE PRES.GEN MGR
Business Phone :	310-510-0626	562-437-2831
24 - Hour Phone :	562-577-0728	562-577-0721
Pager # :	Not Specified	Not Specified

ADDITIONAL INFORMATION

H 6-May-10

ASSESSORS PARCEL NUMBER: N/A

No Site Map on File

Certification: I certify under penalty of law that I have personally examined and am familiar with the information submitted in this inventory and believe the information is true, accurate and complete.

Print Name of Document Preparer :

Signature of Owner/Operator :

David Scott

Date: 12/12/11

Hazardous Materials Inventory Statement

Business Name: PEBBLY BEACH QUARRY
(Same as Facility Name or DBA) 901 PEBBLY BEACH RD

CATALINA

Chemical Location: Unit # 2
(Building/Storage Area) **FIXED CONTAINERS ON SITE**

Facility ID #: FA0020435

1.	2.	3.	4.	5.	6.			7.	8.		9.
Haz. Class	Coord	Common Name	Hazardous Components (for mixture only)	Type and Physical State	Max Daily	Average Daily	Largest Cont.	Units	Storage Pressure	Storage Temp.	Hazard Categories
THINNER											
Sub - Location: CONTAINMENT AREA SHOP #2	RS: N	CAS #		M: Mix P: Pure W: Waste	110	55	55.00	A	A	A	Y
If EPCRA, sign:			<i>Components Not Necessary for Pure Chemical</i>	L	(If radioactive)	365	D				reactive pressure rels acute health chronic heal. radioactive
Mineral Spirits				M	110	0		A	A	A	Y
If EPCRA, sign:				L	(If radioactive)	365	L				reactive pressure rels acute health chronic heal. radioactive
DET CORD-ALL GRAMS											
Sub - Location: EAST OF MAIN SHOP	RS: N	CAS #		M: Mix P: Pure W: Waste	500	100	10.00	C	A	A	Y
If EPCRA, sign:			<i>Components Not Necessary for Pure Chemical</i>	S	(If radioactive)	365	R				reactive pressure rels acute health chronic heal. radioactive
Caps, Electric & Non Electric				P	800	250	5.00	C	A	A	Y
If EPCRA, sign:			<i>Components Not Necessary for Pure Chemical</i>	S	(If radioactive)	365	R				reactive pressure rels acute health chronic heal. radioactive
MOTOR OIL											
Sub - Location: EAST OF MAIN SHOP	RS: N	CAS #		M: Mix P: Pure W: Waste	4,000	2,500	500.00	A	A	A	Y
If EPCRA, sign:			<i>Components Not Necessary for Pure Chemical</i>	L	(If radioactive)	365	A				reactive pressure rels acute health chronic heal. radioactive

* Code Storage Type Code Storage Type Code Storage Type Code Storage Type Code Storage Type Code Storage Type Code Storage Type
 A Aboveground Tank D Steel Drum G Carboy J Bag M Glass Bottle or Jug P Tank Wagon
 B Belowground Tank E Plastic/Non-metallic Drum H Silo K Box N Plastic Bottle or Jug Q Rail Car
 C Tank Inside Building F Can I Fiber Drum L Cylinder O Tote Bin R Other

A: Gallons
B: Cu Feet
C: Pounds
D: Tons
A: Ambient
B: > Ambient
C: < Ambient
D: Cryogenic
A: Ambient
B: > Ambient
C: < Ambient
D: Cryogenic
A: Ambient
B: > Ambient
C: < Ambient
D: Cryogenic

Hazardous Materials Inventory Statement

Business Name: PEBBLY BEACH QUARRY
(Same as Facility Name or DBA) 901 PEBBLY BEACH RD

CATALINA

Chemical Location: Unit # 2
(Building/Storage Area) **FIXED CONTAINERS ON SITE**

Facility ID #: FA0020435

1.	2.	3.	4.	5.	6.		7.	8.		9.
Haz. Class	Grid Coordinate	Common Name	Hazardous Components (or mixture only)	Type and Physical State	Max. Daily	Average Daily	Largest Cont.	Units	Storage Codes	Hazard Categories
		CASTING PROTECTION		P	55	55	55.00	A		fire
<p>Sub - EAST OF MAIN SHOP Location _____ If EPCRA, sign: _____ RS: N CAS # _____</p> <p><i>Components Not Necessary for Pure Chemical</i></p> <p>M: Mix P: Pure W: Waste Curies: _____ Days On Site: _____ Storage Container: * _____ (If radioactive)</p> <p>A: Gallons A: Ambient A: Ambient B: Cu Feet B: Ambient B: Ambient C: Pounds C: Ambient C: Ambient D: Tons D: Cytogenetic D: Cytogenetic Waste Amt: _____</p>										
		WASTE OIL		W	2,000	200	500.00	A		fire
<p>Sub - EAST OF #2 SHOP Location _____ If EPCRA, sign: _____ RS: N CAS # _____</p> <p><i>Components Not Necessary for Pure Chemical</i></p> <p>M: Mix P: Pure W: Waste Curies: _____ Days On Site: _____ Storage Container: * _____ (If radioactive)</p> <p>A: Gallons A: Ambient A: Ambient B: Cu Feet B: Ambient B: Ambient C: Pounds C: Ambient C: Ambient D: Tons D: Cytogenetic D: Cytogenetic Waste Amt: 221</p>										
		DYNAMITE		M	40,000	5,500	55.00	C		fire
<p>Sub - MAIN MAGAZINE #1 Location _____ If EPCRA, sign: _____ RS: N CAS # _____</p> <p><i>Components Not Necessary for Pure Chemical</i></p> <p>M: Mix P: Pure W: Waste Curies: _____ Days On Site: _____ Storage Container: * _____ (If radioactive)</p> <p>A: Gallons A: Ambient A: Ambient B: Cu Feet B: Ambient B: Ambient C: Pounds C: Ambient C: Ambient D: Tons D: Cytogenetic D: Cytogenetic Waste Amt: _____</p>										
		UNOCAL GUARDOL MOTOR OIL 30		P	220	0		A		fire
<p>Sub - CENTRAL PART OF RYD Location _____ If EPCRA, sign: _____ RS: N CAS # _____</p> <p><i>Components Not Necessary for Pure Chemical</i></p> <p>M: Mix P: Pure W: Waste Curies: _____ Days On Site: _____ Storage Container: * _____ (If radioactive)</p> <p>A: Gallons A: Ambient A: Ambient B: Cu Feet B: Ambient B: Ambient C: Pounds C: Ambient C: Ambient D: Tons D: Cytogenetic D: Cytogenetic Waste Amt: _____</p>										
		OXYGEN		P	5,055	3,370	337.00	B		reactive
<p>Sub - NW SIDE OF MAIN SHOP Location _____ If EPCRA, sign: _____ RS: N CAS # _____</p> <p><i>Components Not Necessary for Pure Chemical</i></p> <p>M: Mix P: Pure W: Waste Curies: _____ Days On Site: _____ Storage Container: * _____ (If radioactive)</p> <p>A: Gallons A: Ambient A: Ambient B: Cu Feet B: Ambient B: Ambient C: Pounds C: Ambient C: Ambient D: Tons D: Cytogenetic D: Cytogenetic Waste Amt: _____</p>										

Hazardous Materials Inventory Statement

Business Name: PEBBLY BEACH QUARRY
(Same as Facility Name or DBA) 901 PEBBLY BEACH RD

CATALINA

Chemical Location: Unit # 2
(Building/Storage Area) **FIXED CONTAINERS ON SITE**

Facility ID #: FA0020435

1.	2.	3.	4.	5.	6.	7.	8.	9.
Haz. Class	Grnd Coordinate	Common Name	Hazardous Components (for mixture only)	Type and Physical State	Quantities Max Daily Average Daily	Largest Cont	Storage Codes Storage Pressure Storage Temp	Hazard Categories

ACETYLENE								
Sub - Location	NW SIDE OF SHOP							
If EPCRA, sign:	RS: N	CAS #						
Code	P		M: Mix P: Pure W: Waste		1,600	1,200	400.00	
	Components Not Necessary				Curies: (If radioactive)	Days On Site: 365	Storage Container*	
	for Pure Chemical		L: Liquid S: Solid G: Gas				L	
Code	B		A				A	
	A: Gallons B: Cu Feet C: Pounds D: Tons		A: Ambient B: > Ambient C: < Ambient D: Cryogenic				A	Y
							A	reactive
							A	pressure rels.
							A	acute health
							A	chronic health
							A	radioactive

DIESEL FUEL								
Sub - Location	ON SITE							
If EPCRA, sign:	RS: N	CAS # 68476-30-2						
Code	P		M: Mix P: Pure W: Waste		14,500	7,500	14,500.00	
	Components Not Necessary				Curies: (If radioactive)	Days On Site: 365	Storage Container*	
	for Pure Chemical		L: Liquid S: Solid G: Gas				A	
Code	B		A				A	
	A: Gallons B: Cu Feet C: Pounds D: Tons		A: Ambient B: > Ambient C: < Ambient D: Cryogenic				A	Y
							A	reactive
							A	pressure rels.
							A	acute health
							A	chronic health
							A	radioactive

NITROGEN								
Sub - Location	ON SITE							
If EPCRA, sign:	RS: N	CAS #						
Code	P		M: Mix P: Pure W: Waste		1,200	304	304.00	
	Components Not Necessary				Curies: (If radioactive)	Days On Site: 365	Storage Container*	
	for Pure Chemical		L: Liquid S: Solid G: Gas				L	
Code	B		A				A	
	A: Gallons B: Cu Feet C: Pounds D: Tons		A: Ambient B: > Ambient C: < Ambient D: Cryogenic				A	Y
							A	reactive
							A	pressure rels.
							A	acute health
							A	chronic health
							A	radioactive

PETROLEUM LUBE GREASE								
Sub - Location	ON SITE							
If EPCRA, sign:	RS: N	CAS #						
Code	P		M: Mix P: Pure W: Waste		220	410	55.00	
	Components Not Necessary				Curies: (If radioactive)	Days On Site: 365	Storage Container*	
	for Pure Chemical		L: Liquid S: Solid G: Gas				D	
Code	A		A				A	
	A: Gallons B: Cu Feet C: Pounds D: Tons		A: Ambient B: > Ambient C: < Ambient D: Cryogenic				A	Y
							A	reactive
							A	pressure rels.
							A	acute health
							A	chronic health
							A	radioactive

ANTIFREEZE COOLANT								
Sub - Location	ON SITE							
If EPCRA, sign:	RS: N	CAS #						
Code	M		M: Mix P: Pure W: Waste		165	110	55.00	
	Components Not Necessary				Curies: (If radioactive)	Days On Site: 365	Storage Container*	
	for Pure Chemical		L: Liquid S: Solid G: Gas				D	
Code	A		A				A	
	A: Gallons B: Cu Feet C: Pounds D: Tons		A: Ambient B: > Ambient C: < Ambient D: Cryogenic				A	Y
							A	reactive
							A	pressure rels.
							A	acute health
							A	chronic health
							A	radioactive

* Code	Storage Type	Code	Storage Type	Code	Storage Type	Code	Storage Type	Code	Storage Type
A	Aboveground Tank	D	Steel Drum	G	Carboy	J	Bag	M	Glass Bottle or Jug
B	Belowground Tank	E	Plastic/Non-metallic Drum	H	Silo	K	Box	N	Plastic Bottle or Jug
C	Tank Inside Building	F	Can	I	Fiber Drum	L	Cylinder	O	Toile Bin
								P	Tank Wagon
								Q	Rail Car
								R	Other

Hazardous Materials Inventory Statement

Business Name: PEBBLY BEACH QUARRY
(Same as Facility Name or DBA) 901 PEBBLY BEACH RD

CATALINA

Chemical Location: Unit # 2
(Building/Storage Area) **FIXED CONTAINERS ON SITE**

Facility ID #: FA0020435

1.	2.	3.	4.	5.	6.			7.	8.		9.
					Quantities		Units		Storage Codes		
Haz. Class	Grid Coordinate	Common Name	Hazardous Components (for mixture only)	Type and Physical State	Max Daily	Average Daily	Largest Cont.		Storage Pressure	Storage Temp.	
		ANFO									
		ONSITE									
				M	50,000	25,000	55.00				reactive
				W: Waste							pressure rels.
				S							acute health
				L: Liquid S: Solid G: Gas							chronic heal
						365	R				radioactive

Curies: _____ **Days On Site:** _____ **Storage Container:** _____
Units: A: Gallons B: Cu Feet C: Pounds D: Tons
Waste Amt: _____
Storage Codes: A: Ambient B: > Ambient C: < Ambient D: Cytogenic
Hazard Categories: Y: fire

* Code Storage Type Code Storage Type Code Storage Type Code Storage Type Code Storage Type Code Storage Type

- A Aboveground Tank D Steel Drum G Carboy J Bag M Glass Bottle or Jug P Tank Wagon
- B Belowground Tank E Plastic/Non-metallic Drum H Silo K Box N Plastic Bottle or Jug Q Rail Car
- C Tank Inside Building F Can I Fiber Drum L Cylinder O Tote Bin R Other

EL. 175 FT
MAX: 95,000 lbs
CLASS A

500 FT
To Magazine

Gate Locked to Main
Explosive magazine

EMERGENCY EVACUATION
STAGING AREA

Pacific Ocean

PARKING

OFFICE

OXY
ACET

MAIN
SHOP

PARTS
STORAGE

BATTERY
STORAGE

OUTFALL
NO. 1

Tire Life
Anti Freeze
Thinner

Good Oil

No. 2
SHOP

FLOW

Waste Oil
& Used Filters

Office
& Parts

MATERIAL
TEST PLANT

OUTFALL
NO. 1

SEDIMENT
NO. 1

CONVEYORS
MISC. > Metal
Storage Area

SEPERATOR
PLANT No.1

FLOW

4,000-gal
Fuel Transfer
Tank

14,500-gal
Diesel Fuel
Storage

S-50
DERRICK

EMPTY
BUILDING

OUTFALL
NO. 2
SEDIMENT
NO. 2

S-60
DERRICK

FLOW

SEPERATOR
PLANT No.2

OUTFALL
NO. 3
SEDIMENT
NO. 3

FLOW

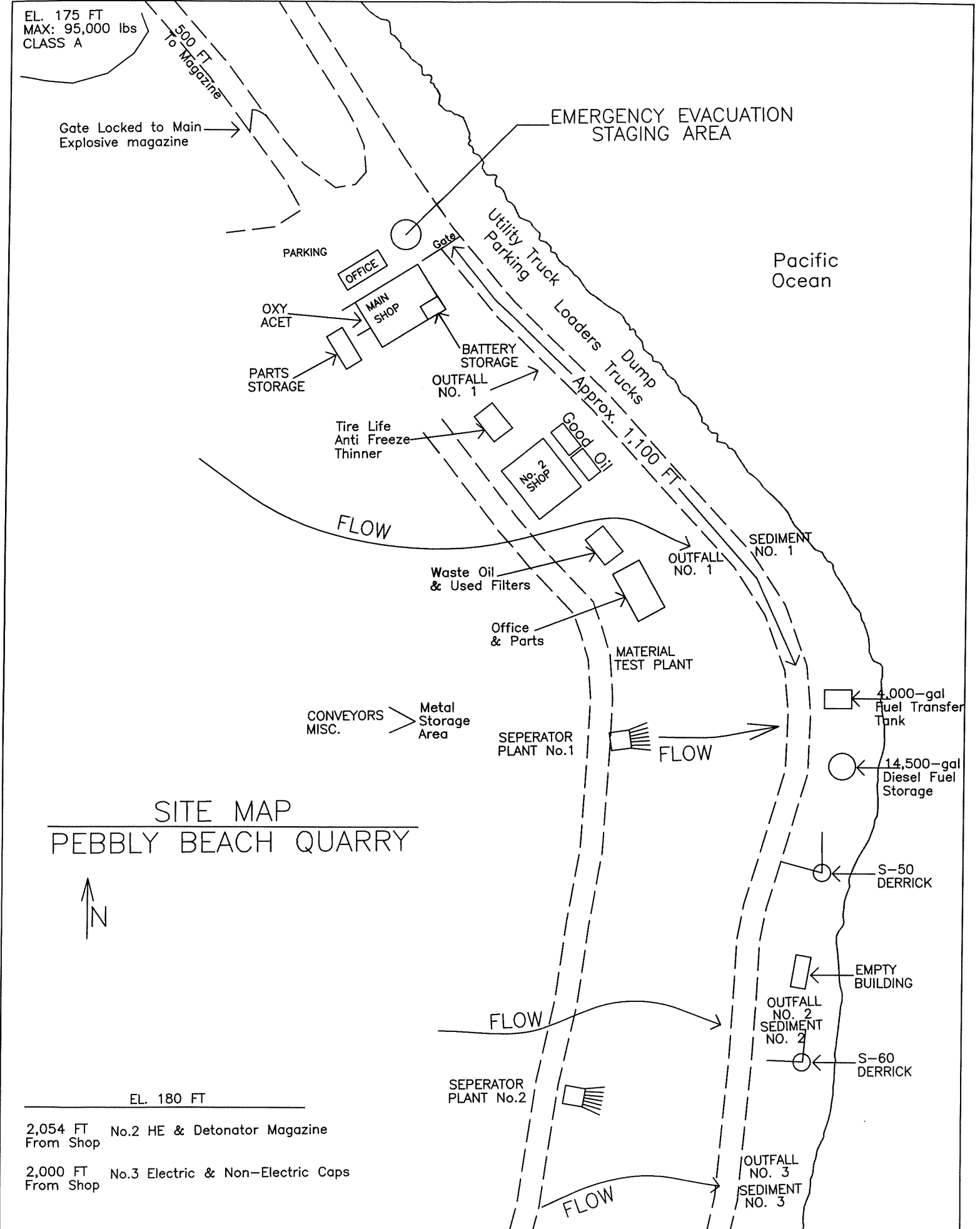
SITE MAP PEBBLY BEACH QUARRY



EL. 180 FT

2,054 FT No.2 HE & Detonator Magazine
From Shop

2,000 FT No.3 Electric & Non-Electric Caps
From Shop



- LEGEND
- Best Management Practices
- SC-20 – Vehicle & Equipment Fueling
 - SC-22 – Vehicle & Equipment Parking
 - SC-32 – Outdoor Equipment Operations
 - SC-33 – Outdoor Storage of Raw Materials
 - SC-34 – Waste Handling & Disposal
 - SC-43 – Parking/Storage Area Maintenance
 - SE-2 – Sediment Basin
 - SC-11 – Spill Prevention, Control, and Clean up
 - SC-10 – Non-Storm Water Discharge
 - WE-1 – Wind Erosion Control
- Mooring Buoys
- Mooring Buoys (distance not to scale)
 - Mooring Buoys (distance not to scale)
 - Mooring Buoys (distance not to scale)
 - Mooring Buoys (distance not to scale)
 - Mooring Buoys (distance not to scale)
 - Mooring Buoys (distance not to scale)

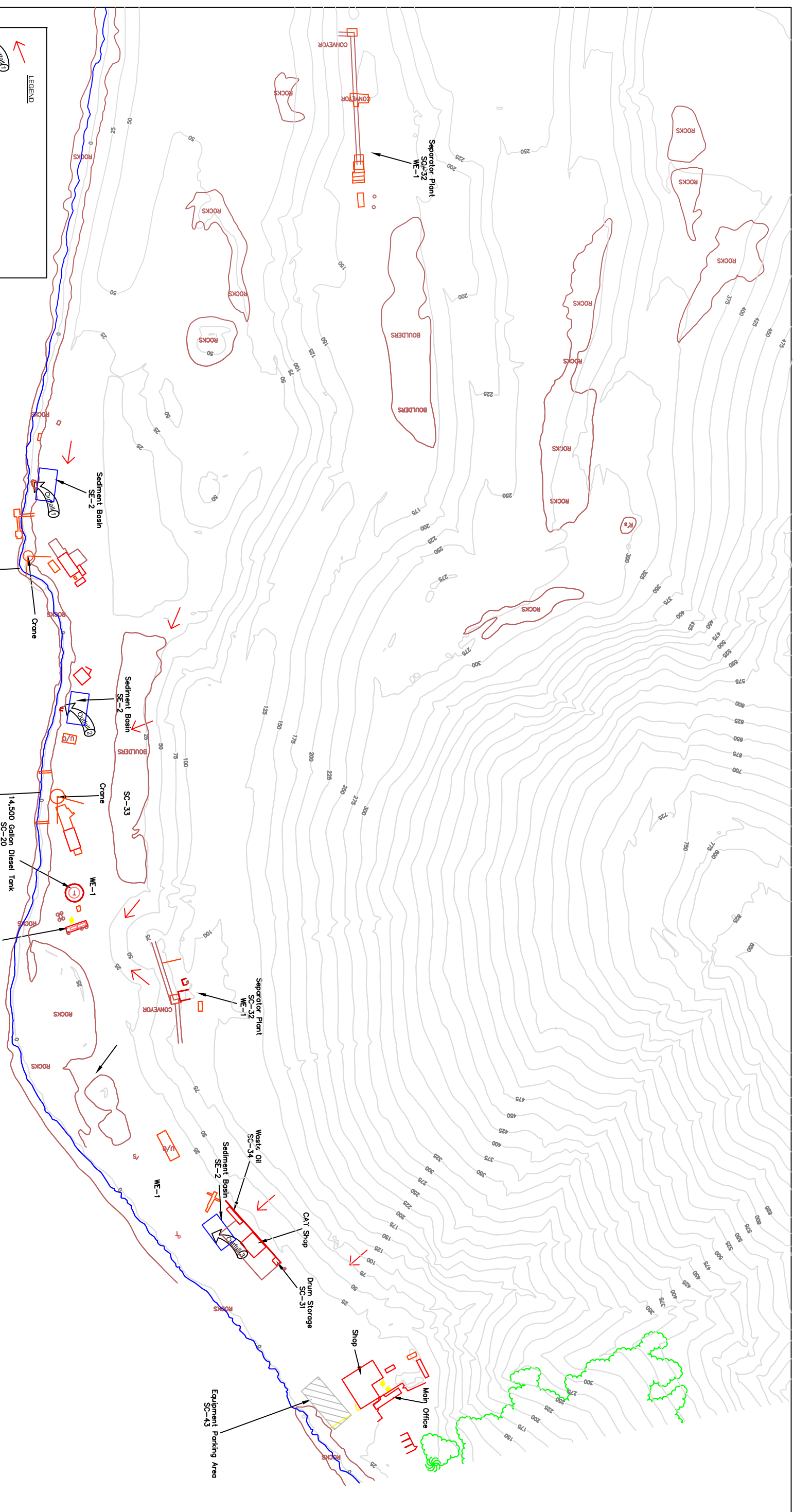
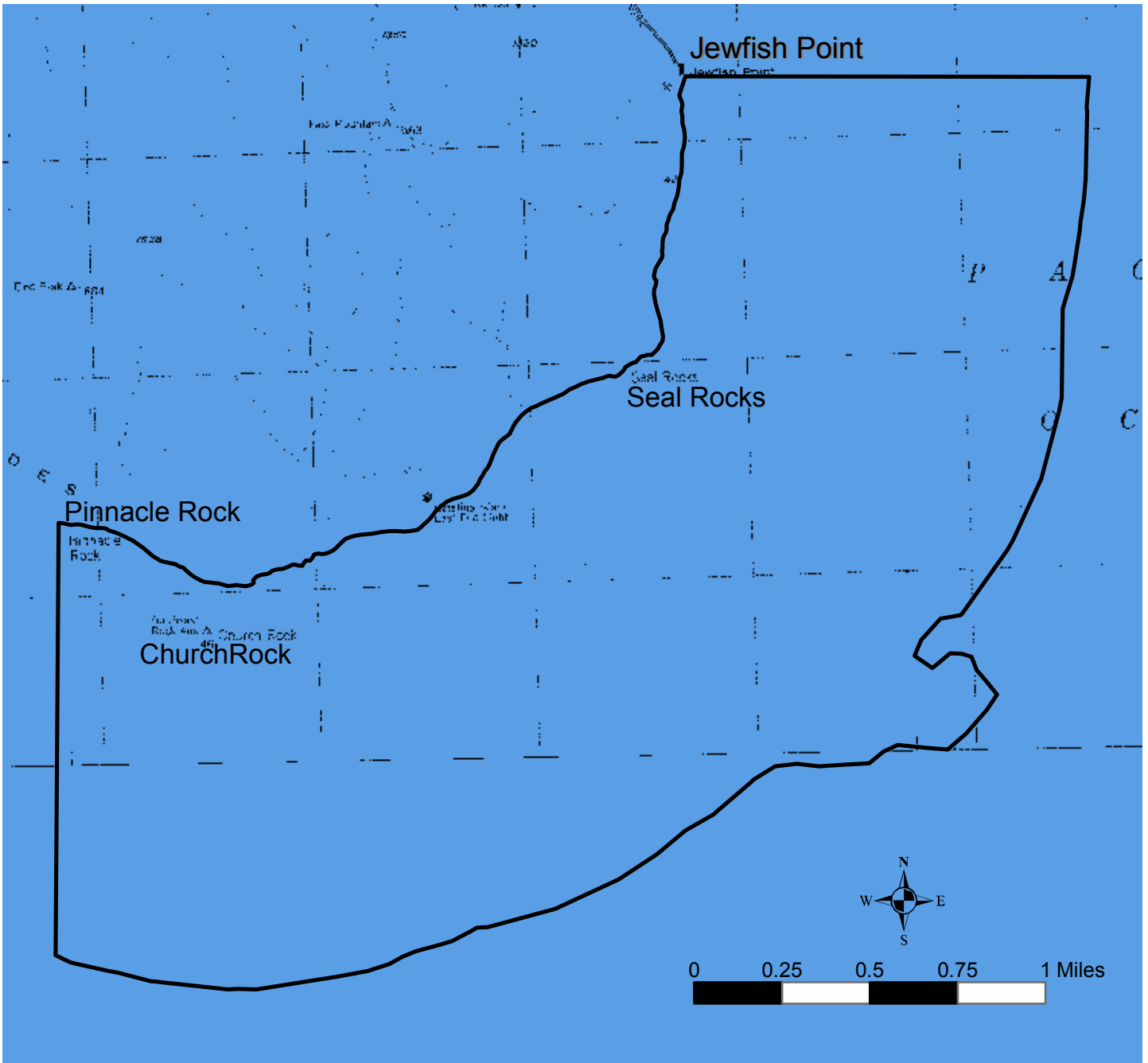


FIGURE 2: SITE LAYOUT

SITE:		Controlly Pacific Company	
PROJECT NUMBER:		ONLP-12-1267	
ASBS	28		
DATE:	09/19/12	SCALE:	1" = 200'
DRAWN:	RS	APPROV:	KH
3777 Long Beach Blvd Annex Building Long Beach, CA 90807 www.altair.com		ALTA ENVIRONMENTAL	



— Approximate Outline of ASBS 28

FIGURE 1: SITE LOCATION MAP

SITE: Area of Special Biological Significance 28

DRAWN: RS

APPROV.: KH

SCALE: See Map

DATE: 09/12



CLIENT: Connolly Pacific Company

3777 Long Beach Blvd., Annex
 Long Beach, CA 90807
 Phone: (562) 495-5777

SOURCE: USGS Santa Catalina, East, CA



Connolly-Pacific Co.
A subsidiary of Knife River Corporation

AGENCY:

United States Environmental Protection Agency

**Spill Prevention Control and
Countermeasure Plan**

Prepared for:

Pebbly Beach Facility
Pebbly Beach Road
Avalon, CA 90704
June 18, 2008

The SPCC plan is not required to be filed with U.S. EPA, but a copy must be available for on-site review by the Regional Administrator during normal working hours. The SPCC plan must be submitted to the U.S. EPA Region IX Regional Administrator and the state agency along with the other information specified in §112.4 within 60 days if either of the following occurs:

1. The facility discharges more than 1,000 U.S. gallons of oil in a single discharge as described in §112.1(b)
2. The facility discharges more than 42 US gallons of oil as described in §112.1(b) in each of two discharges, within any twelve-month period.

PROFESSIONAL ENGINEER CERTIFICATION [§112.7 (3)(d)]

I hereby certify that having examined the facility and being familiar with the provisions of 40 CFR Part 112, attest that the Spill Prevention Control and Countermeasure Plan has been prepared in accordance with good engineering practices.



Date: 6/18/08

Antoine Chemali, P.E.

Registration Number: C67699

Expiration Date: 6/30/09

(Engineer place stamp in area below)



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[\\$112.8(D)] 20

ATTACHMENTS

- “A” - Certification of Substantial Harm Determination Form
- “B” - Dike / Containment Drainage Record
- “C” - Facility Inspection Record
- “D” - Spill Prevention Briefing Record
- “E” - Training Record
- “F” - Spill Information Record
- “G” - Agency Notification Report
- “H” - Available Emergency Equipment
- “I” - Facility Spill History
- “J” - Reference Information

TRAINING MATERIALS

REGULATIONS

CONTAINMENT INFORMATION

Calculation Figures for Tank Area 2 / Tanker Truck Unloading Area

Containment Information Table

Figure 2

SPCC PLAN REVIEW [§112.5(b)]

The responsible official at this facility has completed a review and evaluation of the SPCC Plan at least once every five years. This facility has not changed the facility design, construction, operation or maintenance, which materially affects the facility's potential for the discharge of oil into or upon navigable waters or adjoining shorelines. Evidence of these reviews is recorded below. (Note: If facility has been modified in design, construction or maintenance which materially affects (i.e., increases or decrease) the facility's potential to discharge oil into or upon navigable waters, then this plan must be revised and recertified by a licensed engineer.)

Signature

Date

MANAGEMENT CERTIFICATION [§112.7]

This SPCC plan is fully approved by the management of this company.

I declare under penalty of law that I have reviewed this Spill Prevention Control and Countermeasure Plan and understand my responsibilities, and that the information in this and all attached documents is true and correct to the best of my knowledge.

Steven Schryver, General Manager/Vice President

Date: June 18, 2008

INTRODUCTION [§112.7(a)(1-2)]

The objective of this plan is to describe the procedures, which are followed by the Connolly-Pacific Co. (CPC) to prevent, control, and/or mitigate releases of oil and related petroleum substances to the environment at the Pebbly Beach Quarry located on Catalina Island, California.

CPC manages and operates the Pebbly Beach Quarry. Pebbly Beach is a rock quarry that meets regulatory criteria for an on-shore, non-transportation related facility engaged in storing and consuming oil and oil products. The SPCC Plan is required as Pebbly Beach has the potential to store greater than 1,320 gallons of oil and oil products above ground. Most of the site inventory is contained in aboveground storage tanks and operating equipment, though as idle or spare items must be counted in the 1,320 gallons, and as the site inventory can vary; Pebbly Beach continues to maintain this Plan. There are no polychlorinated biphenyl (PCB) - containing oils and no buried or partially buried petroleum product tanks at Pebbly Beach. This Plan is specific to petroleum products; if a hazardous material or hazardous waste is mixed with the oil, then all applicable Local, State, and Federal disposal laws must be followed.

This Spill Prevention Control and Countermeasure Plan (SPCC Plan) was prepared to comply with the requirements of Part 112, Oil Pollution Prevention of the Code of Federal Regulations Title 40 (40 CFR).

A complete controlled copy of this Plan is maintained at Pebbly Beach Quarry and is available in the main office, for review or use during normal working hours. A controlled copy will also be available at the Connolly-Pacific Co. main office, Long Beach, California during normal working hours for reference.

The SPCC Plan is amended whenever a change in design, construction, operation, or maintenance affects the facility's spill potential. It is also amended whenever applicable regulations are revised, or the plan is found ineffective. In accordance with 40 CFR 112.5, no amendment to the SPCC Plan shall be effective unless it has been certified by a Registered Professional Engineer (PE) familiar with the provisions of 40 CFR 112. At a minimum, the SPCC Plan is reviewed and evaluated by CPC once every 5 years. CPC will amend the Plan in accordance with 40 CFR 112.7.

In an effort to present a more comprehensive Plan, a description of the property that comprise Pebbly Beach, privately owned by CPC. It should be noted that any oil or petroleum product spillage occurring on Pebbly Beach property owned by CPC will be cleaned up promptly by a responsible subcontractor.

FACILITY DESCRIPTION [§112.7(a)(3)]

This facility is a quarry located on Santa Catalina Island. Material is mined from hillside mining areas using the shot method. Shot holes are drilled into the hillside and loaded with explosives, after detonation the released material is loaded into front end loaders and taken to the separator plant. The separator plant consists of belt conveyors, screens and other sorting

equipment. The separated product is then stockpiled using front end loaders and subsequently loaded onto barges for offsite delivery.

The site also has parking areas for trucks and equipment, a maintenance shop, aggregate stockpiles, petroleum storage tanks, and a parts warehouse.

Surface drainage is directed to the central processing area where low intensity rainfall percolates into the soil. Storm water from medium intensity rain event will collect in the central location and sheet flow to onsite sediment basins. Each outfall is equipped with a sedimentation basin which serves to reduce velocity of sheet flow and allow settling of particulates. Water from medium intensity rain events is detained in the basin and no discharge of storm water will occur. The basins will reduce velocity and particulate content from the first flush of rain from high intensity rain events that may result in storm water discharge.

FACILITY INFORMATION [§112.7(a)(3)(i)]	
Facility Name: Site Address:	Connolly-Pacific Company Pebbly Beach Road, P.O. Box 276 Avalon, CA 90704
Facility Responsible Official: Title: Working Hours Phone Number: After Working Hours Phone Number:	Paul Romo Superintendent (310) 510-0626 (310) 510-7095
Facility SPCC Coordinator: Title: Working Hours Phone Number: After Working Hours Phone Number:	Robert Machado Assistant Superintendent (310) 510-0626 (310) 510-9562
Owner:	Connolly-Pacific Company
Address:	1925 Pier D Street, Long Beach, CA 90802
Phone:	(562) 437-2831
SIC Code:	1429 Rock Quarry
Date Operation Started:	1932
Fixed Storage:	1-63,000 Gallon Vertical AST (Diesel) 1-500 Gallon Horizontal AST (Waste Oil) 1-4,000 Gallon Horizontal Transfer AST (Diesel)
Portable Storage:	8-500 Gallon Horizontal AST (Oil) 20-55 Gallon Drums (Oil & Used Oil Filter)

Connolly-Pacific Co.

Portable Equipment Storage Capacities (Caterpillar Front-end loaders and Haul trucks)	16-32 Gallon Hydraulic tanks 16-60 Gallon Diesel Tanks
Maximum Storage Capacity:	74,072 (Include Drums)

Facility Map

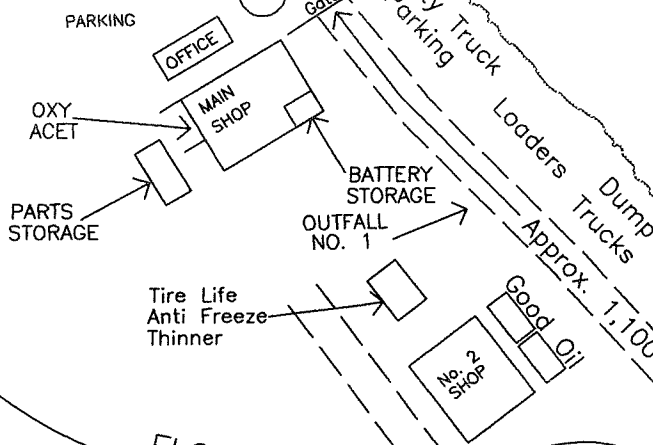
EL. 175 FT
MAX: 95,000 lbs
CLASS A

500 FT
To Magazine

Gate Locked to Main
Explosive magazine

EMERGENCY EVACUATION
STAGING AREA

Pacific
Ocean



FLOW

Waste Oil
& Used Filters

OUTFALL
NO. 1

SEDIMENT
NO. 1

Office
& Parts

MATERIAL
TEST PLANT

CONVEYORS
MISC. } Metal
Storage
Area

SEPERATOR
PLANT No.1

FLOW

4,000-gal
Fuel Transfer
Tank

14,500-gal
Diesel Fuel
Storage

S-50
DERRICK

EMPTY
BUILDING

OUTFALL
NO. 2
SEDIMENT
NO. 2

S-60
DERRICK

FLOW

SEPERATOR
PLANT No.2

FLOW

OUTFALL
NO. 3
SEDIMENT
NO. 3

SITE MAP PEBBLY BEACH QUARRY



EL. 180 FT

2,054 FT No.2 HE & Detonator Magazine
From Shop

2,000 FT No.3 Electric & Non-Electric Caps
From Shop

FACILITY TRANSFER OPERATIONS, AND IN-PLANT PROCESS [§112.7(a)(3)(ii)]

Operator Training

All personal responsible for fueling equipment shall be thoroughly trained in the operation of the fuel storage and dispensing system. The operational training will also include Emergency Response training for fire and/or spills.

Bulk Storage Tank Loading Plan

The loading of diesel fuel will be under the direction of General Petroleum, the fuel supplier, and will be in accordance with all applicable Local, State, and Federal Laws and Regulations.

Connolly-Pacific will have a dedicated tank operator who will assist General Petroleum with the connection of the fueling hose and the opening of the tank fill valves

The attendant will have no other responsibilities except emergency assistance during the tank filling operation, which will last approximately one and one half hours.

Upon completion of filling the 63,000-gallon tank, the truck operator will close the fuel tank valve and clear the fuel hose. Then close the fuel hose valve to the truck prior to disconnecting the hose, thereby preventing any excess dripping of product into the containment pad.

To prevent any possibility of overfilling the tank, the system will be equipped with a float valve, which will shut off flow automatically at the maximum fill height of the tank. In addition, a level indicator will be visible by the fill operators.

Equipment Fueling Tank

Connolly Pacific will use a single 4,000-gallon double wall storage tank to fuel all the quarry equipment. Connolly Pacific will fill the tank equipped with an offloading pump every few days by the bulk storage tank. The tank will be stationary at the dedicated loading area and all equipment loading will take place at the loading area thereby reducing risk of spills and fire hazard at remote areas of the quarry.

Fueling of the storage tank will not be done simultaneously with the fueling of equipment.

Equipment Fueling Tank Loading Plan

A fueling operator will be present at all times during fueling operations. The operator will connect the hose to the tank, open the valve from the bulk tank, set the desired quantity of fuel to be dispensed on the automatic pre-set meter, and start the pump each time the tank is filled. Upon completion, the operator will reverse the procedure each time the tank is filled.

Any spillage on the concrete containment pad will be cleaned up immediately prior to fueling of equipment.

Equipment Fueling Area

The fueling area will be located away from the bulk storage tank, overhead lifting equipment, and vegetated areas. A concrete containment pad will be constructed to prevent ground contamination, and protective barriers will be installed to prevent equipment from getting too close to the tank.

Pipelines not in service or on standby for an extended period are capped or blank flanged and marked as to their origin.

There is no aboveground piping at the facility. Refer to Attachment "C" for the Facility Inspection form to record pipe inspections.

There is no aboveground piping that would be endangered by normal vehicular traffic.

DISCHARGE AND DRAINAGE CONTROLS [§112.7(a)(3)(iii)]

Secondary containment or dikes are provided around tanks, drums, and equipment, which store oil products.

EMERGENCY RESPONSE PROCEDURES [§112.7(a)(3)(iv-vi)]

Control of Potential Spills

In the event of an oil spill, facility personnel are trained to immediately inform the superintendent or his designee of the spill. Employees will attempt to control the spill with the emergency equipment available at the facility and any other necessary means of control. The superintendent or his designee will assess the situation and call emergency response agencies by dialing 9-1-1 if the spill cannot be immediately controlled by facility personnel.

The Superintendent will notify the necessary agencies when a spill reaches navigable water or a spill result in a release exceeding the limits allowed by law². Refer to Attachments "F" & "G" to record and report spill information.

Facility personnel trained in recovery methods are available to recover spilled oil material. The recovered materials are shipped to the main facility (Long Beach, CA) and disposed of in accordance to applicable federal, state, and local regulations.

The agencies will be contacted when the conditions of the event allows, and within 48-hours of the first report of the emergency event.

**EMERGENCY DISCHARGE REPORTING INFORMATION AND PROCEDURES
[112.7(a)(4)]**

The following steps are to be taken immediately in the event of an oil spill. Subsequent emergency procedures can be found in Spill Controls and Countermeasures in this plan.

If you are not trained:

1. Evacuate and warn others as necessary of the release size and location.
2. **If there are injuries or immediate off-site expertise is needed, call 911**
3. Contact Connolly-Pacific Pebbly Beach main office at 310-510-0626, and provide the following information:
 - Location of spill
 - Approximate quantity and identity of product
 - Other hazards, emergency conditions
4. Notify responsible official and on-duty crew chief, radio channel 78
5. Meet the responders at a safe distance from the release and direct them to it

If you are trained:

1. Evacuate and warn others as necessary of the release size and location.
2. **If there are injuries or immediate off-site expertise is needed, call 911**
3. Contact Connolly-Pacific Pebbly Beach main office at 310-510-0626, and provide the following information:
 - Location of spill
 - Approximate quantity and identity of product
 - Other hazards, emergency conditions
4. Take the following action **only if they can be completed safely.**
 - a. Shut down equipment
 - b. Close valves to isolate a leak in a line
 - c. Upright leaking drums or containers
 - d. Plug a leak utilizing a peg, duct tape, etc.
 - e. Block floor drains, storm drains, or storm water drainage channels
 - f. Construct a dike to contain the material utilizing sorbents, booms, or soils
 - g. Apply sorbent to contain petroleum product
5. Meet the responders at a safe distance from the release and direct them to it

SPILL CONTROLS AND COUNTERMEASURES [§112.7(a)(5)]

Spill controls and countermeasures are safety measures to ensure prompt response to spills and mitigation of the consequences. In the event of a spill, the general procedure includes: notification of the Quarry office, Responsible Official, and Safety Director; spill containment and isolation; and clean-up and disposal of small spills by the on-site staff, and for large releases, a licensed disposal contractor. In addition, appropriate regulatory agencies will be notified, if required.

Responsible Officials have overall responsibility to address any oil spill from their processes or equipment.

Spill response actions by Responsible Official generally consist of notifying appropriate personnel, including the Quarry Office and the Safety Director as necessary, and securing the area while the response team continues to control and contain the spill. Absorbent pillows, blankets, and other materials are stored near all tanks and equipment. A summary of spill control material and equipment inventories is provided in Attachment H. Small contained spills (less than 5 gallons) resulting from transfer operations are cleaned up by the staff involved, using oil dry at the time of the spill. The used absorbent materials are placed into drums and are placed in the used oil storage area to await disposal.

The Responsible Official shall implement oil spill controls and countermeasures including the assignment of personnel to stop additional spillage. The Responsible Official will direct response actions for spills that reach the ground or surface water. Spill control and clean-up take priority over routine activities or operations. Specific procedures to be implemented upon detection of an oil or petroleum substance spill are summarized below. The Responsible Official and Safety and Compliance Director conduct a review of the spill event and provide lessons learned to the quarry staff. This review would then become part of the Spill Report, which is prepared by the superintendent. The SPCC Coordinator is responsible to oversee the implementation of lessons learned into the site program.

Responsible Official, with assistance from response team staff, will perform a Notable Event if the spill is ≥ 5 -gallons and/or if it meets any regulatory reporting criteria's.

Spillage in Diked or Curbed Areas

Spills in diked or curbed areas are considered controlled unless the diking or curbing is inadequate to contain an ongoing spill. If the diking or curbing are insufficient, the procedures in undiked or uncurbed areas are applicable. The on-site personnel should follow the process as identified here.

If the spill is controlled:

1. The individual discovering the spill must notify Responsible Official (radio channel 78), who in turn will activate the response by notifying the response team. The following information is reported:
 - Location of spill
 - Approximate quantity and identity of product

- Other hazards or emergency conditions
2. The Responsible Official or authorized delegate should assess the size and nature of the spill and the hazards, and attempt to halt any further spillage by use of available control measures without subjecting responders to safety hazards. The Safety and Compliance Director should be consulted as necessary during normal working hours.
 3. The oil should be pumped out of any containment into drums under direction of the Responsible Official and/or authorized delegate.
 4. Absorbent material should be used to remove residual oil. Oil and oil-containing wastes should then be transferred to the used oil storage area for disposal.
 5. The event should be reported and analyzed as detailed in this Section. The spill would also be recorded in Attachment I (facility spill history).

Spillage in Undiked or Uncurbed Areas

Equipment fueling operations, vendor transfer operations, and certain machinery components, create a potential for releases in undiked or uncurbed areas. Machinery releases could be significant but would likely be confined within a building. The Equipment refueling operations without oil containment pits and vendor transfer operations could release hundreds of gallons. The on-site personnel should follow the response process identified here.

In the event of a spill, the following procedures should be followed:

1. The individual discovering the spill should notify Responsible Official and/or delegate on (radio channel 78) to activate site personnel. This would notify Quarry Management and the response team who in turn should contact any other necessary on-site responders. The following information should be reported:
 - Location of spill
 - Approximate quantity and identity of product
 - Other hazards or emergency conditions
2. The Responsible Official, or upon request, the Safety and Compliance Director, would assess the size and nature of the spill and the hazards, and attempt to halt any further spillage by use of available control measures without subjecting responders to safety hazards. The Safety and Compliance Director may be consulted as necessary during normal working hours.
3. The spread of the spill would be controlled by constructing make-shift dikes of dirt and/or absorbent pads or booms.
4. If material contained in the make-shift dike is of sufficient quantity, the Responsible Official would have it pumped out and transferred into drums. Alternatively, absorbent material could be utilized. Oil and oil-containing wastes would then be transferred to the used oil storage area for disposal.
5. The event should be reported and analyzed as detailed in this Section. The spill should also be recorded in Attachment I (Facility Spill History).

Spillage onto the Surface

Generally, the normal flow of a spill from a petroleum storage vessel, machinery, equipment, secondary containment, or transport vehicle would be toward the nearest natural drainage. In the event of a catastrophic spill, the oil or petroleum would flow or migrate toward the facility boundary. In this event, Oil booms, socks, and other available control measures, pre-positioned near the equipment or transfer operation, would be deployed promptly in the immediate vicinity of the spill. The blocked or boomed product should then be quickly skimmed and pumped into drums and transported to a permitted treatment or disposal facility.

Specific steps are outlined below:

1. The individual discovering the spill should notify the Responsible Official on (radio channel 78) to activate site personnel. This would notify Quarry Management and the response team staff who in turn should contact any other necessary on-site responders. The following information should be reported:
 - • Location of spill
 - • Approximate quantity and identity of product
 - • Other hazards or emergency conditions
2. The Responsible Official and the response team should assess the size and nature of the spill and attempt to halt any further spillage by use of available control measures without subjecting responders to safety hazards. The Safety and Compliance Director should be consulted as necessary during normal working hours.
3. Absorbent materials should be spread in the area of the spill by qualified, trained quarry personnel or a subcontractor, to remove accumulations on the ground, if feasible.
4. The Responsible Official should coordinate any booming and skimming from storm water channels or pathways. Recovered oil should be pumped into tank trucks by a subcontractor and transported for treatment/disposal. The Quarry Management oversees the operation.
5. The event should be reported and analyzed as detailed in this section. The spill should also be recorded in Attachment I (Facility Spill History).

Spill Report and Event Analysis

The Responsible Official should record the event on the Spill Information Record as included in Attachment F of this SPCC Plan.

A Notable Event should be completed following any discharge of oil greater than five gallons, or any oil discharge to a storm water channel, swale, or sewer (storm or sanitary). The Responsible Official, with assistance from the response team will conduct this formal review and analysis of the incident. The process will include at a minimum:

- Interviews with the person or persons involved in the incident, any witnesses, and the person in charge of the process/equipment involved to understand the event, its cause, and how the response was handled.

- Discussion with others involved with similar processes/equipment to identify possible changes to prevent a similar incident and to relay lessons learned from the event.
- Preparation of a written brief to the Safety and Compliance Director detailing the cause and response, and any recommended changes to prevent similar occurrences.
- After consultation with the SPCC Coordinator and the Safety and Compliance Director, a safety briefing should be held for all involved and a memorandum to concerned staff could be issued.

Copies of the Spill Report, including the Notable Event if applicable, should be provided by the Responsible Official to the Safety and Compliance Director, the General Manager, and the SPCC Coordinator.

Some discharges, as identified in the regulations and this SPCC Plan, contain additional reporting requirements. This information can be found in this SPCC Plan.

POTENTIAL EQUIPMENT FAILURES [§112.7(b)]

Potential equipment failures are outlined in following **Table**. Refer to Figure 2 for containment area locations.

Potential Event	Spill Direction	Volume Released	Spill Rate	Containment Type/Capacity
Complete Tank Failure (Diesel) Tank Area #1	South/East	1 to 63,000 Gallons Approximately	Gradual Instantaneous	Steel Containment Structure/Volume of tank plus sufficient free board.
Complete Tank Failure (Diesel) Tank Area #2	South/East	1 to 4,000 Gallons Approximately	Gradual Instantaneous	Steel Double walled Containment Structure/ Volume of tank plus sufficient free board.
Storage Tank Rupture (Oil) Tank Area #3	East	1 to 500 Gallons (Approx. 8-500 Gallon Portable Tanks)	Gradual Instantaneous	Each Tank is housed within its own steel containment structure/ volume of tank plus sufficient free board.
Storage Tank/Drum Rupture (Waste Oil or Oil & Used Oil Filters) Tank Area #4	East	1 to 500 Gallons (Storage Tank) 1 to 55 Gallons (Approx. 8-55 Gallon Drums Stored)	Gradual Instantaneous	Concrete Containment Structure/ Volume of the largest tank/drum plus sufficient free board.
Drum Rupture (Oil) Drum Area #1	East	1 to 55 Gallons (Approx. 12-55 Gallon Drums Stored)	Gradual Instantaneous	Concrete Containment Structure/ Volume of the largest tank/drum plus sufficient free board.
Caterpillar 796-C Complete Tank Rupture (diesel and/or Oil)	South/East	1 to 198 gallons (Hydraulic 58 gallons, Diesel 140 gallons stored)	Gradual Instantaneous	Each Tank is housed within its own steel containment structure/ volume of tank plus sufficient free board.
Caterpillar 773-B Complete Tank Rupture (Diesel /Oil)	South/East	1 to 243 gallons (Hydraulic 58 gallons, Diesel 185 gallons stored)	Gradual Instantaneous	Each Tank is housed within its own steel containment structure/ volume of tank plus sufficient free board.

POTENTIAL EQUIPMENT FAILURES [§112.7(b)] (continued)

Potential equipment failures are outlined in following **Table**. Refer to Figure 2 for containment area locations.

Potential Event	Spill Direction	Volume Released	Spill Rate	Containment Type/Capacity
Caterpillar 773-E Complete Tank Rupture (diesel and/or Oil)	South/East	1 to 235 gallons (Hydraulic 55 gallons, Diesel 180 gallons stored)	Gradual Instantaneous	Each Tank is housed within its own steel containment structure/ volume of tank plus sufficient free board.
Caterpillar 988-B/F Complete Tank Rupture (Diesel /Oil)	South/East	1 to 241 gallons (Hydraulic 77 gallons, Diesel 163 gallons stored)	Gradual Instantaneous	Each Tank is housed within its own steel containment structure/ volume of tank plus sufficient free board.
Caterpillar 992-D Complete Tank Rupture (diesel and/or Oil)	South/East	1 to 554 gallons (Hydraulic 259 gallons, Diesel 295 gallons stored)	Gradual Instantaneous	Each Tank is housed within its own steel containment structure/ volume of tank plus sufficient free board.

Note: Fuel tank drain valves are capped and padlocked. Drainage valves for containment structures are locked closed and manually operated. Minor drips or leaks are controlled by absorbents or other clean-up materials.

CONTAINMENT AND DIVERSIONARY STRUCTURES [§112.7(c)(1)]

The containment areas are constructed to be sufficiently impervious to contain spilled oil. Refer to Figure 2 for containment area locations.

The unloading area for tanker trucks are curbed or sloped to provide secondary containment.

Sorbent materials are provided in strategic locations throughout the facility.

DEMONSTRATION OF PRACTICABILITY [§112.7(d)]

Facility management has determined that use of the containment and diversionary structures or readily available equipment to prevent discharge oil from reaching navigable water is practical and effective at this facility.

INSPECTIONS AND RECORDS [§112.7(e)]

Inspections of the tanks are conducted on a regular basis and visually monitored routinely. The inspections consist of checking for damage or leakage stains or discolored soils, excessive accumulation of water in diked areas and ensure that dike drain valves are securely closed. Inspections that indicate a leak, potential oil spill event or potential failure will require an inspection be performed and filed. The form will identify the location of the inspected area, inspector's name, date, procedures to mitigate or abate the problem, and any comments. Refer to Attachment "C" for the Facility Inspection Record. Records and inspection forms are filed and maintained onsite for a period of three years.

PERSONNEL, TRAINING, AND SPILL PREVENTION PROCEDURES [§112.7(f)]

Facility personnel have been instructed by management in the operation and maintenance of oil pollution prevention equipment and applicable pollution control laws and regulations.

The Superintendent, Paul Romo is accountable for oil spill prevention at the Connolly-Pacific Pebbly Beach facility.

Spill prevention briefings are provided by management for operating personnel to ensure adequate understanding of this SPCC plan. New employees receive instruction in the contents of this SPCC during their orientation. Personnel are properly instructed in the operation and maintenance of equipment in order to minimize the likelihood of an oil discharge.

These briefings highlight and describe any possible spill events or failures, recently developed precautionary measures, and updates with current information as it pertains to this SPCC plan. Refer to Attachment "D" for the Spill Prevention Briefing and Attachment "E" for the

SECURITY [§112.7(g)]

The facility is properly secured by fencing to restrict unauthorized access. The entrance gates are securely locked during non-operating hours.

Valves or drains that permit the direct outward flow of the tank's contents to the surface are secured in a closed position when in non-operating or non-standby status.

The starter control on the fuel pump or fuel dispenser are in the locked 'off' position and are located in a secure area, which is locked when pumps are not in use. This area is accessible only by authorized personnel.

The loading and unloading connections of oil pipelines are capped when not in service or on standby for an extended time.

Lights are located in such a position so as to illuminate the (office and storage areas.) Consideration was given to discovery of spills at night and preventing spills occurring through vandalism.

LOADING AND UNLOADING OF TANKER TRUCKS AND TANKS [§112.7(h)]

The operator uses only certified haulers registered with the Department of Transportation (DOT). Truck loading and unloading procedures meet the minimum requirements and regulations by the DOT.

Curbing and/or berming containment has been installed at the transfer tank unloading area and is designed to contain the single largest compartment volume with any truck used at the facility.

Chock blocks are provided at the loading/unloading area to prevent and/or aid in preventing vehicle departure as well.

The lowest most drain, outlet and connections are inspected for leakage prior to filling and departure.

FIELD-CONSTRUCTION ABOVEGROUND CONTAINERS [112.7(I)]

There are no field-construction aboveground containers at this facility

CONFORMANCE WITH APPLICABLE REQUIRMENTS AND STATE REGULATIONS [§112.7(j)]

This Plan is prepared in accordance with 40 CFR, Part 112, *Oil Pollution Prevention*. Part 112 establishes the requirements for procedures, methods, and equipment to assist in preventing an accidental discharge of oil or any material containing oil from entering into or upon the navigable waters of the United States or adjoining shorelines, or waters of the contiguous zone, or in connection with activities under the Outer Continental Shelf Lands Act

or Deepwater Port Act or affecting certain natural resources. These procedures, methods, and equipment are referred to as the SPCC Plan. Part 112 applies to those owners or operators of non-transportation-related onshore and offshore facilities engaged in drilling, producing, gathering, storing, processing, refining, transferring, distributing, using, or consuming oil or oil products. The applicable facility must also be in a location such that if an oil spill event occurred, the oil spill would be expected to reach navigable waters and the amount of oil discharged would be in harmful quantities as defined in 40 CFR, Part 110¹. This SPCC Plan has been revised and developed in accordance with the guidelines set forth in 40 CFR, §112.7 and is based upon site visit in November 13, 2002 and interview with facility personnel in November 2002.

The references used for SPCC Plan preparations are listed in Attachment J and include the "Spill Prevention, Control, and Countermeasure Information Guide," published by Region III Office of the Environmental Protection Agency and the "Suggested Procedures for development of Spill Prevention, Control, and Countermeasure Plans," published by the American Petroleum Institute.

¹ A harmful quantity is defined as a quantity that has been determined to potentially harmful to the public health or welfare of the United States, except as provided in § 110.7. The discharges include those that: (a) violate applicable water quality standards, or (b) cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines (40 CFR, § 110.3).

FACILITY DRAINAGE [§112.8(b)]

Drainage from secondary containment or diked areas are restrained by valves or other positive means to prevent a spill or excessive leakage of oil into a drainage system not designed to handle spills. Valves used to drain the containment areas are normally locked closed and manually operated. Before discharging occurs the storm water accumulation that may be present is examined to ensure no oil is discharged into navigable water.

Flapper-type drain valves are not employed for the drainage of the containment area.

Facility drainage from undiked areas are graded or diked in a manner to prevent discharges from reaching navigable waters.

Facility drainage systems are adequately engineered to prevent oil from reaching navigable water in the event of equipment failure or human error.

Nearest Navigable Water

The nearest navigable water to the site is Pacific Ocean, approximately 200 feet from the facility. The direction of flow from equipment that could produce a release of oil is diverted to a containment area. If an oil spill event occurs, the containment area is drained of the oil in accordance to company procedures outlined in this SPCC Plan and all federal, state, and local requirements.

BULK STORAGE [112.8(c)]

The materials and construction of all storage tanks and containers are compatible with the oil products they contain and conditions of storage.

Secondary containment for all aboveground storage tanks is provided to contain the entire contents of the largest tank plus sufficient freeboard to offset the accumulation of any potential precipitation into the containment area.

When the containment area requires draining due to accumulation of storm water or an oil spill event, the accumulated material is examined by the Superintendent or his designee to observe for any indication of oil contamination (e.g. oil sheen). If no evidence of oil is present the drain valve is manually opened to release the storm water accumulation. If there is evidence of oil, a pump contractor will be called to drain the containment area. The waste is then shipped to Long Beach, CA and disposed of in accordance with federal, state and local regulations. Adequate records of such events must be kept whenever the secondary containment area is drained. Refer to Attachment "B" for the Dike/Containment Drainage form to record drainage of the secondary containment areas.

There are no underground or partially buried storage tanks at this facility.

ASTs and other equipment (e.g., foundations and supports) are visually inspected on a regular basis for indications of deterioration, leaking equipment, or accumulation of oil inside the containment area.

If an inspection reveals a visible oil leak from a tank seam, gasket or bolt sufficiently large enough to cause accumulation of oil in the containment area, the problem will be promptly corrected where feasible. A record of the correction actions are kept for a minimum of three years as discussed in Inspections and Records of this SPCC Plan. Refer to Attachment "C" for the Facility Inspection form to record the tank inspection information.

There are no internal heating coils at this facility.

Each tank is equipped with:

- a) Liquid level sensing devices should be tested regularly to insure proper operation.
- b) Tanks are equipped with direct vision gauges or their equivalent to determine high liquid levels.

There is no plant effluent discharge into navigable waters.

Oil leaks which result in a loss of oil from tank seams, gaskets, rivets, and bolts are promptly corrected.

Portable oil storage tanks such as 55-gallon drums are positioned within a secondary containment system to prevent spilled oil from reaching navigable water.

The secondary containment is designed to contain the largest single drum or compartment and is located in an area not subject to periodic flooding.

FACILITY TRANSFER OPERATIONS, AND IN-PLANT PROCESS [§112.8(d)]

Buried piping from the diesel AST (Tank Area #1) to the diesel transfer tank (Tank Area #2) is coated and cathodically protected as warranted to protect against corrosion. Whenever a buried pipe is exposed the pipe is inspected for deterioration. If indications of severe pipe deterioration are found additional examination and corrective action will be conducted to mitigate the potential for an oil spill

Pipelines not in service or on standby for an extended period are capped or blank flanged and marked as to their origin.

There is no aboveground piping at the facility. Refer to Attachment "C" for the Facility Inspection form to record pipe inspections.

There is no aboveground piping that would be endangered by normal vehicular traffic.

ATTACHMENTS

ATTACHMENT A

CERTIFICATION OF SUBSTANTIAL HARM DETERMINATION FORM

Facility Name: _____

Facility Address: _____

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

YES _____ NO _____

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground storage tank area?

YES _____ NO _____

3. Does the facility have a total oil storage capacity greater than or to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in 40 CFR Part 112, Appendix C for a comparable formula²) such that a distance from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III of the "Guidelines for Facility and Vessel Response Plans: Fish and Wildlife and Sensitive Environments" (40 CFR Part 112, Appendix E, Section 10, for availability) and the applicable Area Contingency Plan prepared pursuant to section 311(j)(4) of the Clean Water Act.

YES _____ NO _____

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III to this appendix or a comparable formula) such that a discharge from the facility would shut down a public drinking water intake²?

YES _____ NO _____

5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?

YES _____ NO _____

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Signature

Title

Name (please type or print)

Date

¹ If a comparable formula is used documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

² For the purposes of 40 CFR part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).

ATTACHMENT B

DIKE / CONTAINMENT DRAINAGE RECORD

This form is used to record the inspection and drainage of rainwater discharged from dike/ containment areas. Drainage is to be effected when necessary, not at pre-set intervals. If upon inspection the accumulated rainwater visually appears to be free of oil sheen or mixture, drainage may be accomplished. The drain valves are to be secured in the closed position and re-sealed following each drainage event.

To be filled out by inspector

Date: _____

Dike / Containment Area: _____

Time Drainage Started: _____

Time Drainage Finished: _____

Physical Observations (check appropriate descriptions of the water in the containment area)

Color	<input type="checkbox"/> clear	<input type="checkbox"/> black/gray	<input type="checkbox"/> brown	<input type="checkbox"/> green
	<input type="checkbox"/> other, specify			
Clarity	<input type="checkbox"/> clear	<input type="checkbox"/> slightly cloudy	<input type="checkbox"/> muddy	
	<input type="checkbox"/> other, specify			
Odor	<input type="checkbox"/> none	<input type="checkbox"/> sewage	<input type="checkbox"/> musty	<input type="checkbox"/> chemical
	<input type="checkbox"/> other, specify		<input type="checkbox"/> petroleum	
Sheen	<input type="checkbox"/> none	<input type="checkbox"/> slightly sheen	<input type="checkbox"/> significant sheen	
	<input type="checkbox"/> other, specify			
Floating debris	<input type="checkbox"/> none	<input type="checkbox"/> garbage/litter	<input type="checkbox"/> constr. debris	<input type="checkbox"/> sewage
	<input type="checkbox"/> other, specify			

Is a Pump Contractor Required? Yes No

Inspector's

Signature: _____ Date: _____

ATTACHMENT C

FACILITY INSPECTION RECORD

This form is used to conduct monthly facility inspections. Facility inspections should be conducted on a regular basis as preventative measures against the potential of an oil spill event. Place an "X" in the appropriate box for each item. If any response requires elaboration, do so in the descriptions and comments space provided. Further descriptions and comments should be attached on a separate sheet of paper.

Date: _____

<u>Areas</u>	<u>YES</u>	<u>NO</u>	<u>Descriptions and Comments</u>
Tank surface show signs of leakage	<input type="checkbox"/>	<input type="checkbox"/>	_____
Tanks are damaged, rusted, or deteriorated	<input type="checkbox"/>	<input type="checkbox"/>	_____
Bolts, rivets, or seams are damaged	<input type="checkbox"/>	<input type="checkbox"/>	_____
Tank support are deteriorated or buckled	<input type="checkbox"/>	<input type="checkbox"/>	_____
Tank foundations have eroded or settled	<input type="checkbox"/>	<input type="checkbox"/>	_____
Liquid Level gauges or alarms are inoperative	<input type="checkbox"/>	<input type="checkbox"/>	_____
Vents are obstructed	<input type="checkbox"/>	<input type="checkbox"/>	_____
Valve seals or gaskets are leaking	<input type="checkbox"/>	<input type="checkbox"/>	_____
Pipelines or supports are damaged or deteriorated	<input type="checkbox"/>	<input type="checkbox"/>	_____
Buried pipelines are exposed	<input type="checkbox"/>	<input type="checkbox"/>	_____
Loading/unloading area is damaged or deteriorated	<input type="checkbox"/>	<input type="checkbox"/>	_____
Connections are not capped or blank-flanged	<input type="checkbox"/>	<input type="checkbox"/>	_____
Secondary containment is damaged or stained	<input type="checkbox"/>	<input type="checkbox"/>	_____
Dike drainage valves are open	<input type="checkbox"/>	<input type="checkbox"/>	_____
Oil/water separator is functioning properly	<input type="checkbox"/>	<input type="checkbox"/>	_____
Oil/water separator effluent has a sheen	<input type="checkbox"/>	<input type="checkbox"/>	_____
Fencing, gates or lighting is non-functional	<input type="checkbox"/>	<input type="checkbox"/>	_____

Remarks: _____

Inspector's Signature: _____

Date: _____

ATTACHMENT D

SPILL PREVENTION BRIEFING RECORD

This form is used to conduct Spill Prevention Briefings. These briefings will be conducted at intervals frequent enough to assure adequate understanding of the SPCC Plan for this facility. These briefings should also highlight and describe known spill events or failures, malfunctioning components, and recently developed precautionary measures. Personnel should be instructed in operation and maintenance of equipment to prevent the discharge of oil and applicable pollution control laws, rules, and regulations.

Date: _____

Attendees: _____

Topics and Issues: _____

Recommendations
and Suggestions _____

Briefing Conducted By: _____ Date: _____

ATTACHMENT E

TRAINING RECORD

This form is used to record training activities. Training should only be conducted by qualified individuals. The training sessions should be administered on a regular basis to update facility personnel in the use of equipment and procedures to minimize oil discharges, mitigate or abate any oil spill events.

Date: _____

Attendees: _____

Topics: _____

Training Conducted By: _____ Date: _____

ATTACHMENT F

SPILL INFORMATION RECORD

This form is used to record spill information from an oil discharge or release in harmful quantities into or upon navigable waters of the United States or adjoining shorelines as defined in 40 CFR Parts 110 & 112.4.

Facility Address and Telephone Number: _____

Spill Date and Time: _____

Type of Material Spilled (for example, No. 2 Fuel Oil): _____

Estimated Quantity Spilled: _____

Estimated Quantity Entering Navigable Waters (not facility drainage): _____

Source of Spill: _____

Description of Affected Area (for example, spill covered dirt area 80 feet long by 20 feet wide):

Cause of Spill: _____

Injuries or Damages: _____

Corrective Actions Taken: _____

Evacuation Needed? _____

Names of Other Parties Contacted: _____

Names of Other Parties to be Contacted: _____

ATTACHMENT G

AGENCY NOTIFICATION REPORT

This form is used to provide written notification to the U.S. EPA Regional Administrator of an oil discharge of more than 1,000 U.S. gallons into or upon navigable waters of the United States or adjoining shorelines in a single event or discharged oil in harmful quantities, as defined in 40 CFR Part 112.4 into or upon navigable waters of the United States or adjoining shorelines in two spill events, reportable under section 311(b)(5) of the FWPCA occurring within any twelve month period. This report and a copy of your SPCC Plan with any amendments are required to be submitted to the U.S. EPA Regional Administrator within sixty (60) days from the date of the spill event.

Name and Address of Facility: _____

Owner Name and Address Information: _____

Date of Initial Facility Operation: _____

Facility Maximum Fuel and Oil Storage Capacity _____

Facility Average Daily Fuel and Oil Throughput _____

Provide a Description of the Facility, Including Maps, Flow Diagram and Topographical maps:

Date of Spill: _____ Cause(s) of Spill or Release (include a failure analysis of system or subsystem in which the failure occurred): _____

Quantity and Type of Material Spilled: _____

Corrective Action(s) Taken: _____

Preventive Measure(s) Taken to Minimize Possibility of Recurrence: _____

ATTACHMENT H

AVAILABLE EMERGENCY EQUIPMENT

Emergency equipment is available at the facility to assist in controlling a spill event or cleaning up a spill. The following emergency equipment is available at the facility:

- Absorbent material (pads, booms, etc.)
- Portable lighting
- Fire extinguishers or foam extinguishing system
- Stockpiled material fines
- Front end loaders
- Excavation equipment

ATTACHMENT I

PAST SPILL EVENT HISTORY

The facility has not experienced one or more spill events within the past twelve months or during the twelve months prior to January 10, 1974.

CONNOLLY-PACIFIC CO. FACILITY SPILL HISTORY				
Date	Description of Spill	Quantity Spilled	Reported to	Corrective Action

ATTACHMENT J

REFERENCE INFORMATION

CALIFORNIA ABOVEGROUND PETROLEUM STORAGE ACT

Chapter 6.67, Aboveground Storage of Petroleum
Health and Safety Code §§25270-25270.13

Above Ground Storage Tanks

This regulation has three basic requirements:

- 1) All facilities that have an aggregate AST storage capacity of over 1,320 gallons of oil or a single storage AST of more than 660 gallons must register with the state. Excluded from this reporting are fuel tanks on farm, nursery, logging site, or construction site
- 2) Requires all facilities with 10,000 gallons or greater of oil in AST's to implement a Spill Prevention Program to minimize the potential for environmental damage in the event of a leak or tank rupture.
- 3) Specifies the requirements for an Oil Discharge Contingency Plan if an individual AST exists that is at least 10,000 gallons or if the total AST capacity at the facility is 10,000 gallons or greater.
- 4) Requires all facilities with 1,320 gallons or greater of oil in either one AST or by a combination of ASTs to conduct a Groundwater Characterization Study, implement monthly groundwater sampling, and apply more stringent reporting requirements.

Currently Connolly-Pacific Co. does have AST over the 1320-gallon limit. For these reasons Connolly-Pacific Co. does have to report and register with the state.

Note: If a change in regulations or in Connolly-Pacific Co. petroleum product management occurs and these regulations become effective, then this SPCC Plan will be amended to comply with the additional California requirements.

REFERENCE INFORMATION

Spill Prevention, Control, and Countermeasures (SPCC) Information Guide August 1993.

United States Environmental Protection Agency Region III Office of the Environmental Protection Agency, Superfund Removal Branch.

Suggested Procedures for Development of Spill Prevention Control, Countermeasure Plan.

Published by the American Petroleum Institute.

Connolly-Pacific Co.

TRAINING MATERIALS

EXAMPLE EMPLOYEE TRAINING MATERIALS

The following materials contain information that may be used in an employee-training program. These pages could be reproduced and used for overhead transparencies. Training should only be conducted by qualified individuals. These materials are provided only as guidance and should be used at the discretion of each company.

REGULATIONS

CONTAINMENT INFORMATION

CONTAINMENT INFORMATION

Connolly-Pacific Company – Pebbly Beach Facility

Area	Location	Amount of Storage	Dimensions of Storage Area		
			L	W	H
Tank Area #1	Just North of Derrick Barge S-50	1-63,000 Gallons Vertical AST (Diesel)	32.75'	32.75'	10'
Tank Area #2/ Transfer Tank Unloading Area	Just North and Next to Tank Area #1	1-4,000 Gallons Horizontal Double Wall AST Transfer Tank (Diesel)	12.5'	7.5'	8'
Tank Area #3	Just East of CAT Shop	8-500 Gallon Portable Horizontal AST (Oil). Each Tank is Individually Contained.	7.5'	4.5'	3'
Tank Area #4	Just South of CAT Shop	1-500 Gallon Horizontal AST (Waste Oil) 8-55 Gallon Drums (Oil & Used Oil Filter)	30'	6'	1'
Drum Area #1	Just North of CAT Shop	12-55 Gallon Drums (Oil)	16'	6'	1.5'

Note: Refer to Figure 2 for containment area locations.

Operation	Process within Operations	Environmental Concern	Areas Reviewed	Provides Lead Agency Authority	Lead Agency	Associated Regulatory Permits/Plans	Regulatory Requirements	Associated Regulatory Permits/Plans	Regulatory Requirements	Regulatory Documents	Regulatory Documents	Facility BMPs	Facility Documents	
Onshore Operations	Loading of Aggregate	Air Quality	Transfer of Aggregate	EPA Clean Air Act	South Coast Air Quality Management	Rule 1157 Rule 403	Suppression of Dust	*	*	AQMD - Rule 1157	AQMD - Rule 403			
		Water Quality	Transfer of Aggregate Use of Dust Suppressants on Unpaved Roads/ Leaking Machinery	EPA Clean Water Act Porter-Cologne Act	State Water Board [SWRCB]	NPDES General Industry Permit	Waste Discharge Requirements	California Ocean Plan	Water Contact Standards	California Ocean Plan	Stormwater General Industry Permit	Inspections of equipment for Leaks and Damage		
		Spill Prevention	Bulldozer Transfer Activities Loader, Utility & Dump Truck Activities	EPA Clean Water Act Oil Pollution Prevention Regulation	Los Angeles County Fire Department Health Hazardous Materials Division (Certified Unified Protection Agency)	Aboveground Petroleum Storage Act	Development of Spill Prevention Control & Countermeasure Plan	*	*	LA County APSA	CUPA - SPCC Fact Sheet	Active Secondary Containment		
	Demree's Operations	Air Quality	Transfer of Aggregate	EPA Clean Air Act	South Coast Air Quality Management	Rule 1157 Rule 403	Suppression of Dust	*	*	AQMD - Rule 1157	AQMD - Rule 403			
		Water Quality	Leaking of Machinery Fluids	EPA Clean Water Act Porter-Cologne Act	State Water Board [SWRCB]	NPDES General Industry Permit	Waste Discharge Requirements	California Ocean Plan	Water Contact Standards	Stormwater General Industry Permit	California Ocean Plan	Inspections of equipment for Leaks and Damage		
	Vehicular Fueling	Spill Prevention	Rupture of Oil Tanks Spill during Loading Operations	EPA Oil Pollution Prevention Regulation	Los Angeles County Fire Department Health Hazardous Materials Division (Certified Unified Protection Agency)	Aboveground Petroleum Storage Act	Development of Spill Prevention Control & Countermeasure Plan	*	*	LA County APSA	CUPA - SPCC Fact Sheet	Float Valve With Automatic Shut Off Visible Level Indicator Protective Barriers		
		Spill Prevention	Performing general maintenance on equipment, e.g. oil change, refilling of fluids Air Compressor in Area	EPA Oil Pollution Prevention Regulation	Los Angeles County Fire Department Health Hazardous Materials Division (Certified Unified Protection Agency)	Aboveground Petroleum Storage Act	Development of Spill Prevention Control & Countermeasure Plan	*	*	LA County APSA	CUPA - SPCC Fact Sheet	Spill Kits Inspections of equipment for Leaks and Damage		
	Vehicular Maintenance	Water Quality	Leaking of Machinery Fluids	EPA Clean Water Act Porter-Cologne Act	State Water Board [SWRCB]	NPDES General Industry Permit	Waste Discharge Requirements	California Ocean Plan	Water Contact Standards	Stormwater General Industry Permit	California Ocean Plan	Inspections of equipment for Leaks and Damage		
		Non Hazardous/ Hazardous Waste	Air Compressor Blowdown Containment	EPA Resource Conservation & Recovery Act	Los Angeles County Fire Department Health Hazardous Materials Division (Certified Unified Protection Agency)	Resource Conservation & Recovery Act	Development of On Site Hazardous Waste Management	*	*	LA County Hazardous Waste Mgmt	LA County Hw Waste Fact Sheet	Hazardous Materials Business Plan Routine Inspections of Waste Accumulation Areas		
	Vehicular Storage	Non Hazardous/ Hazardous Waste	Leaking/Spill of Hazardous chemicals contained within area	EPA Resource Conservation & Recovery Act	Los Angeles County Fire Department Health Hazardous Materials Division (Certified Unified Protection Agency)	Resource Conservation & Recovery Act	Development of On Site Hazardous Waste Management	*	*	LA County Hazardous Waste Mgmt	LA County Hw Waste Fact Sheet	Hazardous Materials Business Plan Routine Inspections of Waste Accumulation Areas		
		Water Quality	Leaking of Hazardous chemicals contained within vehicles	EPA Clean Water Act Porter-Cologne Act	State Water Board [SWRCB]	NPDES General Industry Permit	Waste Discharge Requirements	California Ocean Plan	Water Contact Standards	Stormwater General Industry Permit	California Ocean Plan	Inspections of equipment for Leaks and Damage		
		Spill Prevention	Spill of hazardous chemicals contained within area	EPA Oil Pollution Prevention Regulation	Los Angeles County Fire Department Health Hazardous Materials Division (Certified Unified Protection Agency)	Aboveground Petroleum Storage Act	Development of Spill Prevention Control & Countermeasure Plan	*	*	LA County APSA	CUPA - SPCC Fact Sheet	Spill Kits Spill Containment Inspections of Accumulation & Satellite Areas		
	Hazardous Waste Areas	Spill Prevention	Spill/ Leak from waste accumulated from maintenance of vehicles	EPA Oil Pollution Prevention Regulation	Los Angeles County Fire Department Health Hazardous Materials Division (Certified Unified Protection Agency)	Aboveground Petroleum Storage Act	Development of Spill Prevention Control & Countermeasure Plan	*	*	LA County APSA	CUPA - SPCC Fact Sheet	Inspections of equipment for Leaks and Damage		
		Non Hazardous/ Hazardous Waste	Waste accumulated from maintenance of vehicles	EPA Resource Conservation & Recovery Act	Los Angeles County Fire Department Health Hazardous Materials Division (Certified Unified Protection Agency)	Resource Conservation & Recovery Act	Development of On Site Hazardous Waste Management	*	*	LA County Hazardous Waste Mgmt	*	Hazardous Materials Business Plan Routine Inspections of Waste Accumulation Areas		
	Disposal Procedures	Water Quality	Solid and Liquid Waste from Trash	EPA Clean Water Act Porter-Cologne Act	State Water Board [SWRCB]	NPDES General Industry Permit	Waste Discharge Requirements	California Ocean Plan	Water Contact Standards	Stormwater General Industry Permit	California Ocean Plan	Covering of trash containers Water light containers		
	Boneyard/Scrap/ Equipment Areas	Water Quality	Leaking or Residual Oils found on stored equipment	EPA Clean Water Act Porter-Cologne Act	State Water Board [SWRCB]	NPDES General Industry Permit	Waste Discharge Requirements	California Ocean Plan	Water Contact Standards	Stormwater General Industry Permit	California Ocean Plan	Routine Inspections of equipment Use of Drip Pans		
	Offshore Operations	Boat Cleaning/Repair Operations	Water Quality	Deck Washdown, Hull Cleaning, Wastewater, Above Water Painting, Propeller, Rudder, Thruster, Stern Tube, Propulsion Pods Maintenance, Wire Rope Lubrication, Cathodic Protection, Biofouling Prevention	EPA Clean Water Act Porter-Cologne Act	State Water Board [SWRCB]	California Ocean Plan	Waste Discharge Requirements Water Contact Standards	*	*	California Ocean Plan	*	Per American Waterways Operator Standards: Fuel oil & bulk lubricating oil containment Bilge stop containment Placard prohibiting discard of oil MARPOL placard Certified marine sanitation device Fuel oil transfer procedures Oil Spill Contingency Plan Spill Kit Hull Inspected in Drydock Training in spill mitigation, environmental protection & loading procedures	
			Water Quality	Graywater, Sewage, Cooling Sea Water, Condensate Discharge, Ballast Water, Bilge Water	EPA Clean Water Act Porter-Cologne Act	State Water Board [SWRCB]	California Ocean Plan	Waste Discharge Requirements Water Contact Standards	*	*	California Ocean Plan	*	Per American Waterways Operator Standards: Fuel oil & bulk lubricating oil containment Bilge stop containment Placard prohibiting discard of oil MARPOL placard Certified marine sanitation device Fuel oil transfer procedures Oil Spill Contingency Plan Spill Kit Hull Inspected in Drydock Training in spill mitigation, environmental protection & loading procedures	
Emergency Operations		Water Quality	Firemain System, Aqueous Film Forming Foam	EPA Clean Water Act Porter-Cologne Act	State Water Board [SWRCB]	California Ocean Plan	Waste Discharge Requirements Water Contact Standards	*	*	California Ocean Plan	*	Per American Waterways Operator Standards: Fuel oil & bulk lubricating oil containment Bilge stop containment Placard prohibiting discard of oil MARPOL placard Certified marine sanitation device Fuel oil transfer procedures Oil Spill Contingency Plan Spill Kit Hull Inspected in Drydock Training in spill mitigation, environmental protection & loading procedures		

ONSHORE OPERATIONS										
Area	Pollutant Potential	Potential Event	BMP	Inspection Required	Maintenance &/or Inspection Type	Supporting Documents	Frequency of Maintenance &/or Inspection	Training Required	Training Type	Individuals Trained
Aggregate Stockpiles	Aggregate (dust, rock, gravel)	1) Stormwater Runoff 2) Dust	1a) Stockpile Grading 1b) Placement on Near Level Ground 1c) Inventory Minimalization 1d) Stormwater Diversion 2) Dust Suppression	Yes	1a & c) Inspection of Slope 1d) Visual Inspection 2) Suppresant Application	1a-d) Non-Storm Water Discharge Visual Observation Form 2) Dust Suppression Monitoring Forms	1a-d) Initial & Quarterly 2) During Operation	Yes	1a-d) Stormwater Training 2) AQMD Fugitive Dust Control Training	1a-d) Responsible Person 2) Dust Control Supervisor
Loading/Drrek Operations/Maintenance	Hydraulic Fluid, Fuel, Coolant, Oil, Lubricants Aggregate (dust, rock, gravel)	1) Leak/Spill 2) Aggregate Spill Over 3) Dust	1a) Visual Inspections 1b) Spill Kit 2) Stockpile Placement 3) Dust Suppression	Yes	1a) Visual Inspection 1b) Inspection of appropriate spill kit material/inventory 2) Visual Inspection 3) Suppresant Application	1a, 2) Non-Storm Water Discharge Visual Observation Form 1a, 2) Storm Water Discharge Visual Observation Form 1b) SPCC Available Emergency Equipment (Attachment H) 3) Dust Suppresion Monitoring Forms	1a,b,2) Initial & Quarterly 1a,b,2) During Wet Season (Monthly) 3) During Operation	Yes	1a,b,2) Stormwater & Spill Prevention Training 3) AQMD Fugitive Dust Control Training	1a,b,2) Responsible Person 3) Dust Control Supervisor
Loader, Utility and Dump Truck Operations/Maintenance	Hydraulic Fluid, Fuel, Coolant, Oil, Lubricants Aggregate (dust, rock, gravel)	1) Leak/Spill 2) Aggregate Spill Over 3) Dust	1a) Visual Inspections 1b) Spill Kit 2) Stockpile Placement 3) Dust Suppression	Yes	1a) Visual Inspection 1b) Inspection of appropriate spill kit material/inventory 2) Visual Inspection 3) Suppresant Application	1a, 2) Non-Storm Water Discharge Visual Observation Form 1b) SPCC Available Emergency Equipment (Attachment H) 3) Dust Suppresion Monitoring Forms	1a,b,2) Initial & Quarterly 3) During Operation	Yes	1a,b,2) Stormwater & Spill Prevention Training 3) AQMD Fugitive Dust Control Training	1a,b,2) Responsible Person 3) Dust Control Supervisor
Fuel Tank Area #1 (AST)	Petroleum Hydrocarbons	1) Above Ground Spill/Leak 2) Below Ground Spill/Leak	1a) Secondary Containment 1b) Spill Kits 1c) Direct Vision Gauge 1d & 2a) Automatic Shut Off Valve 2b) Cathodic Protection	Yes	1a) Visual Inspection 1b) Inspection of appropriate spill kit material/inventory 1c & 2a) Equipment Inspection 2b) Visual Inspection, Capping or Flanging of Pipelines not in service	1a,c, 2a,b) SPCC Facility Inspection Record (Attachment C) 1b) SPCC Available Emergency Equipment (Attachment H) 1a) Non Storm Water Discharge Observation Form	1a) Monthly 1b) Monthly 2a) Monthly 2b) When excavated or pipeline no longer in use	Yes	1a-d, 2a,b) Stormwater & Spill Prevention Training	1a) Responsible Party (Tank Inspectors, Fueling Operators) 1b) Responsible Party 1c) Responsible Party 2b) Responsible Party
Fuel Tank Area #2 (Tanker Truck Unloading Area)	Petroleum Hydrocarbons	1) Above Ground Spill/Leak 2) Below Ground Spill/Leak	1a) Secondary Containment 1b) Spill Kits 1c) Direct Vision Gauge 1d) Chocking 1e) Unloading Inspection 1f & 2a) Automatic Shut Off Valve 2b) Cathodic Protection (from AST Tank #1)	Yes	1a) Visual Inspection 1b) Inspection of appropriate spill kit material/inventory 1d,e) Unloading Inspection 2a) Equipment Inspection 2b) Visual Inspection, Capping or Flanging of Pipelines not in service	1a,c,f 2a,b) SPCC Facility Inspection Record (Attachment C) 1b) SPCC Available Emergency Equipment (Attachment H) 1a) Non Storm Water Discharge Observation Form 1d,e) Unloading Inspection form	1a) Monthly 1b,c) Monthly 1d,e) During Operation 2a) Monthly 2b) When excavated or pipeline no longer in use	Yes	1a,b, 2a,b) Stormwater & Spill Prevention Training 1d,e) Certified Hauler Training (DOT Registration Required)	1a,b) Responsible Party 1d,e) Hauler/Unloader 2a,b) Responsible Party
Fuel Tank Area #3 (Portable Tanks)	Oil	1) Above Ground Spill/Leak	1a) Secondary Containment 1b) Spill Kits 1c) Direct Vision Gauge 1d) Automatic Shut Off Valve	Yes	1a) Visual Inspection 1b) Inspection of appropriate spill kit material/inventory 1c & d) Equipment Inspection	1a,c,d) SPCC Facility Inspection Record (Attachment C) 1b) SPCC Available Emergency Equipment (Attachment H)	1a-d) Monthly	Yes	1a) Stormwater Training 1b,c,d) Spill Training	1a-d) Responsible Person
Hazardous/ Non Hazardous Waste Areas	Petroleum Hydrocarbons, Acids/Bases (from cleaners), Oil & Grease, Anti-Freeze, Heavy Metals	1) Above Ground Spill/Leak	1a) Covered Areas 1b) Spill Containment 1c) Allocated Accumulation Areas 1d) Spill Kits	Yes	1a) Inspection of roofing & flooring (for deterioration & housekeeping) 1b) Inspection of containment structures 1c) Inspection of Accumulation Areas 1d) Inspection of appropriate spill kit material/inventory	1a,b,c) Waste Accumulation Inspection Form 1d) SPCC Available Emergency Equipment (Attachment H)	1a) Annual 1b) Monthly 1c) Monthly 1d) Monthly	Yes	1a-c) Hazardous Waste Training 1b) Stormwater Prevention Training 1d) Spill Prevention Training	1 a - d) Responsible Person
Vehicle Equipment Maintenance & Storage Areas	Petroleum Hydrocarbons, Sulfuric Acid, Lead, Oil & Grease, Anti-Freeze	1) Above Ground Spill/Leak	1a) Enclosed/Covered Areas 1b) Product Labeling & Allocated Trash Recepticals 1c) Waste Oil & Battery Recycling 1d) Drip Pans 1e) Spill Kits 1f) MSDS Management	Yes	1a) Inspection of roofing & flooring (for deterioration & housekeeping) 1b) Inspection of Chemical & Trash Areas 1c) Monitoring/Recordkeeping of Hazardous Waste and Recyclable Items 1e) Inspection of appropriate spill kit material/inventory 1f) Recordkeeping of MSDS	1a,b,) Waste Accumulation Inspection Form 1c) Waste Tracking Form 1e) SPCC Available Emergency Equipment (Attachment H) 1f) Manifest Tracking Form	1a) Annual 1b) Weekly 1c) Monthly 1e) Monthly 1f) New Chemical &/or Updated MSDS available	Yes	1a,b,c,f) Hazardous Material & Waste / Waste Training 1e) Spill Prevention Training	1) Responsible Person 1b,c,f) Responsible Person 1e) Responsible Person
Boneyard/Surplus Equipment Storage	Petroleum Hydrocarbons, Oil & Grease, Anti-Freeze, Acids, Metals, Sediment	1) Stormwater Contaimination	1a) Removal of batteries 1b) Drip Pans (when feasible) 1c) Equipment Inspections 1d) Preventative Maintenance 1e) Spill Pallets	Yes	1a) Visual Inspection 1b) Visual Inspection 1c) Visual Inspection 1d) Equipment Inspection 1e) Visual Inspection	1a,b,c) Non-Storm Water Discharge Visual Observation Form 1e) SPCC Available Emergency Equipment (Attachment H)	1a) Initial & Quarterly 1b) Initial & Quarterly 1c) Initial & Quarterly 1d) Manufacturer Specified 1e) Monthly	Yes	1a,b,c,e) Spill & Stormwater Training 1d) Manufacturer Specific	1a) Responsible Person 1b,c) Responsible Person 1d) Responsible Person/ Maintenance Personnel 1e) Responsible Person

Bulldozer Operations	Hydraulic Fluid, Fuel, Coolant, Motor Oil, Lubricants	Above Ground Spill/Leak	1a) Preventative Maintenance 1b) Spill Kits 1c) Visual Inspection	Yes	1a) Maintenance of Equipment 1b) Inspection of appropriate spill kit material/inventory 1c) Visual Inspection	1b) SPCC Available Emergency Equipment (Attachment H) 1c) Non-Stormwater Discharge Visual Observation Form	1a) Manufacturer Specifications 1b) Monthly 1c) Quarterly	Yes	1a) Equipment Specific 1b,c) Spill & Stormwater Training	1a) Maintenance Mechanics 1b) Operators who work with equipment with spill potential
Trash Recepticles	Recyclables, Refuse, Leachate	1) Above Ground Spill (tip over or wind event) 2) Leachate from rain event	1a) Covering of trash recepticles 1b) Trash Disposal/Pick Up 2a) Water Tight Dumpster	Yes	1a) Visual Inspection 1b) Visual Inspection 2a) Visual Inspection	1a,b, 2a) Non-Storm Water Discharge Visual Observation Form	1a) Quarterly 1b) Weekly* * (frequency dependant on average amount of trash deposited) 2a) Quarterly	Yes	1a) Stormwater Training 1b) Spill Training 2a) Spill & Stormwater Training	1a) Employees who utilize & inspect trash recepticles 1b) Responsible Party 2a) Employees who utilize & inspect trash recepticles
Air Compressors	Petroleum Hydrocarbons	1) Above Ground Leak	1a) Drip Pans (if leaking) 1b) Preventative Maintenance 1c) Blowdown Containment	Yes	1a) Inspections for leaks 1b) Inspection Maintenance of Seals 1c) Inspection at event	1a) Non-Storm Water Discharge Visual Observation Form 1b,c) Preventative Maintenance Log	1 a) Initial & Quarterly 1b,c) Manufacturer Specifications	Yes	1a) Stormwater & Spill Prevention Training	1a) Responsible Person

Training Frequency
1 a-d) Initial & Annual 2) Initial & Bi Annual
1a,b,2) Initial & Annual 3) Initial & Bi Annual
1a,b,2) Initial & Annual 3) Initial & Bi Annual
1 a-c) Initial & Annual 2 a,b) Initial & Annual
1a,b) Initial & Annual 1d,e) Initial & Annual
1 a-d) Initial & Annual
1 a-d) Initial & Annual
1 a,b,c,f,e) Initial & Annual
1a,b,e) Initial & Annual 1 c,d) Manufacturer Specifications

1a) Manufacturer Specifications
1b) Initial & Annual

1a) Initial & Annual
1b) Initial & Annual
2a) Initial & Annual

1a) Initial & Annual

OFFSHORE OPERATIONS										
Area	Pollutant Potential	Potential Event	BMP	Inspection Required?	Maintenance &/or Inspection Type	Supporting Documents	Frequency of Maintenance &/or Inspection	Environmental Associated Training	Individuals Trained	Training Frequency
Deck Cleaning Operations	Debris, Cleaning Residue	Residual chemicals running off deck during normal operation	Cleaning performed while in port	Yes	Routine Visual Inspection	Routine Visual Inspection Form Routine Vessel Inspection Form	Per Voyage or Weekly (whichever is more frequent) & As Needed	1) Spill Prevention 2) Water Quality (Ocean Pollution Prevention)	1-2) Individuals who take part in cleaning of the deck area	1-2) Initial & Annual
Above Water Painting	Paint	Spill or Paint Residue	Painting to be performed while in port, spray guns not to be used	Yes	Routine Visual Inspection	Paint Application Form	Per Voyage or Weekly (whichever is more frequent) & As Needed	1) Spill Prevention 2) Water Quality (Ocean Pollution Prevention)	1-2) Individuals who take part in painting operations	1-2) Initial & Annual
Hull Cleaning	Cleaner substances, Paint, Fouling, Anti biofoulant	Cleaning Residue, Paint Chip Residue, Fouling Residues, Anti biofoulant residue	Hull cleaning performed at drydock	Yes	Drydock Maintenance	Drydock Inspection Report Annual Visual Inspection Form	Annual & As Needed	1) Water Quality (Ocean Pollution Prevention)	1) Individuals who take part in the cleaning & inspection of the hull areas both above & below	1) Initial & Annual
Non Oil Machinery Wastewater	Wastewater	Discharge of wastewater into waters and ASBS areas	Wastewater goes into bilge, which is removed while in port	Yes	Routine Visual Inspection	Routine Visual Inspection Form Routine Vessel Inspection Form	Per Voyage or Weekly (whichever is more frequent) & As Needed	1) Spill Prevention 2) Water Quality (Ocean Pollution Prevention)	1-2) Individuals who take part in bilge unloading operations	1-2) Initial & Annual
Maintenance of Propeller, Rudder, Thrusters, Bearings, Propulsion Pods, Stern Tube	Oils and lubricants	Residual from equipment maintenance and leaking around protective seals	Maintenance performed while in dry dock Spill Response Materials	Yes	Drydock Maintenance Annual Visual Inspection	Drydock Inspection Report Annual Visual Inspection Form	Annual & As Needed	1) Spill Prevention 2) Water Quality (Ocean Pollution Prevention)	1-2) Individuals who take part in maintenance operations	1-2) Initial & Annual
Cathodic Protection	Metals	Degradation of sacrificial anodes leads to corrosion and chipping allowing metals to enter waters and ASBS	Condition of anodes monitored Replacements are made at signs of wear and/or damage	Yes	Inspection of condition	Drydock Inspection Report Annual Visual Inspection Form	Annual & As Needed	1) Water Quality (Ocean Pollution Prevention)	1) Individuals who inspect sacrificial anodes	1) Initial & Annual
Ballast Water Discharge	Oil, Marine organisms	Discharge of ballast allows for oil and foreign species to enter waters and ASBS	Ballasts are completely closed bladders which are opened during dry dock maintenance	Yes	Drydock Maintenance	Drydock Inspection Report Annual Visual Inspection Form	As Needed	1) Water Quality (Ocean Pollution Prevention)	1) Individuals who perform dry dock maintenance	1) Initial & Annual
Biofouling Prevention /Anti Fouling Hull Coating	Chemical residue	Chemical residue entering waters and ASBS	Inspection of flaking/biofouling and repainting of hull coating	Yes	Drydock Maintenance	Drydock Inspection Report Annual Visual Inspection Form	Annual & As Needed	1) Water Quality (Ocean Pollution Prevention)	1) Individuals who apply anti fouling coating	1) Initial & Annual
Bilge Water Disposal	Oily Water	Oily water discharge into waters and ASBS	Bilge water pumped out and emptied in port Bilge water level is monitored	Yes	Routine Visual Inspection	Routine Vessel Inspection Form Bilge Water Log	Per Voyage or Weekly (whichever is more frequent) & As Needed	1) Spill Prevention 2) Water Quality (Ocean Pollution Prevention)	1-2) Individuals who take part in bilge unloading operations	1) Initial & Annual
Refrigeration & Air Condensate Discharge	Oily Water	Discharge of oily waters into water and ASBS	Discharges go to the bilge which is emptied into waste tanks/containers at port	Yes	Routine Visual Inspection	Routine Vessel Inspection Form Bilge Water Log &/or Preventative Maintenance Log	Per Voyage or Weekly (whichever is more frequent) & As Needed	1) Water Quality (Ocean Pollution Prevention)	1a) Individuals who perform PMs associated with Refrigeration & Air Conditioning 1b) Individuals who take part in bilge unloading operations	1) Initial & Annual
Cooling Sea Water Discharge	Oils, Metals, Waters at raised temperatures	Discharge into water and ASBS	Keel cooling is performed, water is not in contact with contaminants	Yes	Preventative Maintenance of Keel Cooling System	Annual Visual Inspection Form Preventative Maintenance Log	Annual & As Needed	1) Spill Prevention 2) Water Quality (Ocean Pollution Prevention)	1) Individuals who perform maintenance and inspect the Keel Cooling System	1-2) Initial & Annual
Fire Extinguishers/Suppresants	CO ₂ , Misc Fire Suppresants	Discharge into water and ASBS	Testing of Extinguishers performed while at Dry Dock Spill containment for any materials extinguished	Yes	Testing of Extinguishers	Annual Visual Inspection Form Preventative Maintenance Log	Annual	1) Spill Prevention 2) Water Quality (Ocean Pollution Prevention)	1) Individuals required safety training with fire extinguishers	1-2) Initial & Annual
Sewage	Sewage	Discharge of sewage into waters and ASBS	Sewage treated through a continuous filter system Boat operators required to turn off system while in ASBS	Yes	Routine Visual Inspection & When within ASBS Area	Routine Vessel Inspection Form Preventative Maintenance Log	Per Voyage or Weekly (whichever is more frequent) & As Needed	1) Spill Prevention 2) Water Quality (Ocean Pollution Prevention)	1a) Individuals that operate the vessel 1b) Individuals that perform maintenance on the vessel with access to sewage system	1) Initial & Annual

(b) List all Individual Sources of Water Supply on and adjacent to area of mining.

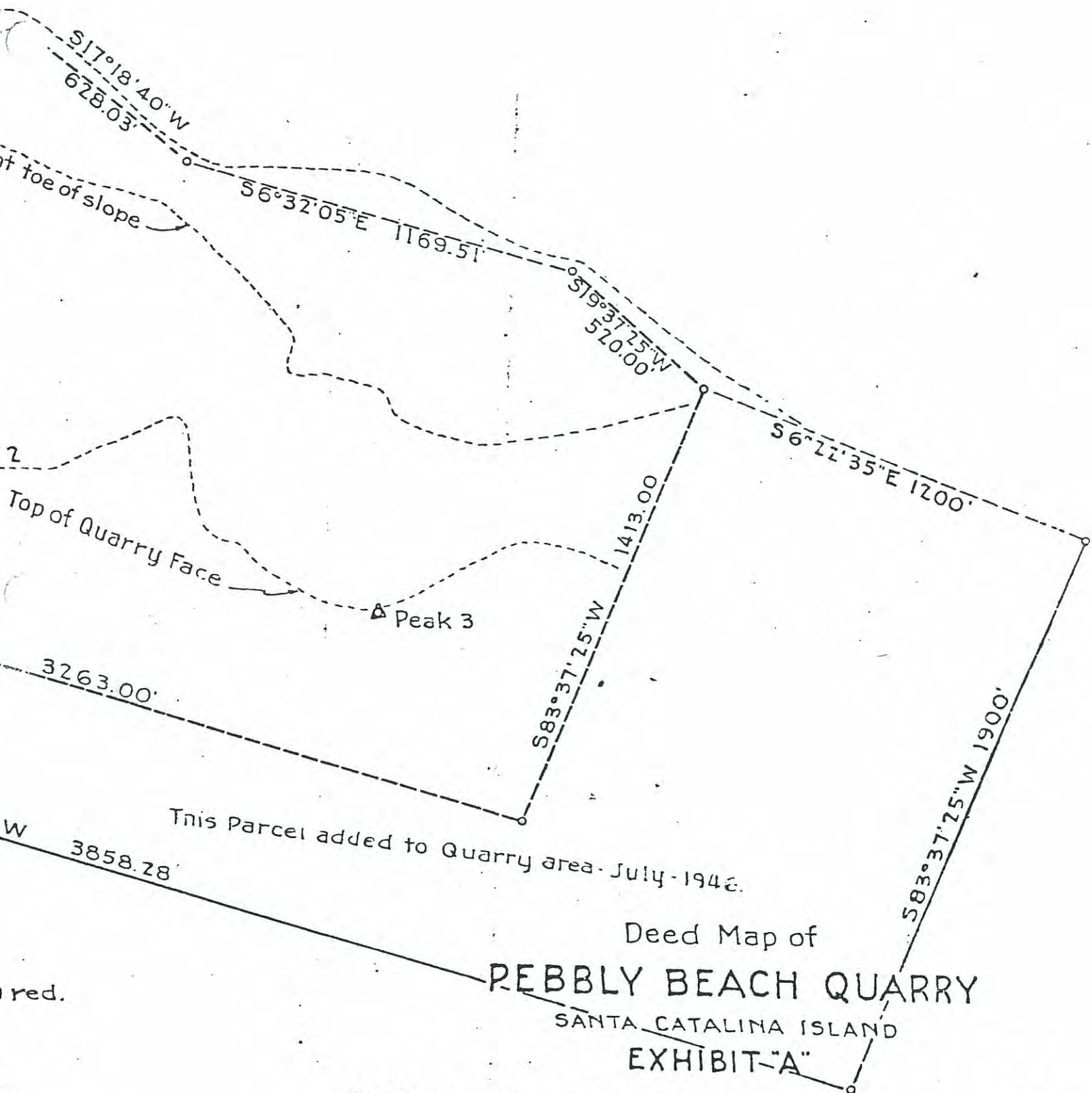
1. Name and address of each owner or user.

2. Type of Water Supply

- (a) Well
- (b) Spring
- (c) Stream
- (d) Public

3. Key the names of individually owned or used water sources, with their locations on the property maps submitted with this Application.

<u>KEY</u>	<u>NAME</u>	<u>ADDRESS</u>	<u>TYPE</u>
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Deed Map of
PEBBLY BEACH QUARRY
 SANTA CATALINA ISLAND
 EXHIBIT "A"

The Santa Catalina Island Company

Scale 1" = 400'

Drawn Apr. 1941 Verne T. Bunker
 Redrawn Sept. 1944 RE. 4843
 Revised • Redrawn Apr. 1946 V.T.B.

Revised July 1946 - V.T.B.

Approximate Shore Line.

S 15° E 1041.21'

S 32° 59' 55" E 359.95'

S 15° 49' 45" E 741.28'

S 32° 22' 45" E 488.32'

S 41° 45' 05" E 832.01'

Present top

Original Random Line

face

Peak 4

part of this Contract

N 23° 07' W

2374.00'

N 32° 54' 30" E 2102.34'

Peak 1

Peak 2

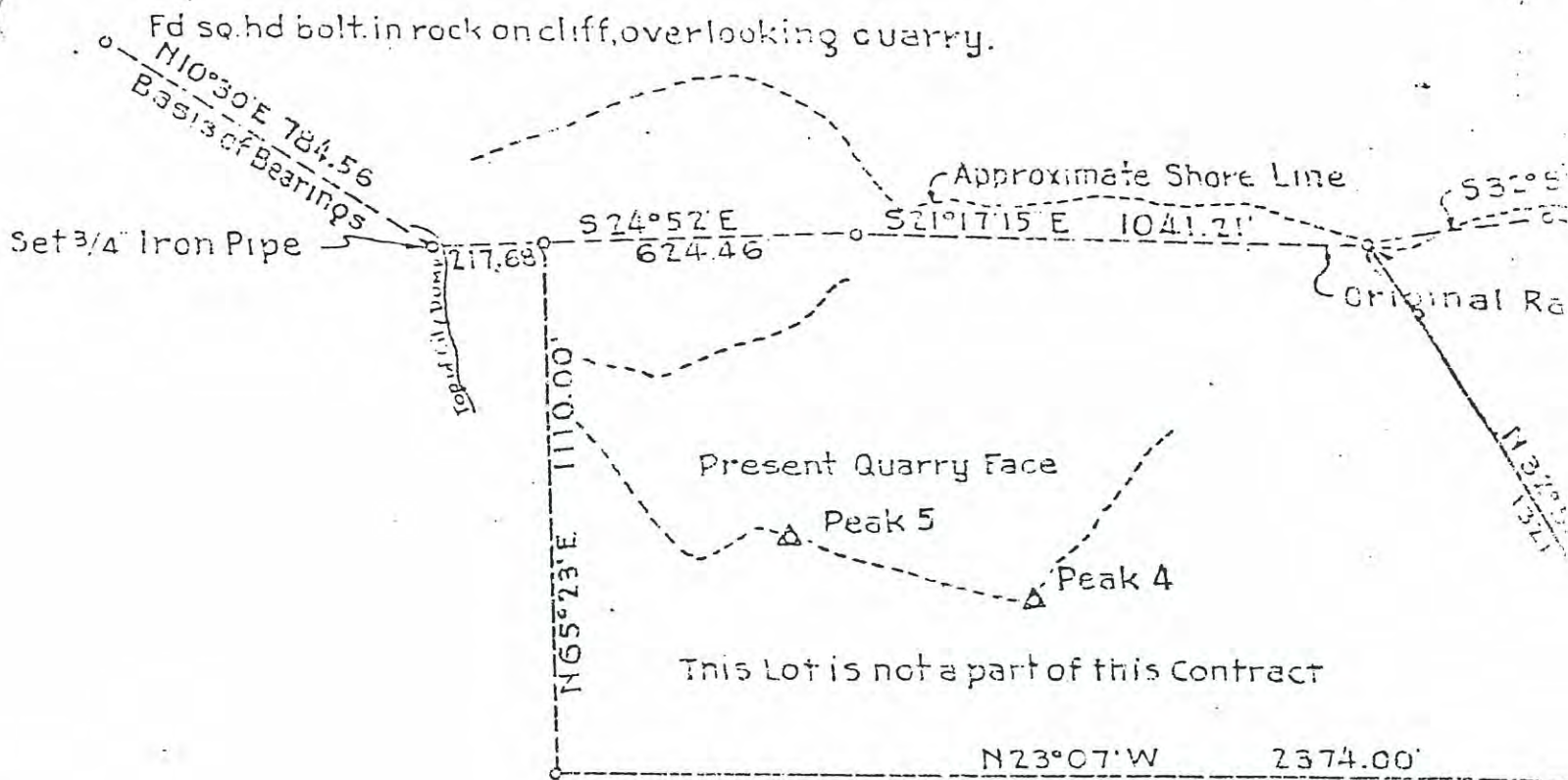
Top

N 7° 07' W

N 7° 07' W

Note: Quarry Boundaries shown in re

THE PIPESTONE GROUP



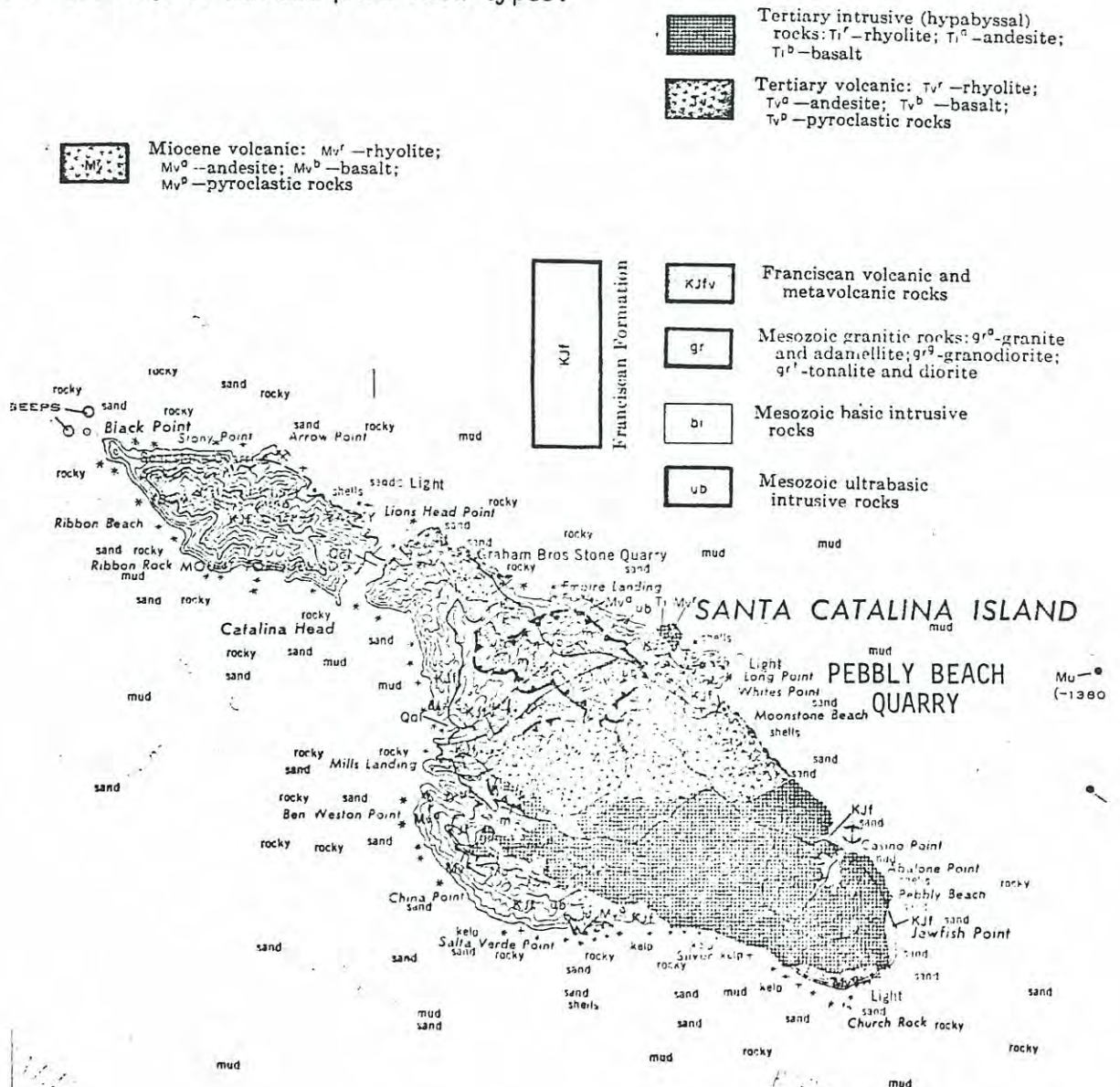
Geology - Pebbly Beach Quarry

The Pebbly Beach quarry is situated in an outlier of the Franciscan Formation in the vicinity of Jewfish Point at the extreme southwest end of Santa Catalina Island.

The rocks exposed in the quarry are an interbedded sequence of variable graywacke sandstones and massive conglomerates. The latter appear to have a tectonic origin.

Extensive faulting of both the normal and reverse types is evident. Due to faulting, the true stratigraphic column and the continuity of individual beds are difficult to discern. Bedding planes are variable. A regional strike trend cannot be determined from exposures in the quarry. Joint systems are extensive in more or less random orientations due to the obvious tectonism.

The graywackes are fine grained and massive bedded. The conglomerates have a fine grained matrix surrounding irregular (1/2" to 18") chunks and pieces of a variety of metamorphic rock types.



PEBBLY BEACH RECLAMATION AND REVEGETATION NARATIVE

There will be four distinct zones subject to future rehabilitation upon cessation of mining and production activity. The zones are indicated graphically on the accompanying plate and cross-section and are described as follows:

Zone 1 Production Work Areas With Unconsolidated Crushed Rock Subbase. These areas are used for stockpiles, haul roads, loading areas, conveyors, crushers and miscellaneous equipment and structures.

Zone 2 Unconsolidated Bench Faces.

Zone 3 Shore Line Slope.

Zone 4 Production High Wall.

"Muck Piles" of broken rock may or may not be present at the toe of the highwall.

The quarry will be reclaimed as undeveloped open space to make it topographically and vegetatively compatible with the surrounding natural sea coast environment of this portion of Santa Catalina Island.

GRADING PLAN

Zone 1 Production Areas.

Production areas will be left at a grade that will direct surface water runoff back from the outer edges of the benches into swale areas constructed along the inner edge of the benches. The swale areas will be depressed about 12 inches and filled with a layer of graded (3 inch to 12 inch) crushed rock. Surface runoff flowing through the swales will be slowed. This will result in longer retention time with correspondingly greater downward percolation into the unconsolidated material of the benches, thereby minimizing surface runoff to the sea.

Zone 2 Unconsolidated Bench Faces.

The slope faces of the outer edges of the unconsolidated benches will be graded to a slope no steeper than 1:1. For slopes steeper than 2:1, armor rock barriers (rows of boulders three feet or larger in diameter), with interspersed "armed" (thorny) barrier plants, will be positioned at the crests and toes to discourage access.

Zone 3 Shore Line Slope.

The shore line slope will be graded to a slope no steeper than 1:1 and then, as necessary, protected from excessive erosion by armor rock.

Zone 4 Production of High Walls.

Upon cessation of mining, a final blast will be taken and the subsequent muck pile will be left as a barrier at its natural angle of repose (about 1.5:1). To further discourage access to the toe of the high wall, an armor rock berm with thorny barrier plants will be constructed along the toe of the muck pile.

The crest of the high wall will be scaled to remove any overhangs or loose rock. The armor rock berm will also be useful as a barrier in stopping most loose rock that might, in the future, break loose and fall from the high wall. The restoration treatment for the high wall will leave the slope compatible with the natural sea cliffs along this part of the coast. (See the oblique photos of the quarry).

REVEGETATION PLAN.

At the Pebbly Beach Quarry, revegetation is currently occurring naturally on the benches, slopes, and muck piles that have been left undisturbed. This is happening as a result of seed transport via wind and bird droppings. However, revegetation of the quarry site, upon cessation of the mining will be accelerated by limited plantings and by "hydroseeding".

Hydroseeding is a process whereby seeds, hormones, fertilizers, wood fibers and water are combined into a slurry which is sprayed onto the benches and/or steep slopes, insuring even distribution of seeds, available plant nutrients (from the slow release fertilizer), and some protection from erosion by the wood fibers.

Present Site Conditions.

As mentioned earlier in the reclamation plan, the site can be classified into four distinct zones subject to revegetation:

1. Production work areas or benches (comprised of unconsolidated crushed rock subbase), which are used for stockpiles, haul roads, loading areas, conveyors, crushers, and miscellaneous production equipment and/or structures.
2. Unconsolidated bench slope faces.
3. Shore line slope face comprised of armor rock sea walls.
4. Production high wall and slump pile at base

The upper production area and slump pile exhibit a considerable amount of grass type plant growth. Some woody type plants are present at the base of undisturbed stock piles and along the toe of the muck pile. Growth is due to transported seeds from the existing plant community above the high wall.

THE PIPESTONE GROUP

Soil ranges from shallow to deep and is saline due to the current watering and dust control methods employed in the mining operation. Sea water is the only readily available source of water. Fresh water sources do not exist at present.

DESCRIPTION OF PLANT COMMUNITY.

The site is located in the narrow coastal plant community which is classified as 'Coastal Sage Scrub', and which occurs on dry rock and gravelly slopes in the coastal range.

This area receives an average of from 10-20 inches of rainfall a year and experiences only an occasional frost.

The site and its climate are almost completely influenced by the ocean. The plant climates can be separated into two zones referred to as the thermal belt and marine belt, and, in addition, these zones can be further described as exposure zones which range from first through third sea coast exposure.

Thermal Belt Coastal Line.

The thermal belt coastal climate zone is inland of the coast usually above the cliffs abutting the sea. This zone is predominately air-drained and is influenced by inland conditions approximately 15 percent of the time.

Refer to the graphic map to locate the valleys which drain towards the ocean immediately above the production high wall.

Marine Influence Coastal Climate.

The marine influence zone ranges from tide line to the base of the high wall (or palisades). The winters are mild, summers are cool and often of limited sunshine because of daily high fogs, and the humidity is often high.

This zone is subject to ocean breezes and high winds. The temperature ranges from 33 to 80 degrees.

First Zone of Exposure.

The shore line plants must bear up under the most rigorous of environmental conditions, such as salt in both the soil and in driven spray.

Second Zone of Exposure.

The second exposure zone must tolerate considerable salt in both the air and soil, but assumes some protection from the wind. The area is inland from the surf line, enough to be protected from actual wetting down by the spray.

Third Zone of Exposure.

The plants in this zone must be tolerant to some degree of salt in the soil and yet stand up to reliably baffled winds. They must favor humidity and moderating influence of sea air.

ADDITIONAL CONSIDERATION.

In addition to the zones of exposure, other environmental factors must be considered in the revegetation plan. These are as follows:

Drought Tolerant Plants.

The resistance of drought tolerant plants is a function of both the water-storing cellular structure in conjunction with the ability to carry through extended dry periods by closing the pores of the leaf against transpiration, or by the leaf being able to turn its edge or reverse side to the sun.

Alkaline Soils.

Soils high in salt content and which cannot be readily leached and/or balanced will support the growth of certain plants.

Sterile Soil.

Due to the nature of the mining operation, new soils have been created which do not have the balanced nutrients which are considered favorable for most plant life. However, there are many vigorous plants which can thrive or can accustom themselves to ill-furnished soils. Generally, these plants will grow more slowly and will become more dense in texture than plants grown in a more favorable soil type.

Gravelly Soil.

Plants that can survive in the gravelly soils which are normally, loose, open structures, sandy and/or rocky, must have root systems that can be described as harsh and stringy. The root fibers must be very long and exploratory in order to seek out nourishment and moisture. Such plant types normally have a root system more extensively developed than the leafy portions.

Soil Binders.

The primary purpose is that of holding ground against wind or moving water. These plants must be tenacious in manner of rooting or re-rooting in a thorough occupation of the soil and efficient in all ways of slowing runoff and the erosion that results.

IMPLEMENTATION OF REVEGETATION.

As previously mentioned, the most economic and modern method available today is the hydroseeding process. In evaluating the site, it has been determined that any type of plant material introduction must consider not only the climate but also the limited growing conditions which do exist.

The critical areas are generally of low fertility, and in fact, such areas have no soils at all or are subsoils or parent materials even lower in available plant nutrients. Since fertilizers are therefore necessary for satisfactory plant growth, a slow-release type of fertilizer suitable to the plant type introduced will be added to the hydroseed slurry.

In addition to the plant list which has been developed specifically for this site, consideration will be made for legume inoculation in the hydro-seeding slurry.

Legumes are important in seeding infertile sites because they can supply their own nitrogen and survive where other plants might not. They receive their nitrogen from root-nodule bacteria which remove it from the soil air and convert it to a form usable by the plants. The nitrogen fixation process results in the fixed nitrogen becoming available for other plant species.

The site has numerous rocky uncompacted slopes between adjoining benches of different elevations. Armed thorny barrier type plants will be installed which will reduce the accessibility of the slopes to people wanting to climb them. The armed thorny plants will be interplanted with armor rock barrier berms constructed along the toes and crests of those slopes presenting hazardous conditions.

With the above discussions in mind, specific plants for revegetation of the site will be chosen from the list which follows:

BOTANICAL NAME	Available in Seed Stock	1st Exposure	2nd Exposure	3rd Exposure	Drought	Alkali	Sterile Soil	Gravelly Soil	Soil Binder	Armed/Barrier
<u>Trees</u>										
Acacia longifolia	o	o	o	o	o	o			o o	o o o
Acacia pycnantha	o	o	o o	o o	o o				o o	o o o
Acacia prunosa			o o	o o	o o					o o o
Acacia (check species)	o		o o	o o	o o				o	o o o
Achras zapota			o	o	o					
Albizzia lebbec		o	o o	o o	o	o	o			
Albizzia julibrissin			o o	o o	o					
Araucaria bidwilli			o o	o o	o					
Araucaria excelsa		o	o o	o o	o					
Agonis flexuosa	o		o o	o o	o	o				
Butia capitata			o o	o o	o					
Callistomen viminalis			o o	o o	o					
Casuarina equistefolia	o	o	o o	o o	o	o				
Casuarina (check species)	o		o o	o o	o	o				
Crinodendron dependens			o o	o o	o					
Calodendrum capense			o o	o o	o					
Coccolobis floridana		o	o o	o o	o					
Cocos nucifera		o o	o o	o o	o					
Cupressus macrocarpa	o	o	o o	o o	o		o o	o o		
Cupressus (check species)	o		o o	o o	o		o o	o o		
Cinnamomum camphora			o o	o o	o	o				
Dracena (check species)		o	o o	o o	o					
Eriobotrya japonica			o o	o o	o	o				
Erythea edulis			o o	o o	o					
Eucalyptus cornuta	o	o	o o	o o	o	o		o		
Eucalyptus ficifolia	o	o	o o	o o	o	o				
Eucalyptus lehmanni	o	o	o o	o o	o	o				
Eucalyptus linearis	o		o o	o o	o	o	o			
Eucalyptus torquata		o	o o	o o	o	o				
Eucalyptus (check species)	o		o o	o o	o	o		o		
Eugenia paniculata			o o	o o	o					
Ficus macrophylla		o	o o	o o	o	o				
Ficus (check species)			o o	o o	o	o	o			
Grevillea robusta	o		o o	o o	o	o		o o		
Juniperus torulosa			o o	o o	o			o o		
Liquidambar styraciflua			o o	o o	o					
Lagunaria patersoni		o	o o	o o	o	o				
Lyonothamnus floribundus	o		o o	o o	o		o	o		
Lysiloma siliquastrum			o o	o o	o					
Metrosideros tomentosa		o	o o	o o	o					
Myoporum laetum	o	o	o o	o o	o					
Maytenus boaria			o o	o o	o					
Macademia ternifolia			o o	o o	o					

BOTANICAL NAME	Available in Seed Stock	1st Exposure	2nd Exposure	3rd Exposure	Drought	Alkali	Sterile Soil	Gravelly Soil	Soil Binder	Armed/Barrier
<u>Trees</u> (continued)										
Melaleuca leucadendra			o	o		o	o			
Magnolia grandiflora				o o						
Olea europaea	o			o	o	o o	o o			
Phoenix canariensis						o o o	o o o			
Phoenix (check species)			o	o		o	o o o o			
Pinus radiata	o	o	o o	o o			o o o o	o o o o		
Pinus torreyana	o o	o o	o o	o o			o o o o	o o o o		
Pinus species	o	o	o	o	o		o	o	o	
Pittosporum viridiflorum		o	o	o		o				
Pittosporum undulatum			o	o		o o				
Pittosporum (check species)				o		o				
Podocarpus (check species)				o						
Quercus ilex	o	o	o	o	o	o		o		
Quercus virginiana			o o	o o	o					
Sabal palmetto		o	o o	o o				o o		
Schinus terebinthifolius			o	o	o	o	o	o o	o o	
Schinus molle				o	o	o	o	o	o	
Thuja orientalis				o						
Ulmus parvifolia				o						
Washingtonia robusta		o	o	o		o				
<u>Shrubs</u>										
Acacia armata		o	o	o		o		o		o
Acacia verticillata			o	o						
Acokanthera spectabilis		o	o	o						
Atriplex breweri	o	o	o	o						
Aeonium spathulatum			o	o						
Anthyllis barba-jovis			o	o						
Abelia grandiflora										
Arctostaphylos insularis	o	o	o	o	o		o	o		
Arbutus unedo	o			o						
Azalea (check species)				o						
Baccharis (check species)	o		o	o				o		
Berberis darwini			o	o		o o				o o
Berberis (check species)	o			o		o o				o o
Buddleja (check species)				o						
Carissa grandiflora		o	o	o						o
Coccolobis uvifera		o o	o o	o o						
Comprosmia baueri		o	o	o						
Callistemon (check species)			o	o						
Cassia splendida			o	o						
Ceanothus verrucosus	o		o	o						o
Ceanothus (check species)	o			o						

BOTANICAL NAME	Available in Seed Stock	1st Exposure	2nd Exposure	3rd Exposure	Drought	Alkali	Sterile Soil	Gravelly Soil	Soil Binder	Armed/Barrier
<u>Shrubs</u> (continued)										
Ceratostigma willmottianum			o	o			o			
Convolvulus cneorum				o						
Cistus (check species)	o		o	o	o	o		o	o	
Cotoneaster			o	o		o				
Cytissus canariensis			o	o	o	o	o	o	o	
Camellia species				o						
Coronilla glauca				o						
Cercocarpus traskiae		o	o	o	o	o		o	o	
Comarostaphylis diversifolia		o	o	o	o	o		o	o	
Dodonea viscosa	o	o	o	o	o	o				
Daphne odora				o						
Eriogonum giganteum	o	o	o	o	o		o	o	o	
Escallonia rosea				o						
Euonymus japonica		o	o	o		o		o	o	
Echium fastuosum			o	o	o	o			o	
Erica melanthera			o	o	o					
Escallonia species			o	o						
Fatsia japonica			o	o						
Griselonia littoralis		o	o	o						
Grewia occidentalis			o	o						
Grevillea species	o			o	o		o	o	o	
Hakea suaveolens		o	o	o	o		o	o		o
Hakea laurina			o	o	o		o	o		o
Heteromeles arbutiflora	o	o	o	o				o		
Hibiscus tiliaceus		o	o	o						
Hebe carnea		o	o	o		o				
Hebe (check species)			o	o		o				
Isomeris arborea			o	o	o	o	o	o		
Juniperus conferta		o	o	o	o		o	o	o	
Juniperus species			o	o	o		o	o	o	o
Jasium species				o						
Lavatera assurgentiflora	o	o	o	o						
Leptospermum laevigatum	o	o	o	o	o		o			
Ligustrum lucidum		o	o	o	o	o				
Ligustrum species			o	o	o	o				
Lupinus longifolius			o	o	o			o	o	
Lycium richi	o	o	o	o		o		o		o
Lauris nobilis			o	o		o				
Lippia citriodora				o			o	o	o	
Melaleuca nesophila		o	o	o	o	o	o	o	o	
Melaleuca species			o	o	o	o	o	o		
Mahonia species				o					o	o
Myrsine africana			o	o		o				

BOTANICAL NAME

Shrubs (continued)

BOTANICAL NAME	Available in Seed Stock	1st Exposure	2nd Exposure	3rd Exposure	Drought	Alkali	Sterile Soil	Gravelly Soil	Soil Binder	Armed/Barrier
Nerium oleander			o	o	o		o	o	o	
Penstemon cordifolius	o		o	o	o		o	o		
Pittosporum crassifolium		o	o	o	o	o	o	o		
Pittosporum (check Species)			o	o	o		o			
Polygala dalmaisiana			o	o	o					
Prunus lyoni	o		o	o		o		o		
Pyracantha species			o	o		o				o
Rhus laurina	o		o	o		o	o	o		
Rhus ovata	o		o	o		o	o	o		
Romneya coulteri	o		o	o				o		
Raphiolepis species		o	o	o						
Sollya heterophylla			o	o						
Steptosolen jamesoni			o	o						
Westringia rosmariniformis		o	o	o	o					
Cortaderia selleana			o	o	o		o	o	o	o
Yucca	o			o	o	o	o	o	o	o

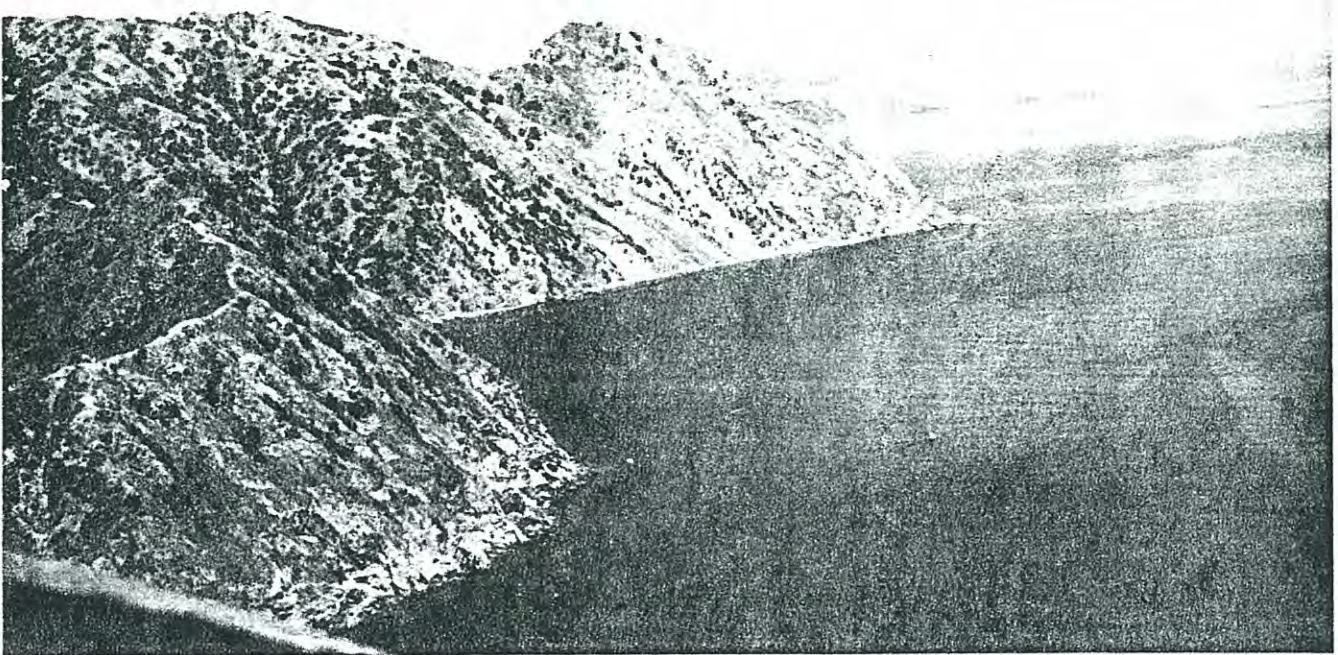
Vines

Bougainvillea species			o	o	o		o	o		o
Boussingaultia baselloides				o	o					
Distictis laciflora				o						
Gelsemium sempervirens				o						
Hedera canariensis			o	o	o		o	o	o	
Hardenbergia species	o			o		o				
Lonicera hildebrandtiana		o	o	o						
Phaedranthus buccinatorius		o	o	o	o					
Polygonum auberti				o			o			
Micromeria chamissonis				o					o	
Vitis girdiana			o	o				o		

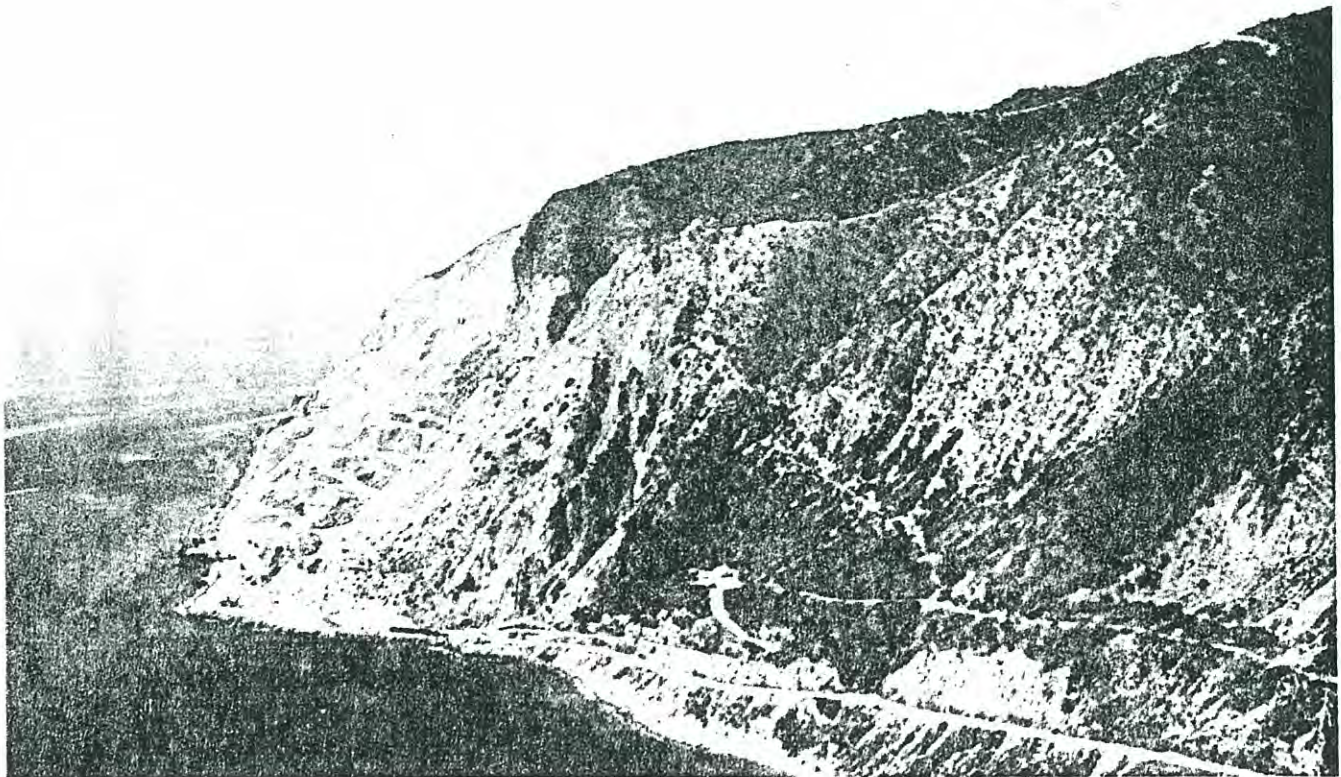
Succulents

Ice Plant species		o	o	o			o	o	o	
Aeonium decorum				o						
Oliveranthus elegans				o						
Othonna crassifolia				o						
Sansevieria species				o						
Opuntia species			o	o	o	o	o	o	o	o
Dudleya pulverulenta			o	o				o		
Agave shawii			o	o	o	o	o	o	o	o
Aloe			o	o	o	o	o	o	o	
Cereus species				o						

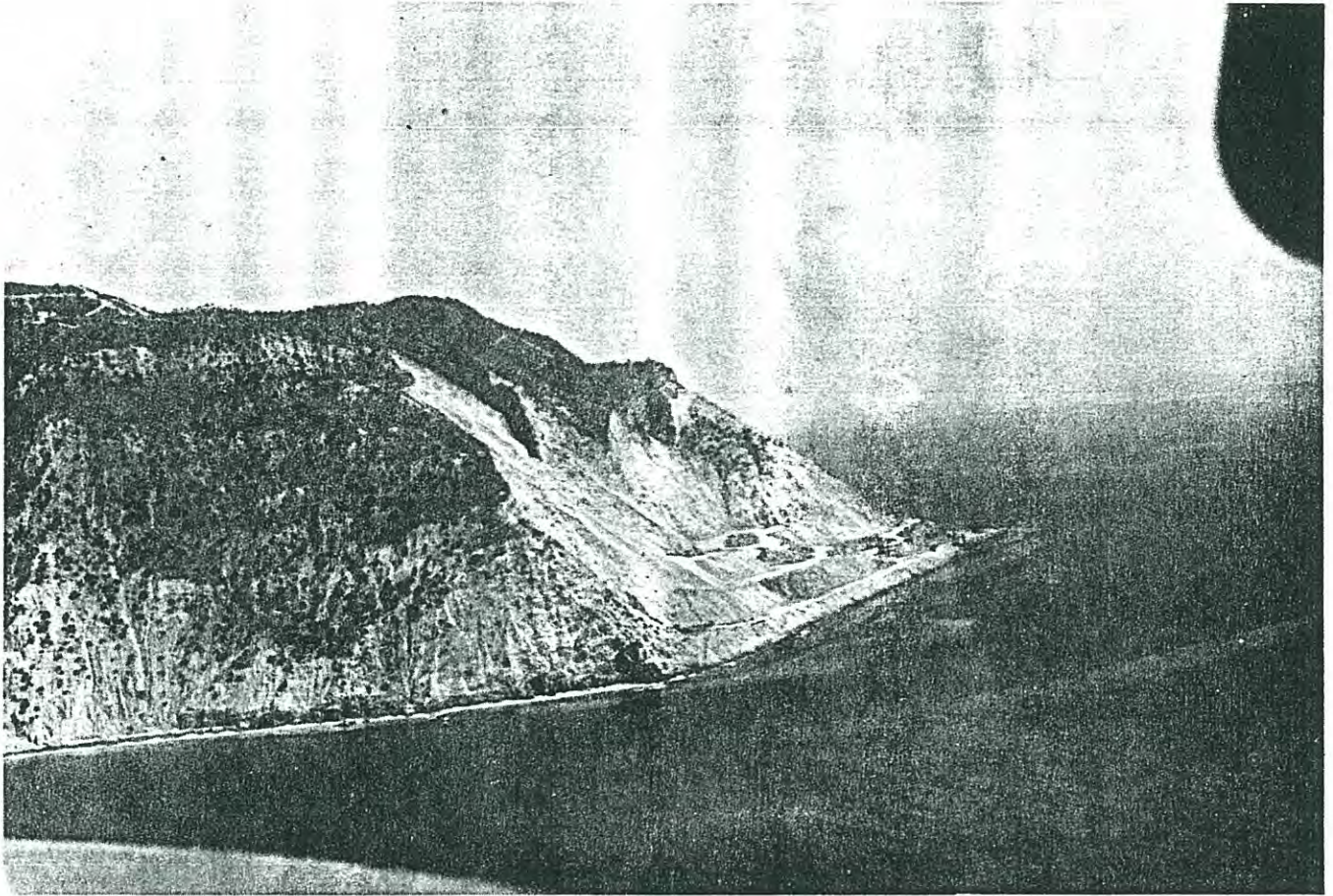
THE PIPESTONE GROUP



ABOVE: TYPICAL, SEAWALL, COASTLINE TOPOGRAPHY CATALINA ISLAND.
BELOW: OBLIQUE VIEW OF PEBBLY BEACH QUARRY, LOOKING SOUTH.



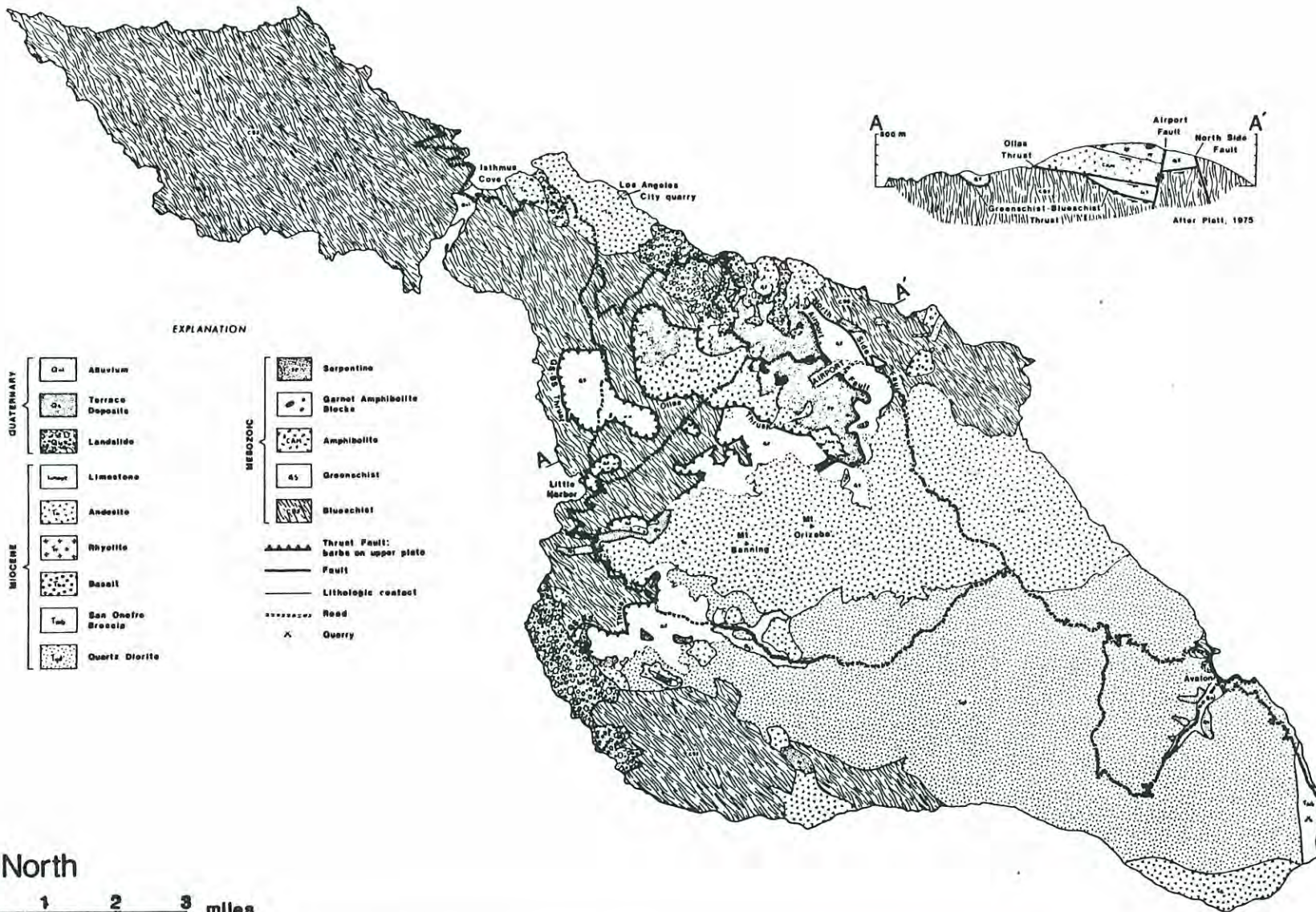
THE PIPESTONE GROUP



OBLIQUE VIEW OF PEBBLY BEACH QUARRY, LOOKING NORTH.

APPENDIX F

EXHIBITS

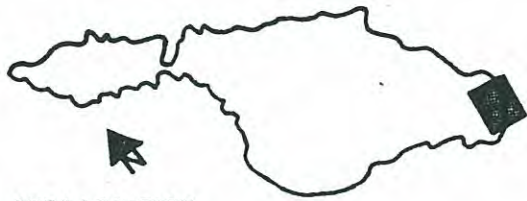


▲ North
 0 1 2 3 miles



Geologic Map and Structure Section of Santa Catalina Island

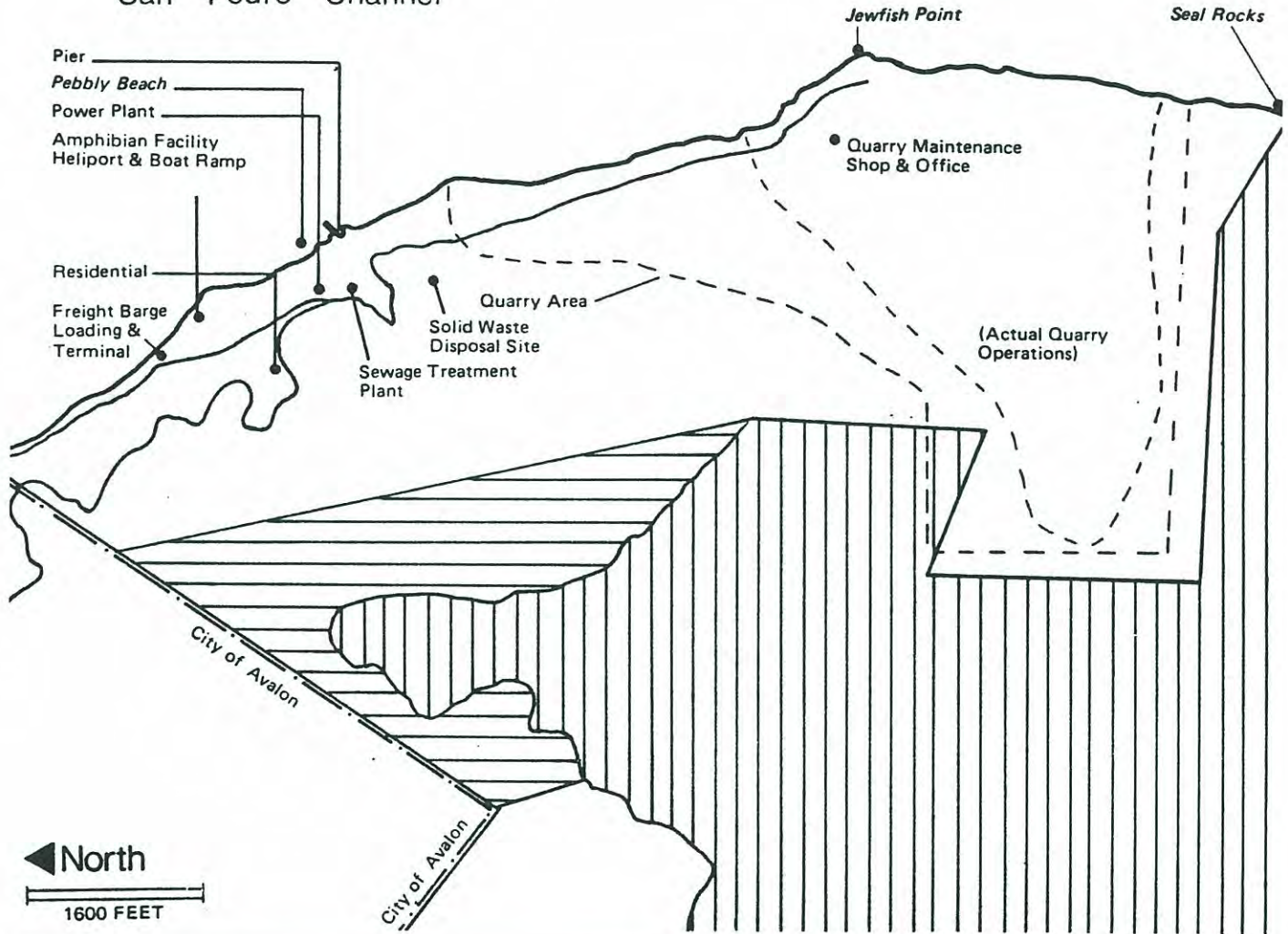
SOURCE: California Division of Mines and Geology



AREA LOCATION

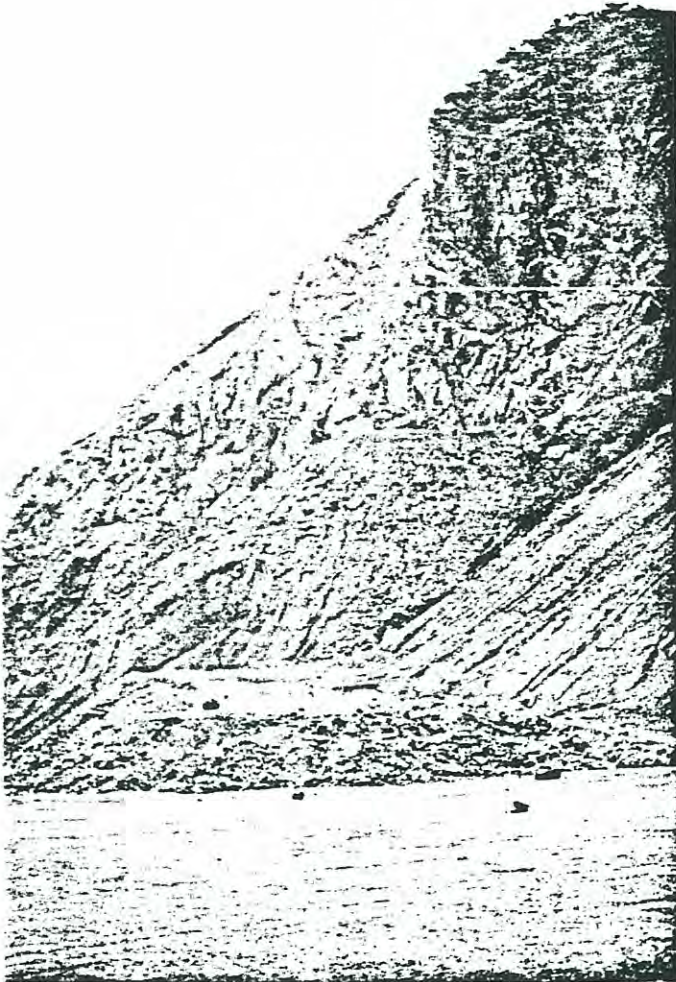
-  Santa Catalina Island Company (Non-Easement, Non-Conservancy)
-  Conservancy Area Outside of Open Space Easement
-  Open Space Easement/Conservancy

San Pedro Channel

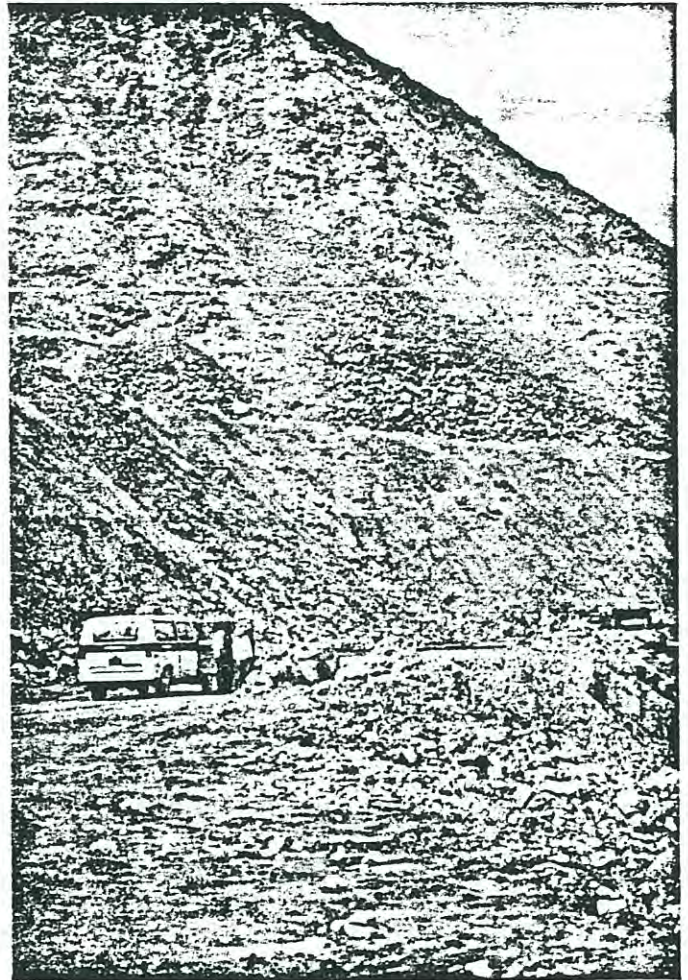


Surrounding Land Uses
Pebble Beach Quarry

SOURCE: County of Los Angeles



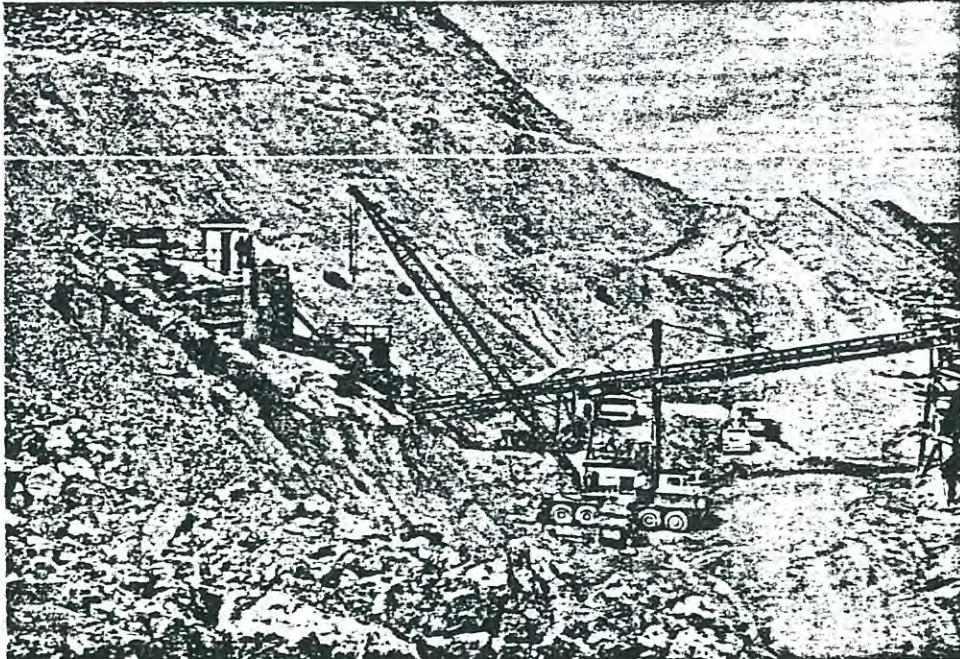
Production Highwall, Muck Piles



Unconsolidated Bench Faces



Site Photographs
Pebbly Beach Quarry



Materials Processing Area



Appendix F 2 pgs 1. Geologic Map 2. Site photographs

APPENDIX G

BIBLIOGRAPHY

APPENDIX G

BIBLIOGRAPHY

1. California Geology, November 1984, Volume 37, No. 11, "Geology of Santa Catalina Island," Stephen M. Rowland, pp. 239-251.
1. Santa Catalina Island Local Coastal Plan, November, 1983, Los Angeles County Department of Regional Planning, pp. II-124, II-130, II-139.

APPENDIX H

PROJECT CONSULTANTS

APPENDIX H

PROJECT CONSULTANTS

1. Don Cotton
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Connolly-Pacific Company
Marine Contractors
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LIST OF AGENCIES TO NOTIFY

- ° Los Angeles County Department of Public Works (Flood Control)
- ° U.S. Army Corps of Engineers
- ° State Department of Fish and Game
- ° U.S. Department of Fish and Wildlife
- ° California Coastal Commission
- ° State Lands Commission
- ° State Division of Mines and Geology
- ° National Marine Fisheries

Old

Executive Summary

In April of 1987, Connolly-Pacific Company was granted a Surface Mining and Reclamation Plan Permit No. 86136-(4) for the Pebbly Beach Quarry located in the vicinity of Jewfish Point at the extreme southwest end of Santa Catalina Island.

As part of the Surface Mining and Reclamation Permit, Condition 8f, Connolly-Pacific Company is required to submit a Reclamation Plan ~~update~~ report for the Pebbly Beach Quarry operations.

ten year

Justice & Associates has been retained by Connolly-Pacific to provide an update report for their Pebbly Beach Quarry operations. This update report focuses on current mining operations and pertinent changes that have occurred over the past ten-year period.

General Operation/Ownership Information

The Pebbly Beach Quarry is an existing rock quarry located at the Southeast end of Santa Catalina Island at Jewfish Point, 22 miles south of the Palos Verdes Peninsula. The Pebbly Beach Quarry encompasses approximately 208 acres.

The Santa Catalina Island Company is the current landowner and is the owner of all mineral rights.

The Connolly-Pacific Company currently retains a lease on the property and operates the Pebbly Beach Quarry for the purpose of quarrying and removal of aggregate materials. The lease with Santa Catalina Island Company is due to expire in the year 2001.

Mining Operations

Since 1934, Connolly-Pacific has been extracting aggregate materials from the Pebbly Beach Quarry site. Over the past ten years, Connolly-Pacific has concentrated their efforts portion of the Pebbly Beach Quarry.

The method of excavation is typical of cliff edge aggregate mining. After blasting material from the cliff the material is removed by a dragline or other heavy equipment directly from the cliff edge while quarrying operations proceed into and along the cliff edge.

As part of the SMARA requirements mining activities are recorded in the annual mining reports. The mine aggregates extracted are used for a variety of harbor construction related projects.

Connolly-Pacific plans to continue mining for aggregate materials until the source of materials are depleted. The life of the quarry is estimated to be approximately 25 years.

Description of Surrounding Properties

The Pebbly Beach Quarry lies at the southeast end of Santa Catalina Island at Jewfish Point. As indicated in the approved Reclamation Plan the quarry is surrounded by industrial operations and open space areas. Properties to the north near Pebbly Beach, support several industrial properties, including the Southern California Edison power plant, the Avalon Sewage treatment plant, a sanitary landfill and a freight Barge loading terminal. The town of Avalon lies approximately one-half mile further north. Properties to the south and west are classified as Open Space and a Conservation easement (not developed) and the Pacific Ocean lies towards the east, respectively.

Reclamation

Reclamation activities are not anticipated until the source materials are depleted or until the landowner chooses not to lease the property for quarry purposes.

Cost of Reclamation Update

In April of 1987, Connolly-Pacific Company submitted cost estimates for Reclamation in accordance with the County's Surface Mining and Reclamation Plan Permit ordinance.

Since the quarry still contains vast quantities of aggregate resources and may continue to be in operation well into the next century, it is difficult to estimate the reclamation costs. The cost values would be highly speculative and would not take into account any reclamation process advances.

Table 1 represents the anticipated cost divided into two separate cost factors; reclamation and maintenance.

TABLE 1

<u>TASK</u>	<u>ESTIMATED COST*</u>
<u>Reclamation</u>	
1. Final blast for loose materials	
2. Grading	
3. Erosion and sedimentation control	
4. Slope stabilization	\$65,000 (1 - 4)
5. Revegetation	\$.03 - .11/sq. ft. .05 - .15/sq.ft.
<u>Maintenance</u>	
1. Site Inspection	\$ 1,200.00/visit (6 to 8 visits per year)
2. Regrading or Revegetation	Varies as needed
3. Cleaning of sedimentation traps	\$ 3,200.00 (once a year)

*1997 dollar values

Assessment of Future Mining Operations

The Pebbly Beach Quarry encompassing 208 acres and is operated by the Connolly Pacific Company. The property is leased from the Santa Catalina Island Company and is used for aggregates mining purposes.

As previously stated in the April 1987 Reclamation Plan, approximately 40 million tons of rock has been excavated and removed from the quarry. The Plan also depicts the areas that will be mined during the period of the existing lease agreement.

Some of the foreseeable obstacles, which may restrict future mining operations, are changes in current lease agreements and alterations to County land use policies. If there are no changes to the current lease agreements and County policies, there should not be any obstacles that could limit the extent of future mining operations.

Connolly-Pacific plans to continue mining in harmony with the current Reclamation Plan, permit conditions and applicable regulatory requirements.

Closure

We appreciate opportunity to be of service to you in this project. If you should have any questions or comments regarding this report, please do not hesitate to contact us at your convenience.

Respectfully yours,

Tom Taylor R.E.A. R.E.P.
Justice & Associates



DOCUMENT TRAVELER

COMPANY NAME: Connolly-Pacific JOB NUMBER: C5187

FILE NAME: Pebble Beach Quarry ~~State~~ County of LA Update Report

DATE	ROUTED		COMMENTS	"E" DRIVE DIRECTORY LOCATION:	SAVED TO DISK? <input type="checkbox"/>
	FROM	TO			
28 Mar	2A	H	TYPED	REPORTS	
3/24	T. b	meb	Type Changes		
3/28	Me	TDM	Changes made	REPORTS	-

Shady Beach Quarry

Surround Land Use

Acres disturbed over the past 10 yrs.
and location of area.

~~Tons Removed~~. Don't put tons in this report per Jim

Remaining life left to mine

Lease with Santa Catalina Island Co is good until?

Copies of Annual Reports.

Update ~~Cost~~ Estimate

PEBBLY BEACH QUARRY RECLAMATION PLAN

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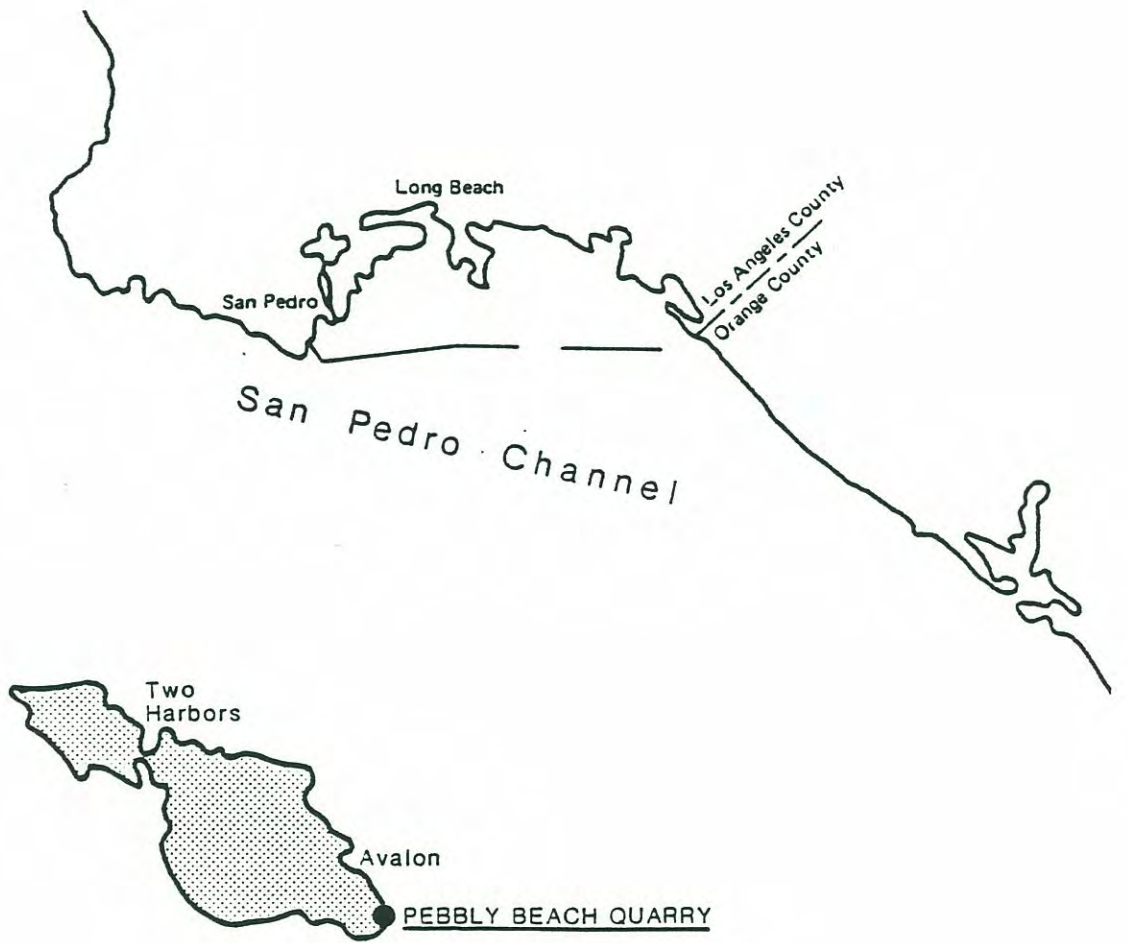
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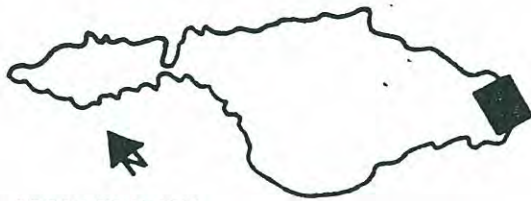
- A. Environmental Setting
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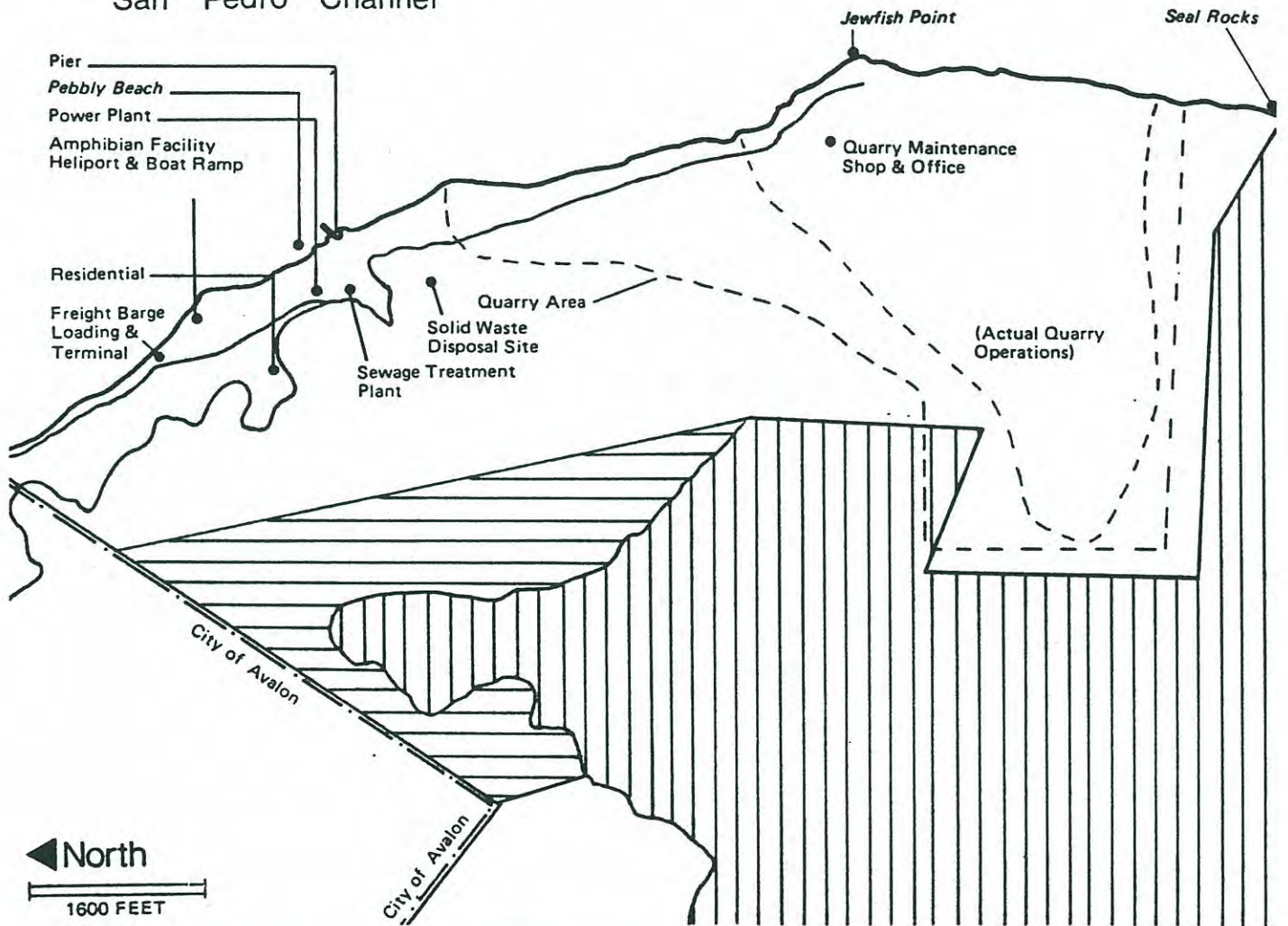
Vicinity Map
Pebble Beach Quarry
SOURCE: County of Los Angeles



AREA LOCATION

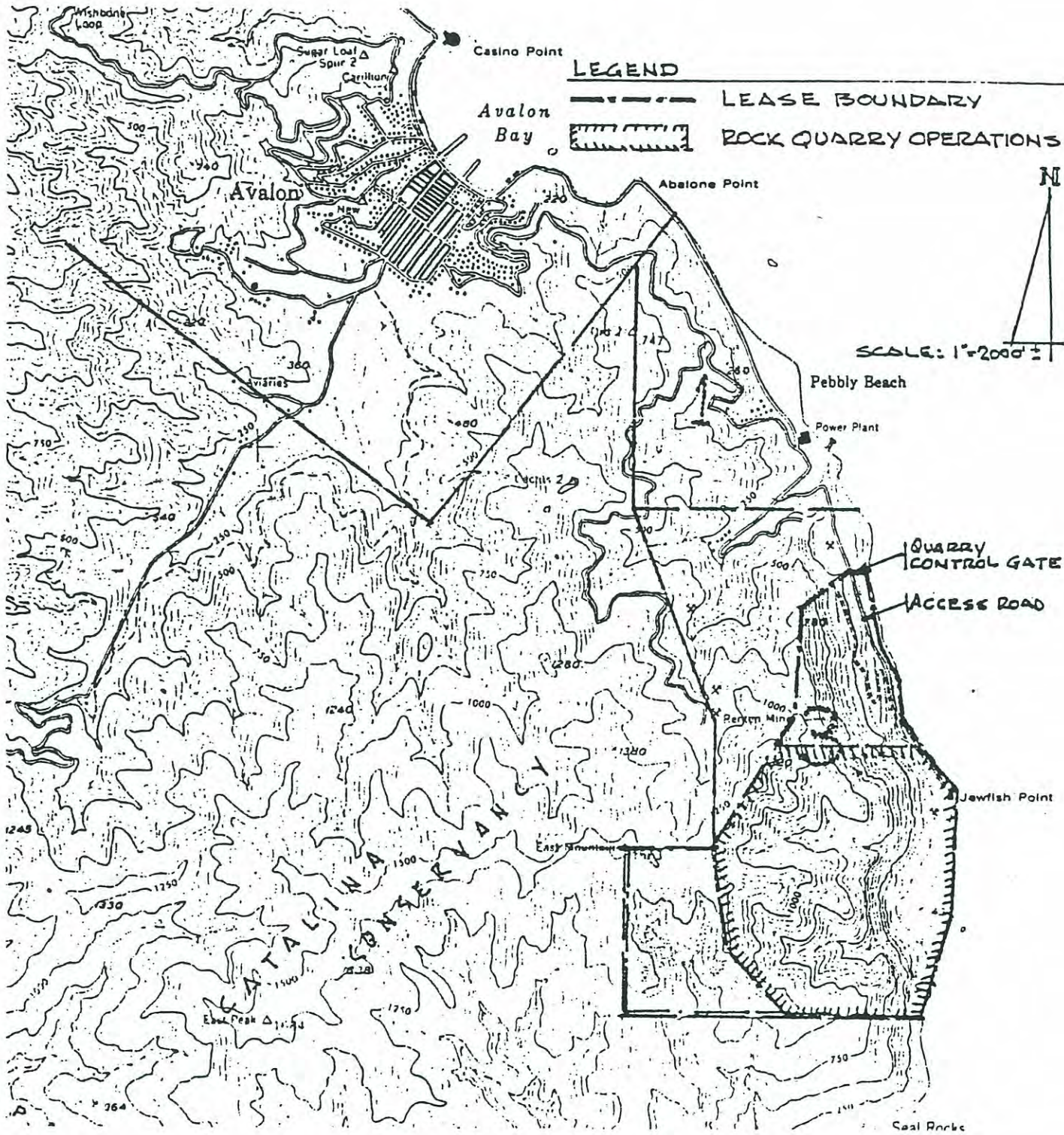
-  Santa Catalina Island Company (Non-Easement, Non-Conservancy)
-  Conservancy Area Outside of Open Space Easement
-  Open Space Easement/Conservancy

San Pedro Channel



Surrounding Land Uses
Pebble Beach Quarry

SOURCE: County of Los Angeles



Pebble Beach Quarry Lease Area Boundaries

II. PROJECT DESCRIPTION

A. Area Characteristics

The Pebbly Beach Quarry lies at the southeast end of Santa Catalina Island at Jewfish Point, 22 miles south of the Palos Verdes Peninsula and approximately two hours by boat from the San Pedro Harbor. The quarry encompasses about 208 acres of seacliff between Pebbly Beach and Seal Rocks. Graded but unimproved private roadways from Avalon provide land access to the subject site, and mooring buoys lying directly offshore permit barges to receive quarried materials from the site. Two large cranes operate at the loading areas near Jewfish Point, and a materials processing area covers a graded bench just behind the primary loading area. The Connolly-Pacific Company proposes to establish an additional stiff-leg crane near the existing cranes in order to provide back-up loading capabilities.

As indicated above, the Pebbly Beach Quarry has been in operation for over 54 years. The Connolly-Pacific Company has been extracting materials from the site since 1934, and the company's current land lease from the Santa Catalina Island Company may extend through 2001.

Land uses surrounding the quarry site include industrial operations and open space areas. Properties to the north, near Pebbly Beach, support several industrial land uses, including the Southern California Edison power plant, the Avalon sewage treatment plant, a sanitary landfill and a freight barge loading terminal. The town of Avalon lies approximately one-half mile farther north. Lands to the south and west lie within an Open Space and Conservation easement, and no development has occurred on these properties. The Pacific Ocean (San Pedro Channel) lies to the east.

B. Mining Operations

The Pebbly Beach Quarry produces rock construction materials which range in size from sand-sized grains to boulders which measure several feet across and weigh upwards of several tons. The large products are used primarily in the construction of marine facilities (e.g. breakwaters and artificial islands), and the smaller materials can be used for a number of construction projects. The materials consist of volcanic breccias and sandstone conglomerates.

The product is mined by tunneling into the cliff face, setting numerous explosive charges and blasting the material from the cliff. As the material falls, it breaks into varying sized boulders which may be broken down further during processing. A crusher and sorter are set up in the materials processing area located onsite, and these machines crush the rocks to ordered specifications and then transport the finished products to onsite stockpiles or to waiting barges via crane.

The processing area and loading areas are shown on the site plan located in the back pocket of this report.

III. RECLAMATION PLAN

A. Goal of Plan

The nature of the quarry operation is such that the site will not be reclaimed until the source materials are depleted or until the landowner chooses not to lease the property for quarrying purposes. Source materials are extracted directly from the cliff face, and quarrying proceeds into and along the cliff face. Therefore, final grading and revegetation will not occur until quarrying activities cease altogether.

The method of reclamation via final grading and revegetation is described in detail in this section. In general, reclamation will occur in four zones as follows:

Zone 1: Production Areas

Production areas will be graded to direct surface water runoff toward swales along the inner edge of the beach. The swales will serve to slow surface flow and thereby minimize surface runoff into the ocean.

Zone 2: Unconsolidated Bench Faces

The outer edges of slope faces will be graded at a 1:1 slope and planted with native vegetation. Slopes steeper than 2:1 will be bordered at the tops and toes by armor rocks and thorny barrier plants, and the slopes themselves will be revegetated.

Zone 3: Shoreline Slope

Shoreline slopes will be protected from erosion and unwarranted trespass by larger armor rocks.

Zone 4: Production High Walls

Upon cessation of mining, a final blast will be taken to loosen debris, and the high wall will be scaled to remove any loose rocks or overhangs. The resultant muck pile will be left at the base of the high wall at its natural angle of repose. Both the high wall and muck pile will be revegetated, and thorny barrier plants may be used along the muck pile base to discourage access.

Exhibit A, contained in the back pocket of this report, provides a visual representation of the reclamation plan. The plan is described in detail on the following pages.

B. Ultimate Use of Land

Since 1934, some form of quarrying activity has occurred on the subject site. Initially, the lease boundaries included a smaller land area, but additional acreage has since been added to the quarry. It now encompasses approximately 208 acres of land.

The current operator, the Connolly-Pacific Company, began mining the site in 1934 and may continue to do so beyond the year 2001. When the current lease expires, a new lease may be granted to Connolly-Pacific or a similar concern, or the Santa Catalina Island Company, the organization which owns the site, may choose to revert the property to its original open space state or to develop the property in accordance with long-range plans.

The Santa Catalina Island Local Coastal Plan, a Los Angeles County document which guides island development, calls for quarry operations to continue on the site. This plan has no specific target date, but it could be amended at any time. (See reference 2, Bibliography)

Since the quarry activities and reclamation procedures will leave the site in a condition approximating natural conditions, the best use of the reclaimed site would be open space. In fact, the reclamation plan has been designed to revert the site to its original condition and to incorporate the site into the adjacent Open Space and Conservation Easement area.

Any other land uses proposed in the future would need to conform to land use policies and restrictions in effect at that future date. All potential land uses can not be anticipated at this time, but for the purpose of this report, it can be stated that open space uses should prevail.

Proposed Reclamation Methods

1. Soil Salvage

A very thin soil layer covers the cliff tops above the quarry operation. The soils are held together by the grassy chaparral vegetation.

During the actual blasting and mining of the site, the soil is incorporated into the rubble pile which forms at the base of the cliff, and it is therefore unsalvageable. As the rocks are crushed into pebble and sand sized grains, the soil becomes part of the gravel mixture. The soil cannot be recovered, and even if it could, it would be necessary to preserve it for unreasonable periods of time due to the nature of the mining operation and the projected date for quarry reclamation.

Since the soil is unsalvageable, rapid soil growth will have to be encouraged on the barren slopes and benches during the reclamation process. Slopes may be graded in a stair-step manner to allow root systems to develop quickly. Hydroseeding is the proposed method of revegetation. The hydroseeding process mixes fertilizers and legumes with plant seed material so that new plants on infertile areas are provided with vital nutrients. These nutrients enable the plants to establish themselves more rapidly and thereby begin the process of soil reconstruction.

2. Grading

The nature of the rock quarry operation is such that very little backfilling of material will be required. Since this quarry is on the Catalina Coast, all

C. Relationship to General Plan and Land Use

1. General Plan Considerations

The Santa Catalina Island Local Coastal Plan serves as the adopted County planning document for Catalina Island. This Local Coastal Plan forms part of the County of Los Angeles General Plan Coastal Element and it has been formulated to adhere to general planning policies set forth by the County General Plan. If a proposed project is found to be consistent with the Santa Catalina Island Local Coastal Plan, it may be considered consistent with the County General Plan.

The Local Coastal Plan's New Development section describes existing land uses within specified planning areas and outlines the type of new development which should occur during the life of the Plan. The Pebbly Beach Quarry lies within the Pebbly Beach-Seal Rocks Plan area, and the Plan recognizes the quarry area as "an important source of breakwater armor rock and rubble". Land use policies recommend that these mineral extraction activities be continued, and the related land use map indicates the area in which these operations should be located.

Based on the above findings, it can be concluded that the existing quarry is consistent with the Santa Catalina Island Local Coastal Plan and is therefore consistent with the County General Plan.

Since the quarry has a lifetime of at least 25 more years, its long term use is consistent with a long range planning document. Land use policies may change over time, and it is anticipated that reclamation activities will be consistent with these changes. In any case, the reclamation plan may be amended to conform to prescribed land use policies.

2. Zoning Considerations

At present, the subject site is zoned M-3, as are the majority of surrounding properties. The M-3 zone is a multi-use zone, and several uses are permitted upon the granting of a conditional use permit. The open space uses proposed by the reclamation plan do not require conditional use permit approval. If at any time during or after reclamation a new use is proposed, it must be reviewed for conformance with the requirements of the M-3 zone.

D. Cost of Reclamation

The County Surface Mining Permit Ordinance requires that the cost of reclamation activities of completion be estimated. Costs should be computed at the estimated cost of the project at the time it is accomplished; that is, the actual end date of quarry operation must be stated, and cost estimates should include an assumed inflation rate from the present date to the end date.

The quarry still contains great quantities of material and may continue to be in operation well into the next century; therefore, estimation of reclamation costs becomes a difficult task. Cost figures would be highly speculative and would not take into account reclamation process advances at the time of actual reclamation, therefore future costs cannot be estimated at this point in time.

The anticipated costs, however, can be divided into reclamation costs and maintenance costs as follows:

Reclamation Procedures

- ° Final blasting for loose materials
- ° Final grading to achieve desired topography
- ° Construction of erosion and sedimentation control facilities
- ° Slope stabilization
- ° Revegetation via hydroseeding

Maintenance

- ° Periodic site inspection
- ° Regrading or revegetation as necessary
- ° Cleaning of sedimentation traps.

Table 1 provides estimates of these costs in 1986 dollars.

E. Assessment of Plan on Future Mining Operations

The operator of the Pebbly-Beach Quarry, the Connolly-Pacific Company, has leased from the Santa Catalina Island Company 208 acres of land for mineral extraction purposes. The property incorporates approximately 7605 feet of shoreline, and it extends over 2000 feet up the seacliff. The existing lease agreement permits Connolly-Pacific to mine the site beyond the year 2001.

As of January of 1986, 40 million tons of rock had been removed from the quarry. The quarry maps included in this report indicate those portions of the site from which material has been extracted and furthermore, they reveal which areas will be mined during the period of the existing lease agreement. The quarry operators plan to proceed in accordance with this plan, and reclamation will occur in accordance with the procedures outlined herein.

Ultimately, all quarried areas must be reclaimed, and the barren slopes will be revegetated with native plant materials so as to blend in with existing untouched slopes. Due to the nature of the site and the quarrying operation (see description in the sections of this report titled "Geology" and "Mining Operations"), these slopes and adjacent slopes could readily yield additional rock materials without significant impact on the environment. Any reopened quarry areas would be subject to later reclamation similar to that proposed by this report.

The foreseeable obstacles to future mining operations on reclaimed cliffs include changes in existing lease agreements which might restrict mining operations and alterations to County land use policies which could limit the extent of the use. Current lease agreements and General Plan policies encourage the existing extraction operations. As long as these policies are in effect, and given the nature of reclaimed slopes, the reclamation plan as proposed should not hinder future mining operations.

COST ESTIMATES

<u>ACTIVITY</u>	<u>ESTIMATED COST</u>
Reclamation Procedures	
1. Final blast for loose material)	
2. Grading)	
3. Erosion and sedimentation control)	\$ 50,000.00
4. Slope stabilization)	
5. Revegetation)	\$.03-.11/sq.ft.
Maintenance	
1. Site Inspection	\$ 1,000.00/visit (6 to 8 visits per year)
2. Regrading or revegetation	Varies as needed
3. Cleaning of sedimentation traps	\$ 3,000.00 (once a year)

RON LACAYO
(818) 458-4943

- Supervising Civil eng. 3

Charles Nestle
(818) 458-4923

- Geologist.

met 8/14/96

- 1.) letter addressing water edge mat, removed soon. - Jim will handle - letter dated 5/19/96
- 2.) Rec. plan update - Done April 97 - Date is soft. -- Address how to update the report info. - i.e. copy of map to accompany annual report:

For LA
office
review

- A.) Permit fill area. should be discussed
- B.) New mat, stored at water edge to be noted.

3/24/97

Community Plan -
Catalina - Pebble Beach

(1)

- 1.) Jim does not think passing the So. Bandy is an issue.
- 2.) we need to address annual report and decide what to do about the 10 yr. review.
- 3.) Not sure if 10 yr. review means public hearing we want to avoid that if possible.
- 4.) we had talked about mail being shipped to San Diego - Jim will ✓ status.
- 5.) we wanted to submit Taps on annual basis to show LA. that area is being shipped out... and less of a problem or potential problem.
- 6.) Last June 96 was last report filed.
- 7.) Jim not sure if Digitized map will be yearly or at least on same schedule as Annual Mining reports.
- 8.) The new map should be ok for this report due mid 97.
- 9.) July 10 1995 inspection stated concerns about stuffing into ocean.
- 10.) Area south of Bandy is pre 1976 and so not much concern.
- 11.) The 10 yr. report is up to us to detail. I suggested we take the Rec plan & address each section to define what has remained unchanged/changed. - Address the letter req. stuffing & the fish assume stuff... Annual reports & inspections should be adequate.

(2)
12.) Can't really start Rec. Plan due to opening on the area disturbed.

13.) Qty of areas disturbed grows slightly \therefore fin. assum may be affected.

14.) AN April 25/87 letter indicates April ~~25~~²²/87 as the "Granted" date. Permit no. 86136-(4)
Pebble Beach

Empire site. 86137-(4)

1.) Granted April 24th

2.) 1992 - last removed mat'l 7600 TONS...
county knows about this...

Q - will L.A. send our report to OMR for review.

Real concern is the lack of activity @ Empire
& tripping Rec. Plan &/or fin. assum.

①
Connolly-Pacific
3-21-91

Beach Quarry
- Reilly Site

Slope sloff into - State Lands - along southeast corner of map - Find out about the material on this corner has it gone to San Diego -

Last annual report sent in June -
Letter 8-19-96, meeting regarding materials to San Diego -

Send a copy of the annual map with the annual report

Connolly-Pacific has the equipment to do cross section etc. from photo

95 - Concerns. Soils report.
July 10, 1995 inspection for La County
Slope concerns of material.

Copy of Rec Plan
Company clip's

(4-24-87 approved)
* 10 yr. Review + Amendment Plan was approved.
Speak about Rec. Plan and anything that has
changed from the rec plan.

Method + typical operation has not change

Table of content of Rec Plan (numbers)
and answer each section with "no change"
or subtle changes.

- recent concern - maps

\$ 417,000

FA seems to be ok and labor rates are
current (get copy).

From June of 1993 to current June 94
areas has increase, we will need est. for the
new distrib. areas update the FA + the bonds
put

Permit

86137-4

Approved
4-22-87 (4-24-87)
Pebble Beach Empire - Permit # 86137-4

Annual Review (approved April 22, 24 1987) (3)
Lay out the conditions for Both Plan

update Rec Plan

Use Table of Content as the path to answer question
of "No Change" or changes.

update FAS with new areas disturbed

Engine moved 7600 tons in 1992
off Empire site

CONNOLLY-PACIFIC CO.

Marine Contractors
Berth D40
1925 Pier D St.
Long Beach, CA 90802
Phone: (310) 437-2831
Fax: (310) 435-2035

Transmittal

To: Mike Justice
Justice & Associates
801 Pacific Coast Hwy., Ste 200
Seal Beach, CA 90740

From: Jim Kruger

Date: 9/12/96

Subject: Reclamation Plan Approval Conditions

Enclosed please find copies of the Hearing Officer's letters relating to each quarry. These letters list the conditions we have been reviewing, particularly that of the 10 year reclamation plan review report.

Pebbly Beach Quarry	Reclamation Plan Approved:	5/29/87
	Surface Mining Permit No:	86136
	10 year report due:	5/29/97
Empire Quarry	Reclamation Plan Approved:	5/29/87
	Surface Mining Permit No:	86137
	10 year report due:	5/29/97

RECEIVED

MJ..... SEP 13 1996 MM..... SP
 SJ..... CJ..... R
 MiB..... LL..... ~~LL~~ CJ.....
 ST..... TT..... VR.....
 KR..... File.....
 MeB..... Follow Up.....

CONFIDENTIAL

Los Angeles County
DEPARTMENT OF
REGIONAL PLANNING
320 West Temple Street
Los Angeles
California 90012
974-6401

Norman Murdoch
Planning Director

CERTIFIED-RECEIPT
REQUESTED



April 28, 1987

Connolly - Pacific Company
1928 Water Street
Long Beach, California 90802

Attn: Ralph Larison

Dear Sirs:

RE: SURFACE MINING PERMIT, RECLAMATION PLAN,
AND EXPLOSIVES PERMIT NO. 86136-(4)
To allow rock quarry operations within
a 208 acre site.
Pebbly Beach area of Catalina Island
Catalina Zoned District, Zone M-3

The case hearing officer on April 22, 1987, GRANTED the
above described permit. Documents pertaining to this grant
are enclosed.

You should carefully review each condition of the grant. In
particular, your attention is called to Condition No. 2
requiring the filing of the enclosed affidavit.

The hearing officer's decision may be appealed to the Regional
Planning Commission at the office of the Commission's secretary,
Room 170, Hall of Records, 320 West Temple Street, Los Angeles,
California 90012. Contact the Commission's secretary for the
necessary forms and the amount of the appeal fee at (213)
974-6409. The appeal must be postmarked or delivered in person
within 15 days after this notice is received by the applicant.
The hearing officer's decision may also be called up for review
by the Regional Planning Commission during the appeal period.
This grant will not become effective until and unless this
period has passed without an appeal or call for review.

COPY

Connolly - Pacific Company
April 28, 1987
Page 2

This grant affects the following described property:

Assessor's Parcel 4:

As shown on Los Angeles County Assessor's Map #59,
Book 7480, Page 45.

For further information on appeal procedures, compliance with conditions or any other matter pertaining to this grant, please contact the Variances and Permits Section at (213) 974-6446.

Very truly yours,

DEPARTMENT OF REGIONAL PLANNING
Norman Murdoch, Director of Planning

Richard Frayin for
John Schwarze, Administrator
Zoning Administration Branch

JS:RF:eh

Enclosures: Affidavit; Findings and Conditions

cc: Commissioners; Zoning Enforcement; Building & Safety;
Road Section;
Santa Catalina Island Co., P. O. Box 737, Avalon, CA 90704
Cotton/Beland/Associates, 1028 N. Lake Ave., #107, Pasadena
CA 91104; James Pompy, Div. of Mines and Geology, Mine
Reclamation Program, 610 Bercut Dr., Sacramento, CA 95814
Dept. of Public Works, Drainage and Grading Section, Attn:
Frank Williams, 550 So. Vermont Ave., Los Angeles, CA 90020

Please complete this form and return to:

The Department of Regional Planning
320 West Temple Street
Los Angeles, California 90012



ACCEPTANCE FORM

STATE OF CALIFORNIA }
COUNTY OF LOS ANGELES } ss

SURFACE MINING PERMIT, RECLAMATION PLAN AND
EXPLOSIVES PERMIT NO. 86136-(4)

I, the undersigned state:
We

I am the owner
We are

of the real property described in the above-numbered case.

I am aware of, and accept, all the stated conditions in said
We are
SURFACE MINING PERMIT, RECLAMATION PLAN AND
EXPLOSIVES PERMIT NO. 86136-(4)

Executed this 18TH day of MAY, 19 87.

I certify (or declare) under the penalty of perjury that the foregoing is true and correct.
We

(Where the owner and applicant are not the same, both must sign)

Type or Print

Applicant Name CONNOLLY-PACIFIC Co.
Address 1925 WATER ST.
City, State LONG BEACH, CA 90802
Signature R.A. Everist
Chmn.

Owner Name Santa Catalina Island Co.
Address P. O. Box 737
City, State ANAHEIM, Ca. 92704
Signature [Signature]

This signature must be acknowledged
by a notary public. Attach appropriate
acknowledgements.

State of California
County of Los Angeles ss.



On this the 18 day of May 1987, before me,

Kris Williamson
the undersigned Notary Public, personally appeared
Payson H. Offield

personally known to me
 proved to me on the basis of satisfactory evidence
to be the person(s) who executed the within instrument as
Vice President or on behalf of the corporation therein
named, and acknowledged to me that the corporation executed it.
WITNESS my hand and official seal.

Kris Williamson
Notary's Signature

State of California
County of Los Angeles ss.



On this the 18 day of May 1987, before me,

Kris Williamson
the undersigned Notary Public, personally appeared
R. A. Everest

personally known to me
 proved to me on the basis of satisfactory evidence
to be the person(s) who executed the within instrument as
Chairman or on behalf of the corporation therein
named, and acknowledged to me that the corporation executed it.
WITNESS my hand and official seal.

Kris Williamson
Notary's Signature

Surface Mining Permit,
Reclamation Plan, and
Explosives Permit No. 86136-(4)

HEARING OFFICER'S FINDINGS AND ORDER

FACTUAL SUMMARY:

The request is to continue the operation of an existing rock quarry located in the Pebbly Beach area of Santa Catalina Island. A reclamation plan and explosives permit are included in this request.

The 208 acre lease site is irregular in shape and steeply sloping in terrain.

The site is bounded by the Pacific Ocean on the east, undeveloped land on the south and west, and industrial uses on the north.

Access to the property is by private graded dirt roads.

The site is developed with areas of mining activity along the ocean cliffside of the easterly boundary of the site as well as the stock piles and loading facilities. The reclamation profiles show the various benches and slopes with the proposed armor rock piles and final slope finishing treatments. Most of the site is to remain undeveloped as open space.

A magazine exists on the site which stores more than 100 pounds of explosives.

The subject property is zoned M-3 (Unclassified Zone). That zone requires approval of the above cases to continue the quarry operations. The site has been utilized for more than 60 years in this capacity and was established prior to current zoning regulations.

The site is located within the "Rock Quarry" Land Use Category of the Local Coastal Plan for Catalina Island. That category was specifically designed to allow the requested use continuation.

Both the State Division Mines and Geology and the Department of Public Works have recommended approval of the Reclamation Plan.

An Initial Study was prepared on this project in compliance with the State CEQA Guidelines and the environmental reporting procedures of the County of Los Angeles. It was determined that this project will not exceed the established threshold criteria for any environmental or service factor and, as a result, will not have a significant effect on the physical environment.

Surface Mining Permit,
Reclamation Plan, and
Explosives Permit No. 86136-(4)

A public hearing was held on April 14, 1987 in which the applicants and their representative testified in favor of the request.

There was no opposition testimony.

FINDINGS:

With respect to the Surface Mining Permit:

- A. The surface mining operation conducted at the location proposed will not adversely affect the health, safety or welfare of persons residing in the surrounding area or otherwise endanger or constitute a menace to the public health, safety or general welfare;
- B. Adverse ecological effects resulting from surface mining operation will be prevented or minimized;
- C. The proposed site is adequately served by streets or highways of sufficient width and improved as necessary to facilitate the kind and quantity of traffic surface-mining operations will or could generate;
- D. The proposed site for surface mining operations is consistent with the General Plan for Los Angeles County.

With respect to the Reclamation Plan:

- E. The plan is in compliance with the requirements of Section 22.56.1290 and Section 22.56.1420 of the Zoning Ordinance;
- F. The plan establishes a workable program for rehabilitating mined lands so they are readily adaptable for alternative land uses compatible with the General Plan.

With respect to the Explosives Permit:

- G. The explosives in the amounts and kind mentioned can be kept at the place proposed without danger of serious injury to persons other than those employed in or about the magazine, or to property other than that of the applicant.

And, therefore, the information submitted by the applicant and presented at the public hearing substantiates the required findings for a Surface Mining Permit, Reclamation Plan and Explosives Permit as set forth in Sections 22.56.1300, 22.56.1410 and 22.56.780 of Title 22 of the Los Angeles County Code, the Zoning Ordinance.

Surface Mining Permit,
Reclamation Plan, and
Explosives Permit No. 86136-(4)

HEARING OFFICER'S ACTION

In view of the findings of fact presented above, Surface Mining Permit, Reclamation Plan and Explosives Permit 86136-(4) are GRANTED with the attached conditions.

BY: David W. Owen DATE: 4-22-87

DAVID OWEN
HEARING OFFICER
Department of Regional Planning
County of Los Angeles

Surface Mining Permit,
Reclamation Plan, and
Explosives Permit No. 86136-(4)

CONDITIONS

1. Unless otherwise apparent from the context, the term "permittee" shall include the applicant and any other person, corporation, or other entity making use of this grant.
 2. This grant shall not be effective for any purpose until the permittee and the owner of the property involved (if other than the permittee) have filed at the office of the Department of Regional Planning their affidavit stating that they are aware of, and agree to accept, all of the conditions of this grant.
 3. The permittee shall reimburse the County for any court and attorney's fees which the County may be required to pay as a result of any claim or action brought against the County because of this grant. Although the permittee is the real party in interest in an action, the County may, at its sole discretion, participate at its own expense in the defense of the action, but such participation shall not relieve the permittee of any obligation under this condition.
 4. If any provision of this grant is held or declared to be invalid, the permit shall be void and the privileges granted hereunder shall lapse.
 5. The subject property shall be developed, maintained and operated in full compliance with the conditions of this grant and any law, statute, ordinance or other regulation applicable to any development or activity on the subject property. Failure of the permittee to cease any development or activity not in full compliance shall be a violation of these conditions.
 6. Notice is hereby given that any person violating a provision of this grant is guilty of a misdemeanor. Notice is further given that the Regional Planning Commission may, after conducting a public hearing, revoke or modify this grant, if it finds that these conditions have been violated or that this grant has been exercised so as to be detrimental to the public health or safety or so as to be a nuisance.
 7. This grant allows the operation of a rock quarry and the implementation of a Reclamation Plan for the site subject to the following restrictions as to use:
 - a. All surface mining operations shall be confined to the leasehold area shown on applicant's Exhibit A and, except for hours of operation, shall comply with the applicable development standards specified within Section No. 22.56.1380 of the Los Angeles County Code, which are incorporated within these conditions by reference, and with the approved reclamation plan.
-

- b. The stockpiling of rock, sand and gravel, and other minerals, and the installation, maintenance or operation of rock crushing plants or apparatus are permitted by this grant.
 - c. A batch plant is permitted.
 - d. The operator shall notify the Director of Planning and the Department of Public Works of his intension to close down operations at least 30 days prior to such action. The Department of Public Works shall inspect the site, notify the operator of what protective devices, structures and/or measures are or may be necessary for the protection of adjacent properties, environmental resources, and the general public, and take appropriate steps to see that such protective measures are implemented. Posting shall be maintained as provided in Subsection 1 of Section 22.56.1380 of the County Code.
 - e. At least 30 days before starting up inoperative mining operations, the operator shall notify the Department of Public Works. Operations shall not commence until the Department of Public Works has determined that all requirements of the operator's surface mining permit and Section 22.56.1380 of the County Code are met.
8. The applicant's Reclamation Plan is approved subject to the following:
- a. Reclamation shall be performed in accord with the applicant's submitted plan, marked Exhibit "A".
 - b. Surface mining will be carried out along the entire working face of the quarry in a manner which will not allow concurrent reclamation. Therefore, for the purposes of this grant, the starting date for beginning reclamation shall be established by one of the following, whichever occurs first:
 - 1. Upon cancellation or termination without renewal of the permittee's lease to operate the rock quarry;
 - 2. Upon cessation of surface mining for a continuous period of 5 years;
 - 3. Upon the permittee having failed to declare its intent to continue the surface mining operations as evidenced by a written request to extend the permittee's lease, submitted to the lessor at least one year prior to the termination of the lease.
-

- c. Reclamation shall be completed within one year of the required starting date. The Department of Public Works shall inspect reclamation activities as necessary to assure compliance. The operator shall pay the County the actual costs of conducting such inspections.
- d. Unless otherwise specified in the approved Reclamation Plan, the reclamation of mined lands shall be carried out in accordance with the requirements and specifications of Section 22.56.1420 of the County Code, subtitled: "Reclamation Activities-Specification", as incorporated in these conditions by reference.
- e. The owner and the operator shall jointly file a covenant with the County Recorder for the benefit of the County of Los Angeles with the following statements included:
 - 1. "This property is subject to Reclamation Plan, No. 86136-(4) requiring, together with other conditions, the completion of a reclamation program for the property except as specifically provided in such Reclamation Plan".
 - 2. A statement accepting responsibility for completion of the reclamation work, with maintenance to be performed for a minimum of 2 years following their completion.

A copy of said recorded document, identifying the case number, shall be returned to the Department of Regional Planning.

The covenant filed pursuant to this condition shall be binding on all successors, heirs and assigns of the applicant.

- f. The Reclamation Plan will be reviewed 10 years from the date of approval.

The applicant shall submit a report to the Hearing Officer at that time, and every 10 years thereafter (unless the review period is amended by the hearing officer, the Commission or the Board of Supervisors), detailing the progress accomplished to achieve the objectives of the reclamation plan or any change of circumstances.

- 9. The storage and transporting of explosives exceeding a total of 100 pounds is permitted on the subject property.
-

The permittee shall maintain current permits from the County Forester and Fire Warden when explosives are kept on the site.

10. Authorization to quarry and to store explosives shall be considered terminated and cease to be in effect:
 - a. At the same time a new principal use is established on the subject property.
 - b. One year after the cessation of mining operations on the subject property, provided the operator has failed to notify the Commission and the Department of Public Works of his intention to conduct intermittent operations as provided in Section 22.56.1400 of the County Code and condition no. 7d and 7e.

This condition shall not be construed as relieving the permittee of reclamation requirements.

11. Upon receipt of this letter, the permittee shall contact the Fire Prevention Bureau of the Los Angeles County Forester and Fire Warden to determine what facilities may be necessary to protect the property from fire hazard. Any necessary facilities shall be provided as may be required by said Department.
12. The permittee shall secure any necessary permits from the South Coast Air Quality Management District and shall fully comply with the terms of said permits.
13. All structures shall conform with the requirements of the Division of Building and Safety of the Department of Public Works.

RF:JS:bd
Revised
4-21-87

CONNOLLY-PACIFIC CO.

Marine Contractors

Berth D40

1925 Pier D St.

Long Beach, CA 90802

Phone: (310) 437-2831

Fax: (310) 435-2035

Transmittal

To: Mike Justice
Justice & Associates
801 Pacific Coast Hwy., Ste 200
Seal Beach, CA 90740

From: Jim Kruger

Date: 9/12/96

Subject: Reclamation Plan Approval Conditions

Enclosed please find copies of the Hearing Officer's letters relating to each quarry. These letters list the conditions we have been reviewing, particularly that of the 10 year reclamation plan review report.

Pebbly Beach Quarry Reclamation Plan Approved: 5/29/87
Surface Mining Permit No: 86136

10 year report due: 5/29/97

Empire Quarry Reclamation Plan Approved: 5/29/87
Surface Mining Permit No: 86137

10 year report due: 5/29/97

RECEIVED

MJ.....	SEP 13 1996	MM.....	SP
SJ.....		CE.....	R
MiB.....	LL.....	CJ.....	
ST.....	TT.....	VR.....	
KR.....	File.....		
MeB.....	Follow Up.....		

CONFIDENTIAL

Los Angeles County
DEPARTMENT OF
REGIONAL PLANNING
320 West Temple Street
Los Angeles
California 90012
974-6401

Norman Murdoch
Planning Director

CERTIFIED-RECEIPT
REQUESTED



April 28, 1987

Connolly - Pacific Company
1928 Water Street
Long Beach, California 90802

Attn: Ralph Larison

Dear Sirs:

RE: SURFACE MINING PERMIT, RECLAMATION PLAN,
AND EXPLOSIVES PERMIT NO. 86136-(4)
To allow rock quarry operations within
a 208 acre site.
Pebbly Beach area of Catalina Island
Catalina Zoned District, Zone M-3

The case hearing officer on April 22, 1987, GRANTED the
above described permit. Documents pertaining to this grant
are enclosed.

You should carefully review each condition of the grant. In
particular, your attention is called to Condition No. 2
requiring the filing of the enclosed affidavit.

The hearing officer's decision may be appealed to the Regional
Planning Commission at the office of the Commission's secretary,
Room 170, Hall of Records, 320 West Temple Street, Los Angeles,
California 90012. Contact the Commission's secretary for the
necessary forms and the amount of the appeal fee at (213)
974-6409. The appeal must be postmarked or delivered in person
within 15 days after this notice is received by the applicant.
The hearing officer's decision may also be called up for review
by the Regional Planning Commission during the appeal period.
This grant will not become effective until and unless this
period has passed without an appeal or call for review.

COPY

Connolly - Pacific Company
April 28, 1987
Page 2

This grant affects the following described property:

Assessor's Parcel 4:

As shown on Los Angeles County Assessor's Map #59,
Book 7480, Page 45.

For further information on appeal procedures, compliance with conditions or any other matter pertaining to this grant, please contact the Variances and Permits Section at (213) 974-6446.

Very truly yours,

DEPARTMENT OF REGIONAL PLANNING
Norman Murdoch, Director of Planning


John Schwarze, Administrator
Zoning Administration Branch

JS:RF:eh

Enclosures: Affidavit; Findings and Conditions

cc: Commissioners; Zoning Enforcement; Building & Safety;
Road Section;
Santa Catalina Island Co., P. O. Box 737, Avalon, CA 90704
Cotton/Beland/Associates, 1028 N. Lake Ave., #107, Pasadena
CA 91104; James Pompy, Div. of Mines and Geology, Mine
Reclamation Program, 610 Bercut Dr., Sacramento, CA 95814
Dept. of Public Works, Drainage and Grading Section, Attn:
Frank Williams, 550 So. Vermont Ave., Los Angeles, CA 90020

Please complete this form and return to:

The Department of Regional Planning
320 West Temple Street
Los Angeles, California 90012



ACCEPTANCE FORM

STATE OF CALIFORNIA }
COUNTY OF LOS ANGELES } ss

SURFACE MINING PERMIT, RECLAMATION PLAN AND
EXPLOSIVES PERMIT NO. 86136-(4)

I, the undersigned state:
We

I am the owner
We are

of the real property described in the above-numbered case.

I am aware of, and accept, all the stated conditions in said
We are
SURFACE MINING PERMIT, RECLAMATION PLAN AND
EXPLOSIVES PERMIT NO. 86136-(4)

Executed this 18TH day of MAY, 19 87.

I certify (or declare) under the penalty of perjury that the foregoing is true and correct.
We

(Where the owner and applicant are not the same, both must sign)

Type or Print

Applicant Name CONNOLLY-PACIFIC Co.
Address 1925 WATER ST.
City, State LONG BEACH, CA 90802
Signature R.A. Everist
Chmn.

Owner Name Santa Catalina Island Co.
Address P.O. Box 737
City, State Avalon, Ca. 90704
Signature [Signature]

This signature must be acknowledged
by a notary public. Attach appropriate
acknowledgements.

State of California
County of Los Angeles ss.



On this the 18 day of May 1987, before me,

Kris Williamson
the undersigned Notary Public, personally appeared

Rayson H. Offield

- personally known to me
 proved to me on the basis of satisfactory evidence

to be the person(s) who executed the within instrument as
Vice President or on behalf of the corporation therein
named, and acknowledged to me that the corporation executed it.

WITNESS my hand and official seal.

Kris Williamson
Notary's Signature

State of California
County of Los Angeles ss.



On this the 18 day of May 1987, before me,

Kris Williamson
the undersigned Notary Public, personally appeared

R. A. Everest

- personally known to me
 proved to me on the basis of satisfactory evidence

to be the person(s) who executed the within instrument as
Chairman or on behalf of the corporation therein
named, and acknowledged to me that the corporation executed it.

WITNESS my hand and official seal.

Kris Williamson
Notary's Signature

Surface Mining Permit,
Reclamation Plan, and
Explosives Permit No. 86136-(4)

HEARING OFFICER'S FINDINGS AND ORDER

FACTUAL SUMMARY:

The request is to continue the operation of an existing rock quarry located in the Pebbly Beach area of Santa Catalina Island. A reclamation plan and explosives permit are included in this request.

The 208 acre lease site is irregular in shape and steeply sloping in terrain.

The site is bounded by the Pacific Ocean on the east, undeveloped land on the south and west, and industrial uses on the north.

Access to the property is by private graded dirt roads.

The site is developed with areas of mining activity along the ocean cliffsides of the easterly boundary of the site as well as the stock piles and loading facilities. The reclamation profiles show the various benches and slopes with the proposed armor rock piles and final slope finishing treatments. Most of the site is to remain undeveloped as open space.

A magazine exists on the site which stores more than 100 pounds of explosives.

The subject property is zoned M-3 (Unclassified Zone). That zone requires approval of the above cases to continue the quarry operations. The site has been utilized for more than 60 years in this capacity and was established prior to current zoning regulations.

The site is located within the "Rock Quarry" Land Use Category of the Local Coastal Plan for Catalina Island. That category was specifically designed to allow the requested use continuation.

Both the State Division Mines and Geology and the Department of Public Works have recommended approval of the Reclamation Plan.

An Initial Study was prepared on this project in compliance with the State CEQA Guidelines and the environmental reporting procedures of the County of Los Angeles. It was determined that this project will not exceed the established threshold criteria for any environmental or service factor and, as a result, will not have a significant effect on the physical environment.

Surface Mining Permit,
Reclamation Plan, and
Explosives Permit No. 86136-(4)

A public hearing was held on April 14, 1987 in which the applicants and their representative testified in favor of the request.

There was no opposition testimony.

FINDINGS:

With respect to the Surface Mining Permit:

- A. The surface mining operation conducted at the location proposed will not adversely affect the health, safety or welfare of persons residing in the surrounding area or otherwise endanger or constitute a menace to the public health, safety or general welfare;
- B. Adverse ecological effects resulting from surface mining operation will be prevented or minimized;
- C. The proposed site is adequately served by streets or highways of sufficient width and improved as necessary to facilitate the kind and quantity of traffic surface-mining operations will or could generate;
- D. The proposed site for surface mining operations is consistent with the General Plan for Los Angeles County.

With respect to the Reclamation Plan:

- E. The plan is in compliance with the requirements of Section 22.56.1290 and Section 22.56.1420 of the Zoning Ordinance;
- F. The plan establishes a workable program for rehabilitating mined lands so they are readily adaptable for alternative land uses compatible with the General Plan.

With respect to the Explosives Permit:

- G. The explosives in the amounts and kind mentioned can be kept at the place proposed without danger of serious injury to persons other than those employed in or about the magazine, or to property other than that of the applicant.

And, therefore, the information submitted by the applicant and presented at the public hearing substantiates the required findings for a Surface Mining Permit, Reclamation Plan and Explosives Permit as set forth in Sections 22.56.1300, 22.56.1410 and 22.56.780 of Title 22 of the Los Angeles County Code, the Zoning Ordinance.

Surface Mining Permit,
Reclamation Plan, and
Explosives Permit No. 86136-(4)

HEARING OFFICER'S ACTION

In view of the findings of fact presented above, Surface Mining Permit, Reclamation Plan and Explosives Permit 86136-(4) are GRANTED with the attached conditions.

BY: David W. Owen DATE: 4-22-87

DAVID OWEN
HEARING OFFICER
Department of Regional Planning
County of Los Angeles

1. Unless otherwise apparent from the context, the term "permittee" shall include the applicant and any other person, corporation, or other entity making use of this grant.
 2. This grant shall not be effective for any purpose until the permittee and the owner of the property involved (if other than the permittee) have filed at the office of the Department of Regional Planning their affidavit stating that they are aware of, and agree to accept, all of the conditions of this grant.
 3. The permittee shall reimburse the County for any court and attorney's fees which the County may be required to pay as a result of any claim or action brought against the County because of this grant. Although the permittee is the real party in interest in an action, the County may, at its sole discretion, participate at its own expense in the defense of the action, but such participation shall not relieve the permittee of any obligation under this condition.
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 5. The subject property shall be developed, maintained and operated in full compliance with the conditions of this grant and any law, statute, ordinance or other regulation applicable to any development or activity on the subject property. Failure of the permittee to cease any development or activity not in full compliance shall be a violation of these conditions.
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 7. This grant allows the operation of a rock quarry and the implementation of a Reclamation Plan for the site subject to the following restrictions as to use:
 - a. All surface mining operations shall be confined to the leasehold area shown on applicant's Exhibit A and, except for hours of operation, shall comply with the applicable development standards specified within Section No. 22.56.1380 of the Los Angeles County Code, which are incorporated within these conditions by reference, and with the approved reclamation plan.
-

- b. The stockpiling of rock, sand and gravel, and other minerals, and the installation, maintenance or operation of rock crushing plants or apparatus are permitted by this grant.
 - c. A batch plant is permitted.
 - d. The operator shall notify the Director of Planning and the Department of Public Works of his intension to close down operations at least 30 days prior to such action. The Department of Public Works shall inspect the site, notify the operator of what protective devices, structures and/or measures are or may be necessary for the protection of adjacent properties, environmental resources, and the general public, and take appropriate steps to see that such protective measures are implemented. Posting shall be maintained as provided in Subsection 1 of Section 22.56.1380 of the County Code.
 - e. At least 30 days before starting up inoperative mining operations, the operator shall notify the Department of Public Works. Operations shall not commence until the Department of Public Works has determined that all requirements of the operator's surface mining permit and Section 22.56.1380 of the County Code are met.
8. The applicant's Reclamation Plan is approved subject to the following:
- a. Reclamation shall be performed in accord with the applicant's submitted plan, marked Exhibit "A".
 - b. Surface mining will be carried out along the entire working face of the quarry in a manner which will not allow concurrent reclamation. Therefore, for the purposes of this grant, the starting date for beginning reclamation shall be established by one of the following, whichever occurs first:
 - 1. Upon cancellation or termination without renewal of the permittee's lease to operate the rock quarry;
 - 2. Upon cessation of surface mining for a continuous period of 5 years;
 - 3. Upon the permittee having failed to declare its intent to continue the surface mining operations as evidenced by a written request to extend the permittee's lease, submitted to the lessor at least one year prior to the termination of the lease.

- c. Reclamation shall be completed within one year of the required starting date. The Department of Public Works shall inspect reclamation activities as necessary to assure compliance. The operator shall pay the County the actual costs of conducting such inspections.
- d. Unless otherwise specified in the approved Reclamation Plan, the reclamation of mined lands shall be carried out in accordance with the requirements and specifications of Section 22.56.1420 of the County Code, subtitled: "Reclamation Activities-Specification", as incorporated in these conditions by reference.
- e. The owner and the operator shall jointly file a covenant with the County Recorder for the benefit of the County of Los Angeles with the following statements included:
 - 1. "This property is subject to Reclamation Plan, No. 86136-(4) requiring, together with other conditions, the completion of a reclamation program for the property except as specifically provided in such Reclamation Plan".
 - 2. A statement accepting responsibility for completion of the reclamation work, with maintenance to be performed for a minimum of 2 years following their completion.

A copy of said recorded document, identifying the case number, shall be returned to the Department of Regional Planning.

The covenant filed pursuant to this condition shall be binding on all successors, heirs and assigns of the applicant.

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The applicant shall submit a report to the Hearing Officer at that time, and every 10 years thereafter (unless the review period is amended by the hearing officer, the Commission or the Board of Supervisors), detailing the progress accomplished to achieve the objectives of the reclamation plan or any change of circumstances.

- 9. The storage and transporting of explosives exceeding a total of 100 pounds is permitted on the subject property.
-