April 30, 2021

Order No. R1-2021-0015
WDID No. 1B20225RSON
Waste Discharge Requirements
for
Barella Family LLC
Roblar Road Quarry
Sonoma County

The following Discharger is subject to waste discharge requirements as set forth in this Order:

Table 1. Discharger Information

Discharger	Barella Family LLC
Name of Facility	Roblar Road Quarry
Facility Address	7601 Roblar Road
	Petaluma, CA 94955

The discharge by the Roblar Road Quarry from the discharge points identified below is subject to waste discharge requirements as set forth in this Order:

Table 2. Discharge Location

Discharge Point	Outfall	Location	Receiving Water
001		Quarry Pit including Interceptor Trenches and Sediment Ponds	Groundwater
002		Infiltration/Irrigation Field A near Access Road as shown on Figure 2	Groundwater
003		Infiltration/Irrigation Field B near Ranch Tributary as shown on Figure 2	Groundwater
	004	Upper Outfall of the Surface Water Runoff Collection Ditch as shown in Figure 2	Surface Water
	005	Middle Outfall of the Surface Water Runoff Collection Ditch as shown in Figure 2	Surface Water
	006	Lower Outfall of the Surface Water Runoff Collection Ditch as shown in Figure 2	Surface Water

IT IS HEREBY ORDERED, that in order to meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, the Discharger shall comply with the requirements in this Order.

I, Matthias St. John, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, North Coast Region, on August 19 or 20, 2021.

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Matthias St. John
Executive Officer

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1. FACILITY INFORMATION

The following Discharger is subject to waste discharge requirements as set forth in this Order:

Table 3. Facility Information

Discharger	Barella Family LLC
Name of Facility	Roblar Road Quarry
Facility Address	7601 Roblar Road
	Petaluma, California 94955
	Sonoma County
Facility Contact and Phone	John Barella, (707) 953-8901
Mailing Address	496 Jasmine Lane Petaluma, CA 94952

2. FINDINGS

The California Regional Water Quality Control Board, North Coast Region (Regional Water Board) finds that:

2.1. Basis and Rationale for Requirements

PES Environmental, on behalf of John and Andrea Barella, submitted a Report of Waste Discharge (ROWD) Application Package, dated March 4, 2020, for the proposed operation of an upland hard rock quarry extraction and processing plant in Sonoma County. The Regional Water Board developed the requirements in this Order based on information submitted as part of the Discharger's application for permit coverage, monitoring data submitted as part of the application, environmental documentation developed for compliance with the California Environmental Quality Act (CEQA), and other available information.

2.2. Background and Facility Description

The Roblar Road Quarry is located in southern Sonoma County (Figure 1) on a 127-acre parcel (APN 027-080-010) associated with development of the quarry and includes a 72-acre parcel (APN 027-080-009) where aggregate mining will occur. The property is bounded on the north by Roblar Road and the County-owned, closed Roblar Landfill; on the west by Roblar Road; on the south by Ranch Tributary (a tributary to Americano Creek); and on the east by privately-owned land. The project site encompasses approximately 199 acres, of which 70 acres will be mined for aggregate material. The aggregate will consist of road base, subbase, drain rock, quarry fines, fill material, riprap, and

concrete rock. The processing facility would occupy approximately 10 acres. The mined aggregate (gravel) would be crushed, screened, washed, stockpiled, and loaded for offsite transport. Approximately 3.80 million cubic yards of overburden, 30,000 cubic yards of topsoil, and 7.55 million cubic yards of rock products will be excavated.

2.3. Legal Authorities

This Order serves as Waste Discharge Requirements (WDRs) for discharges to land issued pursuant to section 13263 of the California Water Code (Water Code).

2.4. Watershed Description

The project is located along Roblar Road in Sonoma County, draining both into a tributary creek (Ranch Tributary) to Americano Creek and directly into the Estero de Americano. Americano Creek exists along the northern boundary of the site and the Ranch Tributary runs along the site's western boundary. Americano Creek is listed as impaired by nutrients under Section 303(d) of the Clean Water Act.

The average annual precipitation at the site is 31.5 inches, about 80 percent of which falls between November and April. The highest elevation on site is near the southeastern corner, at about 600 feet above mean sea level (msl). The lowest elevation on the project property is about 110 feet msl, located at the southwest corner near the confluence of Ranch Tributary.

Regionally, groundwater occurs in the Wilson Grove Formation, Tolay Volcanics, and Franciscan Complex Bedrock. The Wilson Grove Formation is one of the most productive water-bearing units in Sonoma County. Groundwater in the Wilson Grove Formation occurs as unconfined groundwater and forms the regional water table. Shallow groundwater beneath the project site within the Ranch Tributary watershed currently flows southwest to the Ranch Tributary, and shallow groundwater beneath the project site north of the Ranch Tributary Watershed divide, flows west-northwest towards the Roblar Landfill property and Roblar Road.

2.5. Roblar Landfill Property

The Roblar Landfill is located on the property immediately north of the project site. The landfill property is characterized by three main pads which step up the slope from Roblar Road. The lowest (northernmost) pad (containing two waste cells) is situated at approximately 200 feet above mean sea level (msl), a middle pad containing a single waste cell is located at approximately 270 feet above msl, and an upper (southernmost) pad containing a single waste cell is at approximately 350 feet above msl. Shallow groundwater beneath the

project site north of the Ranch Tributary Watershed divide, flows west-northwest towards the Roblar Landfill property and Roblar Road

The landfill site was operated from 1956 through 1967 as an open burn pit. Between 1967 and 1971, the landfill site was operated as a sanitary landfill by Sonoma County. The County used a landfill technique known as trench filling and used inert fill from an on-site source to cover the trenches. During the time the landfill site was operated as a burn pit and sanitary landfill (1956-1971), it received primarily residential and commercial waste, along with minor agricultural waste. Liquid waste was not accepted for disposal at the landfill site. The City of Santa Rosa reopened the landfill in 1972. Under the direction of the City of Santa Rosa, demolition debris was disposed of along the top of the lowest waste disposal unit, and then covered with soil. The City terminated operations in 1973 (Sonoma County, 1992). No additional waste has been accepted at the landfill since that time and the Regional Water Board WDRs have been rescinded.

In 1981, the Sonoma County Department of Public Works performed extensive grading, drainage and revegetation work on the landfill site. This included grading and covering of all landfill areas with a two-foot thick soil layer, the installation of 350 feet of 42-inch storm drains and two sediment ponds, and revegetation for erosion control (Sonoma County, 1987). Three groundwater monitoring wells were installed on the landfill site in 1991 (Sonoma County, 1992).

As part of the County's Stormwater Pollution Prevention Plan (SWPPP) for the landfill, the Sonoma County Department of Transportation and Public Works–Integrated Waste Division (DTPW-IWD) routinely tests surface water quality at the landfill and submits quarterly reports to the Regional Water Board. Since the Roblar Landfill is unlined, leachate is routinely removed from the landfill via an on-site leachate collection system and transported to the Santa Rosa Treatment Plant. This leachate is routinely tested for potential hazardous constituents.

Monitoring wells MW-1, MW-2, MW-2b and MW-3 were installed on the west-facing slope of the project site and are oriented roughly in line between the landfill and the proposed quarry (Figure A-1).

2.6. Historical Groundwater Monitoring Results

On the behalf of the Discharger, PES Environmental, Inc presented the results of groundwater monitoring they conducted in 2011 along with sample results from historical groundwater monitoring of wells located at the Roblar Landfill Property and the quarry site in a Semi-Annual Groundwater Monitoring Reported dated October 2011. Considering all the data presented, constituents that exceeded water quality objectives included arsenic,

chromium, and lead. VOCs were detected in the landfill property wells and in the quarry site wells, although there have been no detections since 2009 in wells at the quarry site. Chromium exceeded the water quality objective of 50 µg/L in quarry site monitoring wells MW-2 and MW-2b (Figure A-1) and in all three landfill site wells. Arsenic exceeded the water quality objective of 10 µg/L in quarry site monitoring wells MW-1 and MW-2 and in two of three landfill site wells. The highest levels of arsenic were consistently measured in the MW-1 well, ranging from 27-45.5 µg/L. Lead results exceeded the California Division of Drinking Water primary MCL of 15 µg/L once in one of the landfill sites well where lead was measured at 63 µg/L in 2007. Lead was measured at much higher levels in the landfill monitoring wells, as compared to samples collected from the quarry site monitoring wells, with detections ranging from 7-9.2 µg/L in addition to the 63 µg/L result. Both aluminum and iron concentrations were consistently a magnitude higher in the landfill wells compared to concentrations in the quarry site monitoring wells.

2.7. **Quarry Development Phases**

The quarry will be developed in four phases; an Interim Phase to construct the infrastructure to facilitate quarry operations (including improvements to Roblar Road) and three mining phases. The Interim Phase and Phase 1 of quarry operations are expected to occur between 2020 through 2025. Phases 2 and 3 of quarry mining would further expand each subsequent phase of the quarry footprint including grading activities, aggregate excavation, and expansion of the sedimentation control basins and drainage features. Phase 2 is anticipated to occur from 2025 to 2030, and Phase 3 from 2030 to 2040. Approximately 570,000 cubic yards of quarry material (i.e., topsoil, overburden, and rock) are projected to be mined on an annual basis (i.e., approximately 2,260 cubic yards per day).

2.8. **Source Water**

Approximately 20,100 gallons per day (gpd) of water is estimated to be used for quarry operations during the wet season, with 34,800 gpd estimated to be required for quarry operations and dust control during the dry season. The water used on the site for these purposes will be pumped from two onsite wells; DW-1 and DW-2, and from retained storm water and spring flows that drain into the pit floor sediment control basins.

2.9. **Site Drainage**

A swale will be constructed along the uphill side of the access road to intercept runoff. Runoff will flow through the swale to a pipe culvert located at the proposed entry to Roblar Road. It will flow from the culvert through a roadside ditch that drains into Americano Creek. Runoff from the quarry slopes will commingle with groundwater seepage, both of which will discharge into the quarry footprint. This water will flow through the interceptor trenches into the

sediment control basins. It will be monitored and treated as necessary. It will be used to support onsite quarry operations and irrigation and will also be disposed of in the infiltration/irrigation fields described in Finding 2.13.

2.10. **Sediment Control Basins**

Sediment control basins will be constructed with each quarry phase. In the event that a storm in excess of the 100-year storm event occurs, runoff will overflow into the interceptor ditch then into the sediment basin located adjacent to the quarry access road west of the quarry floor. This basin will serve as a backup to the sediment control basins. The sediment control basins will collect storm water, spring flows, and process water and allow it to settle prior to discharging to the lower retention pond. All collected waters will be reused or irrigated onsite. Sediments will be excavated from the sediment control basins for use as fill inside the quarry footprint and for subsequent reclamation activities. See Finding 2.18 for more detail on reclamation activities. The sediment control basins and lower retention pond are designed to retain all collected sediments, normal seasonal rainfall, spring flows, and the 25-year, 24-hour event, while maintaining a minimum 2-feet of freeboard.

Sediment control basins will be sampled and analyzed in conjunction with the basin management operations to ensure that water held in each basin is characterized. Once samples and final analytical results are received the quarry will determine the appropriate routing of the water based on applicable water quality standards. Water that meets acceptable water quality standards will be routed to either: (1) the approved infiltration/irrigation disposal fields, (2) direct onsite use to support quarry operations (e.g., dust control, crushing plant, stockpile rock watering, wash rack, irrigation, etc.), or (3) water storage tanks for temporary storage prior to onsite use.

2.11. **Overburden Stockpiles**

The initial phase of mining will include removal and storage of topsoil and overburden material. This will include stripping for the access road and initial grading for the quarry operation. With each mining phase, the topsoil and overburden material will be removed and stockpiled accordingly. This material will be stockpiled and stored onsite in Stockpile Areas “A” and “B” as shown in Figure 2 or incorporated into the floor of the quarry by raising the finish grade.

2.12. **Water Management**

The management of water as part of quarry operations is described in the Revised Water Management Plan, Roblar Road Quarry, Sonoma County, California, February 2020 (WMP). The foundation of the WMP is based upon an onsite water use/reuse, storage and treatment (if necessary) program to support quarry operations. The water balance included in the WMP concludes

that there is enough capacity in the sediment basins, water storage tanks, and infiltration/irrigation disposal fields to prevent any discharge to surface water.

2.13. **Waste Discharges to Infiltration/Irrigation Fields**

Water from the sediment basins or water storage tanks that has been treated to water quality standards, and not needed for onsite operations, will be discharged to one of two infiltration/irrigation disposal fields. The fields are located along the southeast side of the quarry pit between the edge of the quarry and Ranch Tributary and near the quarry entrance. The field near Ranch Tributary will be constructed during the Interim Phase, while the field near the quarry entrance will be constructed at a later date if/when more disposal capacity is needed to accommodate increasing wastewater flows. The WMP includes calculations for the monthly application rate to the infiltration/irrigation fields. The permit prohibits applications above those rates. This Order requires an Infiltration/Field Irrigation Management Plan in accordance with Section 9.1 of this Order to ensure the hydrology is managed in a manner protective of surface and groundwater quality.

2.14. **Interceptor Trenches**

The interceptor trenches are designed to capture and convey surface water runoff and groundwater seepage within the quarry. Precipitation and runoff from within the footprint of the quarry will be collected and treated prior to on site reuse. The precipitation and runoff inside the footprint of the quarry will be collected in 10' wide benches placed at 30' intervals. It will flow along the benches toward bench drains located at 500' intervals and be carried down to the quarry floor. Runoff from the north slope of the quarry will flow through the North Interceptor Trench toward the North Slope Sediment Control Basin. Runoff from the south east slope and quarry floor will be collected within the South East Interceptor Trench and sediment control basin located on the south side of the quarry floor.

2.15. **Water Treatment System**

Excavation of the proposed quarry will cause groundwater, which may contain contaminants, to enter the quarry walls as seepage. In addition, groundwater from the on-site production wells proposed to be used for quarry operations may contain contaminants. To ensure that groundwater is suitable for quarry operations and disposal, the Discharger will employ a granular activated carbon (GAC) and ion exchange water treatment system. The water treatment system consists of the following primary components: (1) groundwater seepage interceptor trenches, (2) sediment control basins; (3) water storage tanks; (4) secondary sediment control; (5) GAC vessels to remove VOCs; and (6) an ion exchange treatment component to address metals.

In the event that monitoring data detect VOCs or metals in concentrations in source waters from the onsite wells or sediment basins exceed levels specified in Table 4, the water will be routed to the water treatment system. Water from the sediment control basins will be piped to secondary sediment control to remove additional sediment and fine-grained material prior to treatment. Following secondary sediment control, the water will be piped to the: (1) GAC treatment system which will be comprised of two, 2,000 pound GAC vessels (or other appropriately sized GAC vessels should conditions warrant) connected in series; and/or (2) the ion exchange resin treatment system to reduce the concentrations of metals (e.g. arsenic, chromium, etc.).

GAC has been demonstrated to be an effective and reliable technology for the removal of VOCs from water to non-detect levels. Similarly, ion exchange resin has been demonstrated to be an effective and reliable treatment technology to reduce the concentrations of metals (e.g., arsenic and chromium) in groundwater. The GAC and/or ion exchange treatment systems are designed to accommodate the average monthly runoff and seepage. The two GAC vessels will be operated and monitored in series as a precautionary measure to assure the effectiveness for the removal of VOCs from groundwater prior to reuse.

In the event that flows exceed the monthly average and treatment is appropriate, contingency plans and adaptive measures will be implemented including the addition of appropriately sized GAC and/or ion exchange resin vessels to balance influent flows. These treatment components are routinely available as commercial stock (“off the shelf”) units.

Following treatment for VOCs and/or metals, the water would be piped to the water storage tanks where it will be retained and sampled for the analysis of VOCs and/or appropriate metals by a California state certified analytical laboratory. Following the receipt of laboratory analytical data that confirms VOCs are at non-detect levels and metals concentrations meet the effluent limitations in Table 4, the treated water would be available for either direct onsite use or temporary storage, or would be routed to the irrigation/infiltration fields.

2.16. **Surface Water Runoff Collection Ditch**

Precipitation and runoff from outside the footprint of the quarry operations (i.e., not in contact with quarry operations) will be directed around the perimeter of the quarry in a Surface Water Runoff Collection Ditch. This ditch will be constructed at the perimeter of the quarry for each phase and will be sized to carry the 100-year design storm. Precipitation and runoff in the Surface Water Runoff Collection Ditch will not require treatment. The water from the Surface Water Runoff Collection Ditch will be returned to Ranch Tributary or Americano Creek. The monitoring and reporting program requires sampling

triggered by rain events at storm water outfalls to ensure there is no waste being discharged to receiving waters during rain events and that upland erosion control measures are effective.

2.17. **Potential Impact on Americano Creek and Ranch Tributary Flows**

Storm water runoff accounts for the majority of surface flow in the Ranch Tributary, but the baseflow (flow that is not directly attributable to a storm event) is supplied by the water-bearing sediments in the Wilson Grove Formation and the upper fractured portion of the underlying Tolay Volcanics. The proposed quarry would eliminate an area of approximately 65 acres, including altering approximately 30 percent of the Ranch Tributary watershed and reducing the area of groundwater storage. Due to these landscape level alterations, it is likely that the drainage and groundwater seepage within the watershed would decrease. Reduced baseflow in a small tributary watershed could have negative biological implications, such as the seasonal reduction of groundwater and surface water available to the riparian area. Further, a reduction in Ranch Tributary flows to Americano Creek during the low flow period of summer and early fall may adversely affect important aquatic habitat parameters such as water depth, velocity, and temperature in the downstream areas occupied by special-status fish species.

The diversion of storm water runoff to Ranch Tributary via the Surface Water Collection Ditch, removal of Wilson Grove overburden material, and exposure of bedrock could increase the amount of storm water runoff leaving the site and increase peak flows in Ranch Tributary and Americano Creek. The additional flows caused by the project could lead to downstream flooding and excessive bank erosion. This may lead to degradation of the existing aquatic habitat quality in Ranch Tributary or Americano Creek.

This Order requires the discharger to implement a baseline flow and creek stage monitoring program for Ranch Tributary and Americano Creek and a drainage plan to ensure storm water flow entering Ranch Tributary and Americano Creek do not exceed pre-project baseline flows during the 2-, 10-, 25-, 50- and 100-year storm events.

2.18. **Site Reclamation**

The comprehensive details for the design, methods, and procedures which outline the lifespan of the quarry relative to the Interim Phase through final reclamation are provided in the updated Reclamation Plan, Roblar Road Quarry, Sonoma County, California, dated February 2020.

Reclamation of the quarry will occur concurrently, following each of the three phases of mining. Backfilling of Phase 1 will be done sequentially, as mining in the Phase 1 pit proceeds and during the removal of overburden from the Phase 2 pit site after Phase 1 mining is complete. All sediment basins will be

reclaimed as ponds. All mined areas other than the staging area (to be covered with aggregate) and sediment basins will be replanted according to the reclamation planting plan.

Upon the completion of mining operations, final reclamation will proceed including the removal of all equipment and facilities. This includes finishing the slopes and benches, ripping the operations area, placing any excess overburden material throughout the quarry site, and reshaping and rounding cut slopes. Overburden or native material would be used to develop the final side slopes of the pit slopes and the pit floor to ensure successful revegetation. The quarry floor will be scarified and covered with topsoil, and hydroseeded with erosion-control grass mixture. All areas will be graded as necessary to ensure positive drainage to the appropriate on-site collection system. Resoiling of the final graded areas will be done using the stockpiled topsoil material. Any excess topsoil will be spread throughout the quarry site prior to planting.

The property owner will continue to maintain and monitor the reclaimed areas for a period of five years following re-vegetation. After the five-year maintenance period, the Regional Water Board's Executive Officer will determine whether the maintenance period will be extended beyond five years.

2.19. **Basin Plan**

As required by Water Code section 13263(a), these WDRs are crafted to implement the Water Quality Control Plan for the North Coast Region (Basin Plan), and in so doing, the Regional Water Board has taken into consideration the beneficial uses to be protected, the water quality objectives (both numeric and narrative) reasonably required for that purpose, other (including previous) waste discharges, the need to prevent nuisance, and the provisions of Water Code section 13241. The Basin Plan contains implementation plans and policies for protecting waters of the basin. The Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply.

The Water Quality Control Plan for the North Coast Region (Basin Plan) identifies beneficial uses for each hydrologic area in the Region, as well as for specific waterbodies and broad categories of waters. Protection will be afforded to the present and potential beneficial uses of waters of the North Coast Region as designated and presented in Table 2-1 of the Basin Plan. The beneficial uses of any specifically identified water body generally apply to all its tributaries. Thus, beneficial uses applicable to area groundwater within the Estero Americano Hydrologic Area to be protected are as follows:

1. Municipal and domestic supply

2. Agricultural water supply
3. Industrial service supply
4. Industrial process supply
5. Aquaculture
6. Native American Culture

Table 2-1 of the Basin Plan identifies the following existing and potential beneficial uses of surface waters in the Estero Americano Hydrologic Area are:

1. Municipal and domestic supply
2. Agricultural supply
3. Industrial supply
4. Groundwater recharge
5. Navigation
6. Water contact recreation
7. Non-contact water recreation
8. Cold freshwater habitat
9. Rare, threatened or endangered species
10. Marine habitat
11. Migration of aquatic organisms
12. Spawning; reproduction, and/or early development of fish
13. Wildlife habitat
14. Commercial and sport fishing
15. Estuarine habitat
16. Aquaculture.

2.20. **Water Code**

Water Code establishes the authority for the Regional Water Board to establish water quality objectives, impose discharge prohibitions, and prescribe waste discharge and reclamation requirements. Water Code section 13241 requires each regional board to "establish such water quality objectives in water quality control plans as in its judgment will ensure the reasonable protection of beneficial uses and the prevention of nuisance […]." The control of waste is established through effluent limitations and other requirements in Waste Discharge Requirement permits. Water Code section 13243 provides that "A regional board, in a water quality control plan or in waste discharge requirements, may specify certain conditions or areas where the discharge of waste, or certain types of waste, will not be permitted."

It is the Regional Water Board's intent that this Order shall ensure attainment of water quality standards, applicable water quality objectives, and protection of beneficial uses of receiving waters. This Order therefore requires the Discharger to comply with all prohibitions, discharge specifications, receiving water limitations, standard provisions, and monitoring and reporting requirements. The Order further prohibits discharges from causing violations of water quality objectives or causing conditions to occur that create a condition of nuisance or water quality impairment in receiving waters as a result of the discharge.

2.21. **Title 27 Exemption**

This discharge is exempt from the requirements of "Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste", as set forth in California Code of Regulations, title 27, section 20005, et seq., (hereinafter title 27). The exemption, pursuant to section 20090(b), is based on the following: a) The Regional Water Board is issuing waste discharge requirements; b) The discharge complies with the Basin Plan; and c) The waste material does not need to be managed according to California Code of Regulations, title 22, chapter 11, division 4.5, as a designated or hazardous waste.

2.22. **Antidegradation Policy**

State Water Board Resolution 68-16, the Statement of Policy with Respect to Maintaining High Quality Waters of California (hereafter the Antidegradation Policy), requires the disposal of waste be regulated to achieve the highest water quality consistent with the maximum benefit to the people of the state. The Antidegradation Policy (Policy) applies when a discharge may degrade high quality waters[1]. The Policy requires that high quality water will be maintained until it has been demonstrated to the state that any change will be consistent with the maximum benefit to the people of the state, will not unreasonably affect present and anticipated beneficial use of the water, and will not result in water quality less than prescribed in the policies. In addition, any activity that discharges waste to existing high quality waters will be required to meet Waste Discharge Requirements that will result in the best practicable treatment or control of the discharge necessary to assure pollution or nuisance will not occur, and the highest water quality consistent with the maximum benefit to the people of the state will be maintained.

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[1] The Board interprets "high quality waters" as the best water quality that has existed since the Policy was adopted in 1968 after considering any subsequently authorized degradation that has been allowed in compliance with the Policy.

This Order will protect beneficial uses of groundwater and does not authorize any discharge to surface water. The requirements in this Order are designed to protect beneficial uses and it does not promote or authorize discharges that will result in water quality less than that prescribed in the Basin Plan. This Order contains discharge prohibitions and receiving water limitations that are expected to maintain or improve water quality. The Order requires the monitoring of wastewater to ensure that the implementation of best management practices (BMPs) and other provisions of the Order constitute the best practicable treatment or control of the discharges and will protect groundwater and surface water beneficial uses.

2.23. **Human Right to Water**

It is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes (Water Code §106.3, subd. (a)). The Safe Drinking Water Act provides that all Californians have a right to pure and safe drinking water (Health & Safety Code § 116270, subd. (a)). This Order promotes that policy by requiring the Discharger to handle and dispose of waste in a manner that will protect water quality objectives, including those that protect drinking water supplies.

2.24. **Endangered Species Act**

This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A sections 1531 to 1544). The Discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

2.25. **California Environmental Quality Act (CEQA)**

Sonoma County is the lead agency for the project under the California Environmental Quality Act (CEQA, Public Resources Code Section 21000, and et. Seq.). On June 13, 2019, the Board of Supervisors of the County of Sonoma, State of California (Board of Supervisors) certified the Supplemental Environmental Impact Report for the Roblar Road Quarry, and on October 7, 2019, the Board of Supervisors issued the Modified Use Permit (PLP03-0094) to the John E. Barella and Andrea M. Barella Trust for operation of the Roblar Road Quarry. Pursuant to California Code of Regulations, title 14, section 15096, as a responsible agency under CEQA, the Regional Water Board has reviewed and considered the environmental documentation prepared by the lead agency and finds that none of the conditions described in California Code of Regulations title 14, section 15162 have occurred such that preparation of additional environmental documents pursuant to CEQA is required. All

applicable mitigation measures identified in the environmental documentation that are within the Regional Water Board's jurisdiction are included as enforceable conditions of this order. Mitigation measures include various BMPs intended to minimize erosion, retain all water within the active mine areas, create wildlife habitat for that lost to mining, and various other administrative and monitoring/reporting measures intended to protect both water and air quality.

The Regional Water Board will file a Notice of Determination in accordance with California Code of Regulations, title 14, section 15094 following adoption of this Order.

2.26. **Monitoring**

Water Code sections 13383 and 13267 authorizes the Regional Water Board to require technical and monitoring reports. This Order requires that all monitoring wells and water supply wells be tested for possible chemical contaminants on a regular basis. If chemicals are detected in concentrations exceeding those stipulated in this Order, the Discharger will be required to treat all contaminated water to specified standards stipulated in this Order, prior to any onsite use. A groundwater level monitoring and adaptive management program will be implemented when the project begins to pump groundwater for quarry operations from onsite wells.

2.27. **Installation of Additional Monitoring Wells**

In February 2011, the Discharger developed and submitted a work plan for the installation of groundwater monitoring wells MW-5, MW-6, MW-7, MW-9, MW-9, and MW-10. This Order requires the installation of the wells described in the work plan and additional monitoring wells needed to:

1. Further characterize groundwater at the site including potential changes in groundwater levels, groundwater gradients, and/or water quality resulting from quarry operations;
2. Assess the potential impact of the construction and operation of the quarry on baseflows in Americano Creek and Ranch Tributary;
3. Assess the impact of wastewater discharges to the infiltration/irrigation on constituents of concern in groundwater.

The data collected during the construction and monitoring of these wells (i.e., lithologic information, results of borehole geophysics and groundwater levels data) will be used to further characterize conditions of the bedrock aquifer beneath the site and also act as an early detection of the migration of groundwater from underneath the landfill site towards the quarry. This permit includes several measures that are required if constituents associated with landfill leachate are detected in the monitoring wells.

2.28. **Section 401 of the Clean Water Act**

Section 401 of the Clean Water Act requires that any person applying for a federal permit or license, which may result in a discharge of dredged or fill pollutants into waters of the United States, must obtain a state water quality certification that the activity complies with all applicable water quality standards, limitations, and restrictions. This Order does not authorize dredge or fill activities within waters of the Unites States.

The Discharger has applied for a section 401 permit (Water Quality Certification), which will be publicly noticed. The Water Quality Certification will include water quality requirements, avoidance, minimization and mitigation measures to address impacts to jurisdictional wetlands and waters within the project site. The request for Water Quality Certification is being considered in a separate approval process, as final Certification authorization is delegated to and will be considered by the Executive Officer following the Regional Water Board's consideration of this Order.

2.29. **Notification of Interested Parties**

The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations.

2.30. **Consideration of Public Comment**

The Regional Water Board provided a 30-day written public comment period, and in a public meeting, heard and considered all comments pertaining to the discharge.

2.31. **Petition of Action**

Any person aggrieved by this action of the Regional Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions will be provided upon request or may be found on the California Waterboards Water Quality Petitions webpage:
(https://www.waterboards.ca.gov/public_notices/petitions/water_quality)

3. DISCHARGE PROHIBITIONS

3.1. The direct or indirect discharge of wastes and process water to surface waters or surface water drainage courses is prohibited. Inland surface waters consist of rivers, streams, lakes, reservoirs, and inland wetlands.

3.2. No debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement or concrete washings, oil or petroleum products, or other organic or earthen material from any construction or associated activity of whatever nature, other than that authorized by this certification, shall be allowed to enter into or be placed where it may be washed by rainfall into waters of the state.

3.3. The discharge of any waste not disclosed by the Discharger or not within the reasonable contemplation of the Regional Water Board is prohibited.

3.4. Creation of pollution, contamination, or nuisance as defined by section 13050 of the Water Code is prohibited.

3.5. Bypass or overflow of treated or untreated waste is prohibited.

3.6. The presence of surfacing or ponded effluent in the infiltration/irrigation fields is prohibited.

3.7. The discharge of wastewater exceeding the maximum concentrations established in Table 4 from anywhere within the collection, treatment, or disposal system is prohibited.

3.8. The discharge of wastewater containing constituents above the effluent limits in Table 4 from anywhere within the collection, treatment, or disposal system is prohibited.

3.9. The discharge of waste to land that is not owned by or under agreement to use by the Discharger is prohibited.

3.10. The discharge of waste at any point not described in Table 2 or authorized by a permit issued by the State Water Board or Regional Board is prohibited.

3.11. The discharge of waste from the outfalls of the Surface Water Runoff Collection Ditch is prohibited.

3.12. Discharges of waste that violate any narrative or numerical water quality objective that are not authorized by waste discharge requirements or other order or action by the Regional or State Water Board are prohibited.

3.13. Project activities shall not result in a migration of landfill contaminants that result in a statistically significant change in concentration in the respective monitoring locations.

3.14. Project activities shall not result in a significant reduction in the baseflows in Ranch Tributary and Americano Creek.

3.15. Peak storm water runoff from the proposed quarry during active mining and post reclamation shall not be increased such that peak storm water flows

entering Americano Creek and Ranch Tributary from the project site exceed pre-project baseline flows during the 2-, 10-, 25-, 50- and 100 year storm events.

3.16. The use of chemical additives without prior approval of the Regional Water Board's Executive Officer in the processing plant and sediment control basins is prohibited.

3.17. Discharge of water, except direct precipitation or spring flow, to a sediment control basin having a freeboard of one foot or less is prohibited.

3.18. Discharges from the two overburden soil stockpiles are prohibited.

3.19. The discharge of waste in violation of, or not consistent with, the applicable Regional Water Board's Basin Plan is prohibited.

3.20. Discharge of waste classified as "hazardous" as defined in Sections 2521(a) of Title 23, CCR, Section 2510, et seq., or "designated," as defined in Section 13173 of the CWC, is prohibited.

4. SOURCE WATER EFFLUENT LIMITATIONS

4.1. Prior to the use of water from the sediment control basins or water supply wells, the quarry shall obtain representative samples of the source water and submit the samples for analysis of VOCs (EPA Method 8260) and/or metals (EPA Method 6010) by a California state certified analytical laboratory. If, the monitoring detects analytes above the limitations shown in Table 4, in samples of source waters, the Discharger shall immediately treat the supply water to a level equal to or lower than the levels shown in Table 4 prior to any onsite use. Monitoring and reporting requirements for source waters are specified in Attachment A, Monitoring and Reporting Program No. R1-2021-0015.

4.2. The maximum concentrations for select analytes that may be present in source waters before onsite use or disposal are shown in Table 4. To determine if the facility has contributed to the discharge of naturally occurring compounds, data shall be compared to background concentrations in the monitoring wells MW-XX (see Attachment A Section 1) located upgradient and downgradient of the infiltration/irrigation fields. Any discharge of a naturally occurring compound at a level statistically significant and greater than background is a violation.

Table 4. Effluent Limitations of Analytes in Source Waters

Parameter	Units	Effluent Limits
Metals[2]	µg/L[3]	Concentration Limits[4] from Groundwater Baseline as determined in Section 4.2
VOCs[5]	µg/L	ND[6]
Semi-VOCs[7]	µg/L	ND[6]

4.3. If the monitoring conducted pursuant to the monitoring and reporting program reveals concentrations of parameters greater than the ability of the treatment system to treat to the limits shown in Table 4, the Discharger shall submit a report within 90 days of the Discharger's receipt of the test results to characterize the waste. If such report demonstrates the presence of chemicals at concentrations that may adversely affect any onsite reuse during the life of the quarry, or surface or groundwater quality as a result of the final reclamation of the site, then within 120 days, the Discharger shall submit a report evaluating alternatives to reduce the chemical contamination to meet the limits in Table 4. All work plans and reports shall be prepared under the immediate supervision of a California Registered Civil Engineer or Engineering Geologist and shall be certified by such individual in accordance with the Business and Professions Code.

5. GROUNDWATER LIMITATIONS

5.1. The collection, treatment, storage, and disposal of wastewater shall not cause or contribute to degradation of groundwater quality and shall not violate

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[2] Metals include aluminum, antimony, arsenic, barium, beryllium, boron, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, mercury, molybdenum, nickel, potassium, selenium, silver, sodium, thallium, titanium, tin, vanadium, and zinc. Metals analyses are for dissolved concentrations.
[3] µg/L – micrograms per liter
[4] The concentration limit for each constituent shall be determined by calculation in accordance with a statistical method pursuant to Title 27, section 20415(e)(8) or by an alternate statistical method meeting the requirements of Title 27, section 20415(e)(8)(E).
[5] Volatile Organic Compounds (VOCs) – US EPA method 8260B

[6] Not Detected (ND) Those sample results less than the laboratory's Method Detection Limit.

[7] Semi-Volatile Organic Compounds (Semi-VOCs) US EPA method 8270

groundwater quality objectives or cause impacts to beneficial uses of groundwater. Quarry operations shall not cause water quality degradation by allowing a measurably significant increase over background or baseline concentrations as calculated in accordance with a statistical method pursuant to Title 27, section 20415(e)(8) or by an alternate statistical method meeting the requirements of Title 27, section 20415(e)(8)(E). Any detection of VOCs or Semi-VOCs, or naturally occurring compounds at a level statistically significant and greater than background, in groundwater is a violation of this Order.

5.2. The collection, treatment, storage and disposal of the treated wastewater shall not cause or contribute to levels of chemical constituents in groundwater that exceed the primary and secondary maximum contaminant levels specified in California Code of Regulations, title 22, Table 64431-A, Table 64444-A, Table 64449-A, and Table 64449-B. (Cal. Code Regs., tit. 22, § 64444 and § 64449)

5.3. The collection, treatment, storage, and disposal of wastewater shall not cause groundwater to contain taste- or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses.

5.4. The collection, treatment, storage and disposal of wastewater shall not cause groundwater to contain toxic substances in concentrations that are toxic to, or that produce detrimental responses in humans, or that adversely affects beneficial uses. This limitation applies regardless of whether the toxicity is caused by a single substance or the synergistic effect of multiple substances.

5.5. Process waters that may discharge to groundwater, in combination with other sources, shall not cause underlying groundwater to contain waste constituents in concentrations statistically greater than those found in background water quality sampling.

6. SEDIMENT CONTROL BASINS AND RETENTION POND SPECIFICATIONS

6.1. Small coves and irregularities shall not be created around the perimeter of the sediment control basins' water surface.

6.2. Weeds shall be minimized through control of water depth, harvesting, or herbicides.

6.3. Dead algae, vegetation, and debris shall not accumulate on the water surface.

6.4. All precipitation and runoff within the footprint of the active quarry pit shall be collected, monitored and treated for sediment removal and potentially for the removal of volatile organics, semi-volatile organics and/or metals prior to onsite use.

6.5. Dams, levees, and other earthworks intended to hold or convey water shall be designed and constructed under the direct supervision of and certified by a

California Registered Civil Engineer or Engineering Geologist having expertise in the design of such earthworks.

6.6. All sediment control basins shall be designed, constructed, operated and maintained to prevent inundation or washout due to floods with a return period of 100 years.

6.7. The sediment control basin system shall have sufficient capacity to accommodate allowable process water flow and design seasonal precipitation, and ancillary inflow and infiltration to prevent inundation or washout during the winter months. Design seasonal precipitation shall be based on total annual precipitation using a return period of 100 years, distributed monthly in accordance with historical rainfall patterns.

6.8. A sediment control basin water freeboard gauge shall be installed and maintained in each basin so freeboard can be readily assessed.

6.9. The sediment pond shall include a forebay to trap coarse soil particles before the runoff enters the main sediment ponds.

6.10. Freeboard shall never be less than two feet for basins with berms or dams, or one foot for basins built below grade (measured vertically to the lowest point of overflow). Lesser freeboard is allowed as long as no overflow of the lower retention basin occurs, and lesser freeboard is due to direct precipitation or storm water runoff occurring as a result of annual precipitation with greater than a 100-year recurrence interval, or a storm event with an intensity greater than a 25-year, 24-hour storm event.

6.11. By 1 October of each year, available pond storage capacity shall at least equal the volume necessary to contain all sediments, average yearly rainfall, and the 25 year, 24-hour rain event. The sediment control basins shall be inspected weekly from October 15 - April 15 and year-round following rainfall events greater than 1-inch in 24 hours. Fine-grained sediment shall be removed as needed to preserve adequate capacity.

6.12. In the event that VOCs and/or metals are detected in water of the sediment control basins at concentrations above acceptable water quality standards, the sediment within the respective basin shall also be sampled and analyzed for VOCs and/or metals (by a California state certified laboratory) prior to the removal. If VOCs and or metals are present in the material at concentrations which exceed acceptable criteria, sediment shall be disposed of in accordance with state and federal regulations

6.13. Except for recycled process water and solids removed from the mine pit sediment control basins, the discharge shall remain within these basins at all times.

6.14. Existing monitoring wells not located within the footprint of the aggregate excavation pits or the settling pond(s) shall be maintained. The Discharger

shall obtain approval from the Regional Board's Executive Officer prior to the abandonment or destruction of any monitoring well.

6.15. Sediment will be stored and disposed of in accordance with local, state, and federal regulations.

6.16. Sediment basin and retention structures shall be inspected monthly from October - April to confirm adequate performance. These structures will be cleaned and maintained on an annual basis and routinely inspected for erosion and slippage during the rainy season.

6.17. All chemical dust suppressants and slope stabilization chemicals or polymers, and sediment pond enhancement chemicals or polymers shall be EPA-approved and shall be used strictly according to the manufacturer's directions. An accurate accounting of the kinds and quantities of these materials used on the site shall be maintained by the operator.

7. OVERBURDEN AND TOPSOIL STOCKPILES

7.1. Prior to placement of overburden in the proposed stockpile locations, all areas receiving material shall be cleared and stripped. Stockpiled overburden and topsoil materials stored outside of the active mine pit shall be managed to minimize and/or prevent erosion of sediment to surface water drainage courses.

7.2. Where overburden materials are placed on underlying supporting slopes steeper than 6:1, the fill area shall be prepared by constructing horizontal benches into firm natural soil or rock. The benches must be at least eight feet in width, with a step of at least four feet between benches.

7.3. Overburden stockpile material shall be placed and compacted using conventional heavy equipment.

7.4. Fugitive dust emanating from the soil stockpiles shall not create a situation of nuisance beyond the quarry boundaries.

7.5. Overburden stockpiles shall be inspected monthly from October – April to confirm adequate performance and to address any erosion source and/or slippage during the rainy season.

7.6. All grading work and fill placement plans shall be approved, in writing, by a California registered Geotechnical Engineer or a California Certified Engineering Geologist.

8. INTERCEPTOR TRENCHES AND SURFACE WATER COLLECTION DITCH

8.1. Interceptor Trenches and Surface Water Runoff Collection Ditch shall be managed to minimize and/or prevent erosion of sediment to surface water drainage courses.

8.2. Interceptor Trenches and Surface Water Runoff Collection Ditch shall be inspected monthly from October 15 - April 15 and year-round following rainfall events greater than 1-inch in 24 hours to confirm adequate performance and to address any erosion source and/or slippage during the rainy season.

8.3. The outfalls of the Interceptor Trenches and the Surface Water Collection Ditch shall be monitored in accordance with Monitoring and Reporting Program 2021-0015 (MRP, Attachment A).

8.4. If, upon inspection, evidence of erosion is found in the Interceptor Trenches or the Surface Water Runoff Collection Ditch, the Discharger shall:

1. Conduct an evaluation to determine the source of the erosion and shall immediately implement corrective actions if they are needed.
2. Update the Storm Water Management Plan (SWMP) required in Section 10.1 accordingly and implement additional erosion control measures to reduce pollutants and to minimize erosion and sedimentation.

8.5. If the results of monitoring associated with the Surface Water Runoff Collection Ditch conducted in accordance with the MRP show exceedances of water quality objectives, the Discharger shall:

1. Conduct an evaluation to determine the sources of sediment contributing to the exceedances and shall immediately implement corrective action if it is needed.
2. Update the SWMP required in Section 10.1 accordingly and implement additional erosion control measures to minimize erosion and sedimentation and eliminate pollutants.

9. INFILTRATION/IRRIGATION FIELDS

9.1. The discharger shall submit an Infiltration/Irrigation Field Management Plan to the Regional Water Board's Executive Officer for approval prior to commencement of Phase 1. The plan shall include the following information:

1. Locations and design of the infiltration/irrigation fields including the design details for the subsurface 'infiltration fields' that use infiltration trenches and the surface 'irrigation fields' that use spray irrigation.
2. Maximum flow rates for the disposal of wastewater from the sediment control basins based on site characteristics.
3. A description of the conditions under which new infiltration/irrigation fields will be constructed to accommodate increased runoff and seepage rates that will result in additional discharge volumes from the sediment control basins as the quarry footprint is expanded.

9.2. Wastewater discharged to the infiltration/irrigation fields shall not exceed the maximum flow rate established in the Infiltration/Irrigation Field Management Plan.

9.3. Wastewater discharged to the infiltration/irrigation fields shall not contain analytes in concentrations exceeding the effluent limitations in Table 4.

9.4. Wastewater shall not be applied to an irrigation field within 24 hours of forecasted precipitation with a greater than 50-percent probability of occurring, during precipitation events, within 24 hours after precipitation, or when the infiltration/irrigation fields surface soil is saturated.

9.5. Infiltration/Irrigation fields must be set back a minimum 50 ft from Ranch Tributary and Americano Creek.

10. STORM WATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL

10.1. At a minimum of 90 days prior to beginning of the Interim Phase, the Discharger shall submit a Storm Water Management Plan (SWMP) to control erosion, sedimentation, and potential hazardous pollutants during active quarry operations. All structural elements and processes shall be designed and approved by a professional civil engineer experienced in stormwater management and sediment control. The SWMP shall be regularly updated as Best Management Practices (BMPs) and new BMPs are constructed and/or the quarry operation changes. The SWMP shall be implemented during the initial stage of quarry construction and stay in effect through the completion of reclamation. The SWMP shall:

1. Include storm water control measures that will be implemented during the reclamation process and post-closure of the quarry;
2. Ensure that the peak storm water and seasonal non-storm water flows are managed to the extent that storm water flow entering Americano Creek and Ranch Tributary from the project site does not exceed pre-project baseline flows during the 2-, 10-, 25-, 50- and 100 year storm events.
3. Include alternative on-site storm water retention strategies to ensure that storm water flows are adequately detained so post-reclamation discharges to Americano Creek and Ranch Tributary do not exceed baseline discharge rates
4. Ensure that the proposed sediment ponds operate as a storm water runoff retention feature with the capacity to contain and manage at least a 100-year return storm
5. Include storm water control measures that account for seepage during operation, as well as, in the long-term following reclamation and are based on conservative estimates of seepage derived from measures hydraulic conductivities in the weathered and unweathered Wilson Grove Formation and the Tolay Volcanics.
6. Include a comprehensive dust control program that includes dust control measures to maintain minimal fugitive dust impacts from the project.

10.2. This Order requires the implementation of the best available technology economically achievable (BAT) and best conventional pollutant control technology (BCT) to reduce or eliminate pollutants in storm water runoff, as well as additional measures as necessary to ensure no storm water that comes into contact with quarry operations discharges to surface waters. BCT/BAT are both defined in relation to the Best Practicable Control Technology Currently Available (BPT), which is the basic control level that all discharges must attain. BPT usually reflects the average of the best existing performance in a category of technology-based controls. BAT refers to treatment that may be applied in addition to BPT for removal of toxic pollutants and other non-toxic, non-conventional pollutants, while BCT refers to treatment that may be applied in addition to BPT for removal of conventional pollutants. Where required in this Order, BCT, BAT and BPT requirements shall be implemented consistent with their meaning under the Clean Water Act and implementing regulations. To comply with this requirement the Discharger shall implement effective and adequate combinations of erosion and sediment control BMPs to control storm water.

10.3. A California registered Geotechnical Engineer shall inspect the quarry slopes on a quarterly basis during excavation (in addition to following rainstorm greater than 1 inch in 24 hours, earthquakes, or blasting) to assess bedrock fracture and joint conditions. The inspection shall require continued mapping and movement monitoring of the mining slopes to assess slope stability. If a slope condition presents the potential for erosion/siltation, repair measures shall be implemented.

10.4. In areas not being actively mined, bare soil shall be protected from erosion with the application of hydraulic mulch or hydroseeded.

10.5. In areas requiring temporary protection until a permanent vegetative cover can be established, bare soil shall be protected by the application of straw mulch, wood mulch, or mats.

10.6. Benches shall drain into adequately sized pipes or rock-lined channels that convey the runoff to the quarry floor. Outlets of pipes shall have appropriate energy dissipaters to prevent erosion at the outfall.

10.7. The applicant shall install sediment retention measures prior to October 15.

10.8. Silt fences, fiber rolls, and straw bale barriers shall be used on bare slopes no being actively mined to intercept and trap sediment carried by sheet flow.

10.9. Fueling and maintenance of all rubber-tired loading, grading and support equipment shall be prohibited within 100 feet of drainage ways. Fueling and maintenance activities associated with other less mobile equipment shall be conducted with proper safeguards to prevent hazardous materials releases. All refueling and maintenance of vehicles and mobile equipment shall take place in a designated area with an impervious surface and berms to contain any potential spills.

10.10. If surface water monitoring indicates discharges from the quarry site are occurring in violation of Discharge Prohibition 3.10, the applicant shall revise the SWMP adding BMPs where needed to eliminate the source of the discharge.

10.11. Water or other dust palliative shall be applied to stockpiles of soil as needed to control dust.

10.12. Water shall be applied to all active unpaved vehicle circulation areas daily, using reclaimed water whenever possible. Watering should be sufficient to prevent airborne dust from leaving the site. Increased watering frequency shall be applied whenever wind speeds exceed 15 miles per hour during dry conditions.

10.13. Excavation activity shall be suspended when winds (instantaneous gusts) exceed 25 miles per hour during dry conditions.

10.14. All quarry-operated trucks hauling soil, sand, and other loose materials shall be covered or otherwise required to maintain at least two feet of freeboard.

10.15. Paved roadways shall be swept (with water sweepers using reclaimed water if possible) at the end of each day if visible soil material is carried onto adjacent paved roads.

10.16. Inactive exposed soil areas shall be hydroseeded or have soil stabilizers applied.

10.17. Exposed soil stockpiles shall be enclosed, covered, watered daily or treated with a (non-toxic) soil stabilizer.

10.18. Wheel washers or other washing method (e.g., water sprayers or use of a water depression crossing) shall be installed so that that tires or tracks of all exiting trucks leaving the site are cleaned of dirt and gravel to minimize tracking these materials onto public roads.

10.19. The quarry's crushers shall be covered to minimize fugitive dust during crushing operations.

10.20. Prior to initiation of the project, the applicant shall prepare a Spill Prevention, Control and Counter Measure Plan (SPCCMP) in conformance with the requirements of the Code of Federal Regulations 40CFR112. A copy of the SPCCMP shall be submitted to the Sonoma County Department of Emergency Services.

10.21. If hazardous waste is generated or stored, then the operator shall comply with hazardous waste generator laws and AB2185 requirements and obtain a permit or approval from the C.U.P.A. or the participating agency. The applicant shall submit a copy of a current permit to the Permit and Resource Management Department Health Specialist to verify compliance.

10.22. All hazardous waste materials shall be stored, handled and managed in accordance with the approved site plan and hazardous materials plan so as to reduce the potential for any spillage.

10.23. No soil or other material containing hazardous or toxic waste shall be imported to the quarry.

11. BASEFLOW AND PEAK FLOWS IN RANCH TRIBUTARY AND AMERICANO CREEK

11.1. At a minimum of 90 days prior to beginning of the Interim Phase, the Discharger shall submit an updated hydrology study assessing changes to site drainage through the phases of quarry development and post-reclamation. The study must address the following topics:

1. Potential changes in baseflow in Americano Creek and Ranch Tributary. The study must demonstrate that baseflows in Americano Creek and Ranch Tributary will not be significantly reduced below pre-project levels as required by Discharge Prohibition 3.14;

2. Changes in pre-project baseline flows in Americano Creek and Ranch Tributary during the 2-, 10-, 25-, 50- and 100-year storm events. The study must demonstrate that peak storm water runoff from the proposed quarry during active mining and post reclamation shall not be increased such that peak storm water flows entering Americano Creek and Ranch Tributary from the project site exceed pre-project baseline flows during the 2-, 10-, 25-, 50- and 100 year storm events as required by Discharge Prohibition 3.15.

11.2. The Discharger shall implement a flow and creek stage monitoring program for Ranch Tributary and Americano Creek prior to the Interim Phase of operations to ensure compliance with Discharge Prohibitions 3.14 and 3.15. The purpose of the flow and creek stage monitoring program is to ensure no changes to the hydrograph for Americano Creek and Ranch Tributary through the phases of quarry development and post-reclamation and to quantify and mitigate potential changes in seasonal baseflow and changes in storm related peak flows. The discharger shall submit a work plan for the monitoring program 90 days after the adoption of this Order. The required monitoring program shall, at a minimum, include one location on Ranch Tributary and three representative locations on Americano Creek (i.e., upstream location at east property boundary, and locations upstream and downstream of Ranch Tributary). Flow and creek stage monitoring shall be conducted continuously at Monitoring Locations PSW-1, PSW-2, PSW-3, and PSW-4. The Discharger shall submit flow monitoring data to the Regional Water Board. If the base and peak flow monitoring programs show noncompliance with the Discharge Prohibitions 3.13 and 3.14 and/or unmitigated impacts to seasonal baseflow and changes in storm related peak flows occur, the Discharger is subject to additional investigative orders and enforcement remedies to address the

impacts, and may be required to seek additional permits to address unauthorized discharges and changes to the hydrograph for Americano Creek and Ranch Tributary.

12. GROUNDWATER LEVEL MONITORING

12.1. If pumping at Well DW-1 or DW-2 results in a measurable declining trend of static water levels, adaptive management strategies shall be employed including short term (e.g. alteration of pumping schedule, reduced pumping, decreased water use, changes in overall water management strategies or temporary cessation of pumping) or long term corrective measures until the groundwater levels in onsite wells are shown to recover to pre-project pumping conditions.

12.2. The ensure consistency in measured groundwater data, prior to mining and as required, all the existing and proposed wells on the quarry property to be used for monitoring shall be surveyed by a licensed surveyor for location and elevation, referenced to mean sea level, utilizing the North American Datum of 1988-DEOID 99 (NAVD88)

13. SITE RECLAMATION

13.1. Prior to reclamation of the quarry, appropriate sampling and testing shall be performed to identify any sources of soil contamination. If soil contamination is identified, then an appropriate remediation plan shall be developed prior to closing out the quarry operation, including obtaining any necessary permitting for site clean-up.

13.2. After all the equipment and buildings have been removed from the operations area, and prior to placement of topsoil and replanting, the operations area shall be ripped to loosen the area from excessive compaction and scarified prior to finish grading and replanting.

13.3. All drainage facilities shall be left in place including the Surface Water Runoff Collection Ditch, drainage structures and pipes located on the quarry face, the north and south slope interceptor trenches located along the perimeter of the quarry floor, and all three sediment basins.

13.4. Any sediment shall be removed from the remaining ditches, trenches, and basins and the basins shall be planted.

13.5. Reclamation erosion control shall consist of protecting all exposed surfaces with effective and adequate combinations of BMPs including permanent seeding and mulching, hydroseeding, placement of erosion control blankets on exposed surfaces, fiber rolls on slopes, silt fences along edges of swales where appropriate, tree planting on the quarry floor and quarry benches, and a stabilized entrance at the end of the paved access road. The objective for survival of vegetation is an 80% survival rate.

13.6. Monitoring and maintenance of the drainage facilities shall be performed for a period of 5-years after reclamation is completed. The Discharger shall immediately notify the Regional Water Board of any flooding, slope failure, or other change in site conditions which could impair the integrity of the control measures.

13.7. All disturbed areas shall be graded to flow into the site and toward sedimentation ponds. Side casting shall be avoided. The topsoil and overburden mounds shall be protected from erosion by straw covering and hydro-mulching prior to October 1.

13.8. Reclamation or stabilization of all quarry slopes and the quarry floor (excluding the working/processing/stockpile/loading/access areas) shall be completed by October 1 of each year.

13.9. The reclamation maintenance program ends five years after reclamation is completed and after all reclamation plan objectives are met. The Discharger shall then obtain written concurrence from the Regional Water Board's Executive Officer to terminate the reclamation maintenance program. All maintenance work shall be conducted during September and October and shall be completed prior to October 15th of each year. The annual maintenance inspections shall be conducted by the property owner prior to September 15 each year, and recorded onto logs. These routine inspections shall include repairing the irrigation system if needed, erosion control work, fence repair, and sediment removal from ditches, swales and the sediment basin.

13.10. During the rainy season, October 15th - April 30th, the sediment basins shall be inspected weekly. Year-round, following rainfall events greater than 1-inch in 24 hours, the site shall be inspected for significant erosion and sediment control problems. Inspection must include, at a minimum, excavated slopes, drainage ditches, swales, culverts, and sediment basins.

13.11. The Discharger shall have the continuing responsibility to assure protection of waters of the state from discharged wastes that may be generated and discharged during the reclamation process, and post-reclamation maintenance period of the facility as long as the Discharger maintains ownership of the property or remains an operator.

13.12. The Discharger shall submit an updated Reclamation Plan to the Regional Water Board's Executive Officer for approval prior to the initiation of Phase III of quarry operations. The updated Reclamation Plan must account for any operational or structural changes implemented during the life of the project.

14. GENERAL PROVISIONS

Failure to comply with provisions or requirements of this Order, may subject the Discharger to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies. Additionally, certain violations may subject the Discharger to

civil or criminal enforcement from appropriate local, state, or federal law enforcement entities. The Discharger shall comply with the following provisions:

14.1. **Availability**. A copy of this Order and the associated Monitoring and Reporting Program shall be maintained at the Facility and be available at all times to operating personnel.

14.2. **Enforcement**. The Discharger shall operate and maintain the Facility as described in this Order. Violation of any requirements contained in this Order subject the Discharger to enforcement action, including administrative and judicial civil liability, under the Water Code.

14.3. **Severability**. Provisions of these waste discharge requirements are severable. If any provision of these requirements is found invalid, the remainder of these requirements shall not be affected.

14.4. **Spill Response**. The Discharger shall comply with the following:

1. The Discharger shall take all feasible steps to stop spills and overflows from the drainage systems and sediment basins as soon as possible. All reasonable steps shall be taken to collect spill or overflow material and protect the public from contact with the wastes or waste-contaminated soil or surfaces.
2. The Discharger shall report orally and in writing to the Regional Water Board staff all spills and overflows of process wastewater. Spill notification and reporting shall be conducted in accordance with the Monitoring and Reporting Program of this Order.

14.5. **Drainage Facility Construction.** All on-site drainage facilities shall be constructed according the Sonoma County Water Agency's Flood Control Design Criteria and the Sonoma County Permit and Resource Management Department (PRMD) standards and requirements, and shall be operated and maintained in accordance with the prepared drainage plan during operation of the quarry and post-reclamation.

14.6. **Operation and Maintenance**. The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Discharger to achieve compliance with this Order. Proper operation and maintenance includes adequate laboratory control and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order.

The Discharger shall maintain an updated Operation and Maintenance Manual (O&M Manual) for the operational components of the Facility. The Discharger shall update the O&M Manual, as necessary, to conform to changes in operation and maintenance of the Facility. The Discharger shall operate and maintain the Facility in accordance with the most recently

updated O&M Manual. The O&M Manual shall be readily available to operating personnel on-site and for review by state inspectors.

The Discharger shall maintain procedures to ensure prompt identification and repair of damage to the drainage and water quality control systems, especially after large storm events. The Discharger shall conduct routine inspection and maintenance of the storm water and sediment control facilities. Storm water drainage conveyance and outfalls shall be inspected weekly from October 15 to April 15 and after each rainstorm greater than 1-inch in 24 hours. If inspections reveal that storm water conveyance of water quality control facilities (e.g. sediment ponds, energy dissipation structures) are damaged, corrective actions shall be implemented immediately.

14.7. **Change in Discharge.** The Discharger shall promptly report to the Regional Water Board any material change in the character, location, or volume of the discharge. The Discharger shall obtain confirmation from the Board that such proposed modifications are acceptable under the terms of these WDRs. Confirmation or new WDRs shall be obtained before any modifications are implemented. If the Executive Officer does not disapprove the proposed change within 60 days of receiving a written report describing the proposed change, the discharge may proceed in accordance with the proposed modifications. Possible changes under these WDRs include, but are not limited to, the need to expand the sediment control basins and/or the need to use a flocculating agent in the sediment control basins.

14.8. **Water Treatment System Performance**. If the water treatment system operation results in effluent concentrations exceeding the respective effluent limitations within Table 4, then the Discharger shall be required to improve water treatment measures, or provide evidence that the mining activity complies with State Water Resources Control Board Resolution No. 68-16 and other Regional Board policies. Prior to the operation of the treatment system, the Discharger shall develop a contingency plan kept on on-site 1) to ensure adequate treatment system capacity in the event that influent source waters volume are greater than the design flow and 2) for exceedances of effluent limitations.

14.9. **Change in Control or Ownership**. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Discharger, the Discharger shall notify the Regional Water Board of such changes in writing, and shall also notify the succeeding owner or operator of the existence of this Order and current compliance status in writing. The succeeding owner or operator, in order to obtain authorization for discharges regulated by this Order, must apply in writing to the Regional Water Board Executive Officer, requesting transfer of the Order. This request must include complete identification of the new owner or operator, the reasons for the change, and effective date of the change. Discharges

conducted without Regional Water Board approval will be considered discharges without waste discharge requirements, which are violations of the Water Code.

14.10. **Vested Rights.** This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the Discharger from liability under federal, state, or local laws, nor create a vested right for the Discharger to continue the waste discharge.

14.11. **Monitoring and Reporting**. The Discharger shall comply with the Monitoring and Reporting Program and any modifications to these documents as specified by the Regional Water Board Executive Officer.

14.12. **Records Retention.** The Discharger shall maintain records of all monitoring information, including calibration and maintenance records and all strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended upon notification of extension by the Regional Water Board Executive Officer.

14.13. **Signatory Requirements.** All reports shall be signed by persons identified below:

1. For a corporation: by a principal executive officer of at least the level of senior vice-president.
2. For a partnership or sole proprietorship: by a general partner or the proprietor.
3. For a municipality, state, federal or other public agency: by either a principal executive officer or ranking elected or appointed official.
4. A duly authorized representative of a person designated in 13.1.1, 13.1.2 or 13.1.3 of this requirement if;
    a. the authorization is made in writing by a person described in 13.1.1, 13.1.2 or 13.1.3 of this provision;
    b. the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a waste management unit, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position);
    c. the authorization is submitted to the Regional Water Board prior to or together with any reports, information, or applications signed by the authorized representative.

5. Any person signing a document under paragraph 4.a. or 4.b. of this provision shall make the following certification:

   "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted, is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

14.14. **Inspections**. The Discharger shall permit authorized staff of the Regional Water Board the following:

1. Entrance to the premises in which treatment, collection or management of waste occurs, where an effluent source is located or in which any records required by this Order are kept;
2. Access to inspect and copy any monitoring equipment or records required for compliance with terms and conditions of this Order; and
3. Access to sample any discharge or monitoring location associated with the Facility.

14.15. **Noncompliance**. In the event the Discharger is unable to comply with any of the conditions of this Order due to breakdown of waste treatment equipment, accidents caused by human error or negligence, or other causes such as acts of nature, the Discharger shall notify Regional Water Board staff by telephone as soon as it or its agents have knowledge of the incident and confirm this notification in writing within two weeks of the telephone notification. The written notification shall include pertinent information explaining reasons for the noncompliance and shall indicate the steps taken to correct the problem and the dates thereof, and the steps being taken to prevent the problem from recurring.

14.16. **Revision of Requirements**. The Regional Water Board will review this Order periodically and may revise requirements when necessary.

14.17. **Construction Storm Water Permitting.** The Discharger shall maintain continuous coverage under the General Permit for Discharges of Storm Water Associated with Construction Activities, Water Quality Order No. 2009-0009-DWQ, and any subsequently adopted versions, during initial construction activities and until such time as quarry operations commence for any construction activities that require coverage under that Order.

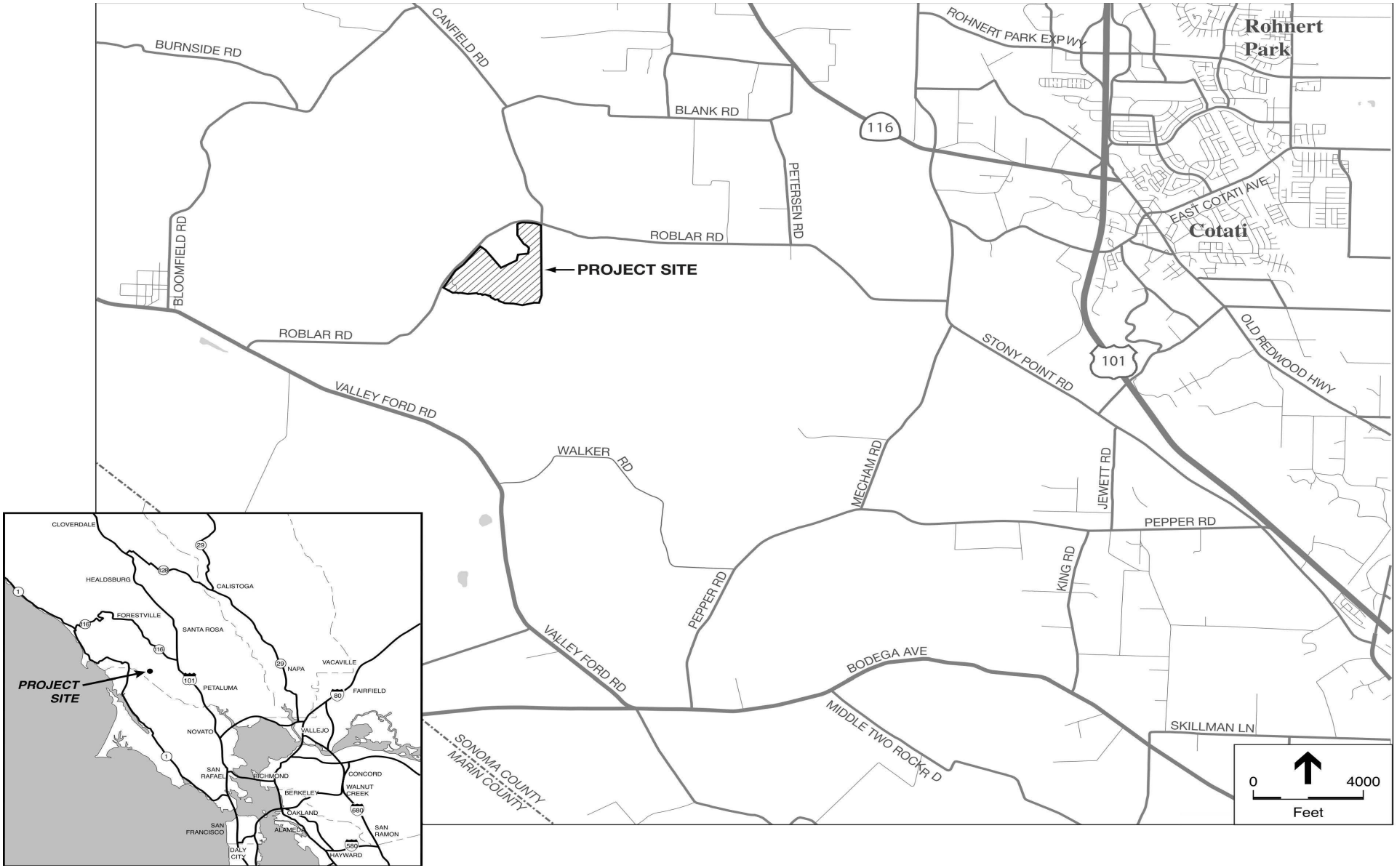

FIGURE 1 - Roblar Road Quarry Site Location Map

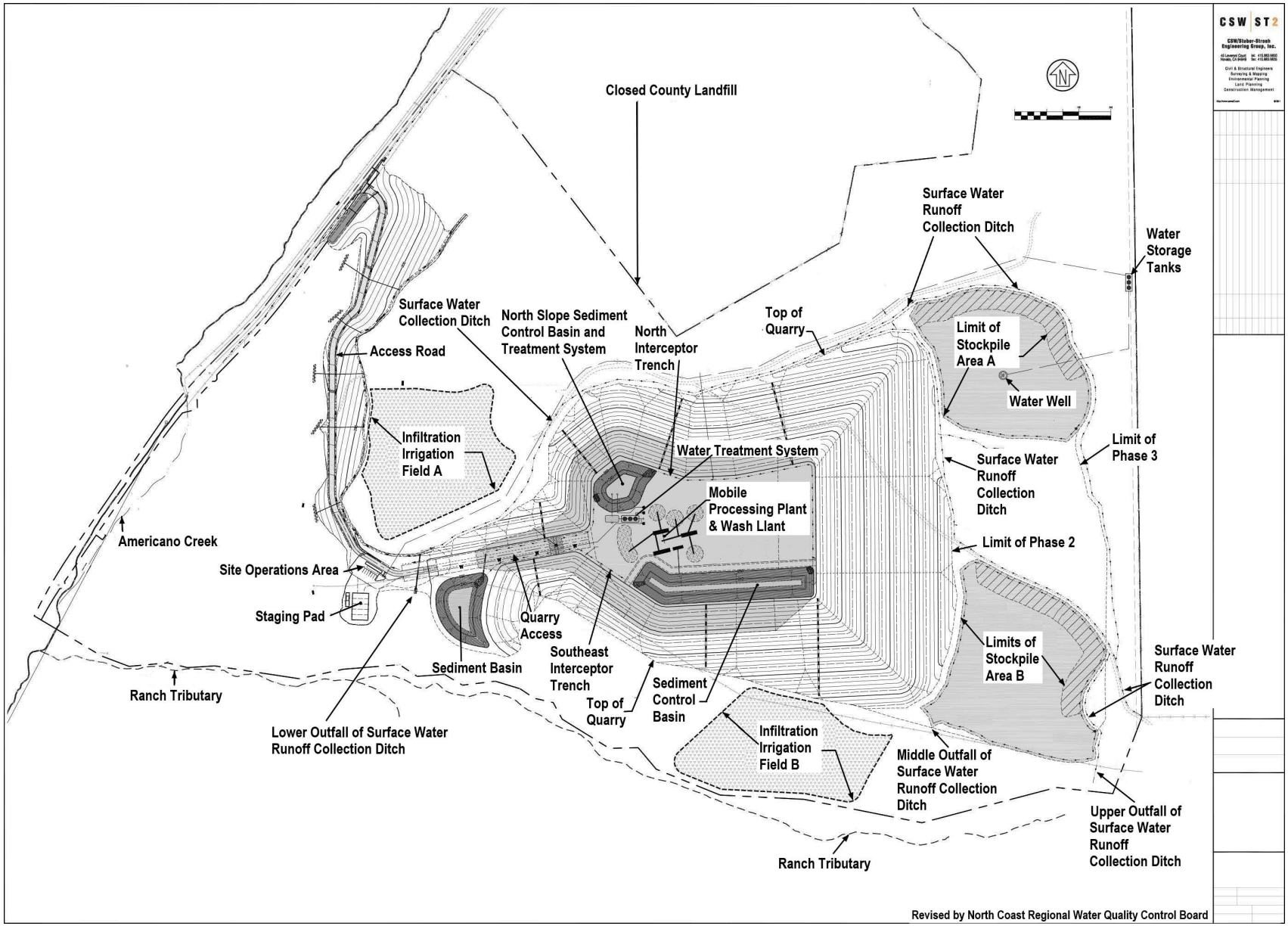

FIGURE 2 - Roblar Road Quarry Site Plan Phase 2 and Phase 3 limits.

ATTACHMENT A

Order No. R1-2021-0015

WDID No. 1B20225RSON

Monitoring and Reporting Program

for

Barella Family LLC

Roblar Road Quarry

Sonoma County

California Water Code (Water Code) sections 13267 and 13383 authorizes the Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. This Monitoring and Reporting Program (MRP) establishes monitoring and reporting requirements, which are necessary to assure the discharges of waste that could impact water quality complies with waste discharge requirements and water quality objectives. The monitoring and reporting program will help ensure that management measures are effective in preventing discharges that could adversely affect beneficial uses in surface and groundwaters. The MRP will ensure that any site discharges are detected, and adequate response measures to address such discharges are implemented. As such, the burden, including costs to monitor and prepare the reports bears a reasonable relationship to the need for the information. This MRP may be modified, as necessary by the Executive Officer. Pursuant to Water Code section 13268, failure to submit the report(s) as described by this Order is a misdemeanor and may subject you to an administrative civil liability if the reports are not received by the deadline.

1. MONITORING LOCATIONS

The Discharger shall establish the monitoring locations described in Table A-1 below to demonstrate compliance with the discharge prohibitions, discharge specifications, and other requirements in this Order. The existing monitoring well locations and are shown in Figure A-1.

The Discharger shall install two nested pairs of groundwater monitoring wells MW 5U/L and, MW-6U/L, and six conventional groundwater wells MW-7, MW-8, MW-9, MW-10 at the locations shown in Figure A-1 prior to the Interim Phase of quarry development.

The Discharger shall submit a workplan for the installation of two additional sets of monitoring wells, MW-XX and MW-YY, within 90 days after adoption of this Order. The monitoring wells must be designed and certified by a registered geologist or a

certified engineer and comply with all requirements of Title 27 Section 20415 of the California Code of Regulations. The wells must be located to determine the following:

1.1. Changes in groundwater quality downgradient of the infiltration/irrigation fields. Wells MM-XX must be installed in locations as necessary to adequately characterize groundwater quality upgradient and downgradient of the infiltration/irrigation fields. The wells must be installed six months prior to use of the infiltration/irrigation fields and be located so that they adequately characterize groundwater quality upgradient and downgradient of the irrigation/infiltration field.

1.2. Changes in hydraulic gradient that could affect baseline flows in Americano Tributary and Ranch Tributary. Wells MW-YY must be installed in locations to adequately evaluate changes to groundwater levels in Ranch Tributary all along the quarry footprint. The wells must be installed 12 months prior to the start of the Phase 1 of quarry operations to properly characterize baseline groundwater levels.

Table A-1. Monitoring Station Locations

Monitoring Location Name	Monitoring Location Description
DW-1, DW-2	Water Supply Wells. DW-2, the primary water supply well, is located in the northeast section of the quarry footprint. DW-1, the backup water supply well, is located north of the quarry footprint.
MW-1, MW-2b, MW-3, MW-4, MW-5, MW-6	Monitoring wells located between the quarry footprint and the closed Sonoma County Landfill.
MW-7	Monitoring well located within the quarry footprint and on the north slope.
MW-8	Monitoring well located west and downgradient of the quarry footprint and between the quarry and Americano Creek.
MW-9	Monitoring well located south of the quarry footprint and between the quarry and Ranch Tributary.
MW-10	Monitoring well located near the water storage tanks upslope of the quarry footprint.
MW-XX	Monitoring well locations to be determined per the Monitoring Locations provision Section 1 above.
MW-YY	Monitoring well locations to be determined per the Monitoring Locations provision Section 1 above.
SCB-1	North Slope Sediment Control Basin on quarry floor.
SCB-2	South Slope Sediment Control Basin on quarry floor.
SCB-3	Sediment basin located near access road.
WTS-1	Outlet of water treatment system.

Monitoring Location Name	Monitoring Location Description
INT-1	Outlet of North Interceptor Trench to the North slope Sediment Control Basin
INT-2	Outlet of east side Interceptor Trench to the sediment control basin located on the south side of the quarry.
PSW-1	Surface water monitoring location on Americano Creek upstream of the quarry.
PSW-2	Surface water monitoring location on Americano Creek downstream of the quarry and upstream of the confluence of Ranch Tributary.
PSW-3	Surface water monitoring location on Ranch Tributary prior to the confluence with Americano Creek.
PSW-4	Surface water monitoring location on Americano Creek downstream of Ranch Tributary and the quarry.
PSW-5	Surface water monitoring location on Ranch Tributary downstream of where runoff water from the Lower Outfall of the Surface Water Runoff Collection Ditch enters Ranch Tributary.
PSW-6	Surface water monitoring location on Ranch Tributary upstream of where runoff water from the Lower Outfall of the Surface Water Runoff Collection Ditch enters Ranch Tributary.

2. MONITORING PARAMETERS

The groups of parameters show in the monitoring requirements tables below include the following parameters for each group:

2.1. VOCs: US EPA Method 8260B

2.2. Semi-VOCs: US EPA Method 8270

2.3. Metals[1]: Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Titanium, Tin, Vanadium, and Zinc.

2.4. Field Parameters: pH, Specific Conductance, Total Alkalinity, Total Suspended Solids, Total Dissolved Solids, Turbidity, Total Hardness, Chloride, Nitrate as N, Oil and Grease.

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[1] Metals samples shall be filtered through a 0.45-micron filter prior to preservation. Analytical methods shall be selected to provide detection limits below the limiting water quality objective for each constituent.

3. MONITORING REQUIREMENTS

3.1. Source Water from Water Supply Wells

Table A-2. Monitoring Locations, Parameters, and Frequency

Monitoring Locations	VOCs	Metals	Field Parameters	Groundwater Elevation[2]
DW-1 and DW-2	24 hours[3]	24 hours[3]	24 hours[3]	Quarterly

3.2. Source Water from Sediment Control Basins

Table A-3. Monitoring Locations, Parameters, and Frequency

Monitoring Locations[4]	VOCs	Metals	Field Parameters	Freeboard
SCB-1, SCB-2, SCB-3	6-M/Q	6-M/Q	6-M/Q	Quarterly

6M/Q: Six monthly sampling events; quarterly thereafter

3.3. Source Water from Water Treatment System

Table A-4. Monitoring Locations, Parameters, and Frequency

Monitoring Location	VOCs	Metals	Field Parameters
WTS-1[5]	6-M/Q	6-M/Q	6-M/Q

6M/Q: Six monthly sampling events; quarterly thereafter

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[2] Groundwater elevations shall be monitored on a weekly basis during periods of active pumping from Well DW-1 or DW-2.

[3] Groundwater extracted from Wells DW-1 and DW-2 shall be sampled and analyzed once every 24-hours during periods of sustained or cyclic pumping (until a suitable trend of water quality standards is established), and at the end of each pumping episode during times of intermittent use of the well (intermittent use means pumping episodes separated by more than 24 hours).

[4] The samples shall be collected at the head end of the process water discharge point into the basin at a depth approximately midway between the pond surface and pond bottom.

[5] Composite sample required.

3.4. Groundwater Monitoring

Table A-5. Monitoring Locations, Parameters, and Frequency

Monitoring Locations	VOCs	Semi-VOCs	Metals	Field Parameters	Groundwater Elevation
MW-1, MW-2b, MW-3, MW-4, MW-5, MW-6	6-Q/S	6-Q/S	6-Q/S	6-Q/S	Quarterly
MW-7, MW-8, MW-9, MW-10, MW-XX	6-Q/S	N/A	6-Q/S	6-Q/S	Quarterly
MW-YY	N/A	N/A	N/A	N/A	Quarterly

6Q/S: Six quarterly sampling events; semi-annually thereafter

3.5. Interceptor Trench Surface Water Monitoring

Table A-6. Monitoring Locations, Parameters, and Frequency

Monitoring Locations	VOCs	Semi-VOCs	Metals	Field Parameters
INT-1 and INT-2	6-Q/S	6-Q/S	6-Q/S	6-Q/S

6Q/S: Six quarterly sampling events; semi-annually thereafter

3.6. Surface Water Monitoring

Table A-7. Monitoring Locations, Parameters, and Frequency

Monitoring Locations	VOCs	Metals	Field Parameters	Flow	Creek Stage
PSW-1, PSW-2, PSW-3, PSW-4	6-Q/S	6-Q/S	6-Q/S	Continuous	Continuous
PSW-5, PSW-6			4-QSE[6]		
SCD-1, SCD-2, SCD-3			4-QSE[6]		

6Q/S: Six quarterly sampling events; semi-annually thereafter. Three of the first six quarterly sample events and one of the two annual semi-annual sampling events may be coordinated with the storm-triggered sampling events required below.

4-QSE: Four sampling events during a Qualifying Storm Event (QSE). A QSE is defined as a rain event that meets all of the following conditions:

- there is runoff present at the outfall of the Surface Water Runoff Collection Ditch at the SCD-1 monitoring location
- there is flow present in Ranch Tributary at the PSW-5 and PSW-6 monitoring locations and

[6] Samples analyzed for turbidity only

- there has been no runoff from the Surface Water Runoff Collection Ditch occurring at the SCD-1 monitoring location within the previous 48 hours.

4. GENERAL MONITORING PROVISIONS

4.1. Water Treatment System Monitoring Provision

Composite samples may be taken by a proportional sampling device approved by the Regional Water Board Executive Officer or by grab samples composited in proportion to flow. In compositing grab samples, the sampling interval shall not exceed 1 hour.

4.2. Supplemental Monitoring Provision

If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the monthly and annual self-monitoring reports.

4.3. Laboratory Certification

Laboratories analyzing monitoring samples shall be certified by the State of California Environmental Laboratory Accreditation Program and must include quality assurance/quality control data with their reports. The Discharger may analyze pollutants with short hold times (e.g., pH, chlorine residual, etc.) in its on-site laboratory provided that the Discharger has standard operating procedures (SOPs) that identify quality assurance/quality control procedures to be followed to ensure accurate results.

4.4. Minimum Levels

Compliance and reasonable potential monitoring analyses shall be conducted using commercially available and reasonably achievable detection limits that are lower than the applicable effluent limitation. If no minimum level (ML) value is below the effluent limitation, the lowest ML shall be selected as the reporting level (RL). The method detection limit (MDL) is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in title 40, Code of Federal Regulations (C.F.R.), part 136, Attachment B, revised as of July 3, 1999.

4.5. Monitoring Equipment Provision

All monitoring and analysis instruments and devices used by the Discharger to fulfill this MRP shall be properly maintained and calibrated as recommended by the manufacturer to ensure their continued accuracy. The calibration interval for flow measurement devices shall not exceed 5 years.

4.6. **Treated Water Monitoring Provision.**

For effluent monitoring from the granular activated carbon and/or ion exchange water treatment system, composite samples may be taken by a proportional sampling device approved by the Regional Water Board Executive Officer or by grab samples composited in proportion to flow. In compositing grab samples, the sampling interval shall not exceed 1 hour.

4.7. **Groundwater Gradients**

Groundwater elevations taken prior to purging the well and sampling for Monitoring Parameters shall be used to fulfill the groundwater gradient/direction analyses required. For each monitored groundwater body, the Discharger shall measure the water level in each well and shall determine groundwater gradient and direction at least quarterly, including the times of expected highest and lowest elevations of the water level for the respective groundwater body. Groundwater elevations for all upgradient and downgradient wells for a given groundwater body shall be measured within a period of time short enough to avoid temporal variations in groundwater flow which could preclude accurate determination of groundwater gradient and direction. This information shall be included in the quarterly monitoring reports.

5. REPORTING REQUIREMENTS

5.1. **Self-Monitoring Reports (SMRs)**

1. The Discharger shall submit quarterly SMRs including the results for all monitoring specified in this MRP. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
2. Quarterly SMRs shall be submitted by the first day of the second calendar quarter, following the quarter of sampling. Annual summary reports shall be submitted by March 1 each year.
3. Monitoring periods for all required monitoring shall be completed according to the following schedule:

Table A-8. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On	Monitoring Period
Daily	Permit Effective Date	(Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling.
Weekly	Sunday following permit effective date or on permit effective date if on a Sunday	Sunday through Saturday

Sampling Frequency	Monitoring Period Begins On	Monitoring Period
Monthly	First day of calendar month following permit effective date or on permit effective date if that date is first day of the month	First day of calendar month through last day of calendar month
Quarterly	First day of calendar quarter following permit effective date or on permit effective date if that date is first day of the quarter.	January through March April through June July through September October through December
Annually	January 1 following (or on) permit effective date	January 1 through December 31

4. The Discharger shall report with each sample result the applicable MDL, the RL and the current MDL, as determined by the procedure in Standard Methods.
5. The Discharger shall report with each sample result the applicable ML[7], the RL and the current MDL, as determined by the procedure in Standard Methods.
   a. Sample results greater than or equal to the reported ML shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
   b. Sample results less than the RL, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported. For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words "Estimated Concentration" (may be shortened to "Est. Conc."). The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (+ a percentage of

[7] The concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

c. Sample results less than the laboratory's MDL shall be reported as "Non-Detect," or ND.

d. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.

6. The Discharger shall submit monthly SMRs in accordance with the following requirements:

   a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the Facility is operating in compliance with effluent limitations and other WDR requirements.

   b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify:

      i. Facility name and address;

      ii. WDID number;

      iii. Applicable period of monitoring and reporting;

      iv. Violations of the WDRs (identified violations must include a description of the requirement that was violated and a description of the violation);

      v. Corrective actions taken or planned; and

      vi. The proposed time schedule for corrective actions.

   c. The Discharger shall obtain a GeoTracker Account and Global ID for the Roblar Road Quarry site. Information on the GeoTracker database is provided on the State Water Board website: (https://www.waterboards.ca.gov/resources/data_databases/groundwater.shtml)

   d. The Quarterly SMRs, and the Annual Reports must be uploaded to the State Water Board's GeoTracker database in a Portable Document Format (PDF). Analytical results must be electronically submitted to GeoTracker database in electronic deliverable format (EDF).

5.2. **Annual Report**

The Discharger shall submit an annual report, as per this section, to the Regional Water Board for each calendar year. The report shall be submitted by March 1 of the following year. The report shall, at a minimum, include the following:

1. Monitoring Data Summaries. Both tabular and, where appropriate, graphical summaries of the monitoring data and disposal records from the previous year. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculation and report of the data submitted in the SMR.
2. Compliance Reporting. A comprehensive discussion of the Facility's compliance (or lack thereof) with all water quality limitations and other WDRs, and the corrective actions taken or planned, which may be needed to bring the discharge into full compliance with the Order.
3. Infiltration/Irrigation Application Rates. Monthly application rates of wastewater discharged to the infiltration/irrigation fields.
4. Baseflow and Peak Flow Monitoring. Hydrographs for Americano Creek and Ranch Tributary reporting the results of continuous monitoring. The report shall compare current year results to historical results through the development of the quarry to post-reclamation and note any statistically significant changes over time. The report shall also contain the quarterly groundwater level measurements and compare current results to historical results and note any statistically significant changes over time.

5.3. **Notification of Detections of Exceedances of Concentration Limits**

1. If the results of the monitoring program show there is any detection of VOCs or Semi-VOCs, or that metals concentrations or field parameters are measured above concentration limits[8] for changes over time within samples collected from monitoring wells MW-1, MW-2b, MW-3, MW-4, MW-5, MW-6, MW-XX and surface water sample locations INT-1 and INT-2, the Discharger shall:
   a. Immediately notify the Regional Water Board staff by telephone or email of the exceedance,
   b. Within seven days of the initial findings, follow up with written notification,

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[8] The concentration limit for each constituent shall be determined by calculation in accordance with a statistical method pursuant to Title 27, section 20415(e)(8) or by an alternate statistical method approved by Regional Water Board staff.

c. Within 30 days of the initial finding, re-sample for the constituent(s) or parameter(s) at the point where the standard was exceeded, and

d. Within 60 days of the initial finding, submit the results of the re-sampling and statistical analysis, indicating whether or not an exceedance or release was confirmed by the re-test. Within 180 days of verifying constituents of concern above concentration limits specified in this Order, submit a corrective action plan to correct the violations and to prevent future similar violations.

5.4. **Spill Notification**

1. Spills and Unauthorized Discharges. Information regarding all spills and unauthorized discharges that may endanger health or the environment shall be provided verbally to the Regional Water Board[9] within 24 hours from the time the Discharger becomes aware of the circumstances and a written report shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances of the spill or unauthorized discharge.

   Information to be provided verbally to the Regional Water Board includes:

   a. Name and contact information of caller;

   b. Date, time and location of spill occurrence;

   c. Estimates of spill volume, rate of flow, and spill duration, if available and reasonably accurate;

   d. Surface water bodies impacted, if any;

   e. Cause of spill, if known at the time of the notification;

   f. Cleanup actions taken or repairs made at the time of the notification;

   g. Actions taken to prevent the spill or unauthorized discharge from reoccurring; and

   h. Responding agencies.

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[9] The contact number of the Regional Water Board during normal business hours is (707) 576-2220. After normal business hours, spill reporting to the California Governor's Office of Emergency Services Warning Center. (CalOES) will satisfy the 24-hour spill reporting requirement for the Regional Water Board. The contact number for spill reporting for the CalOES is (800) 852-7550.

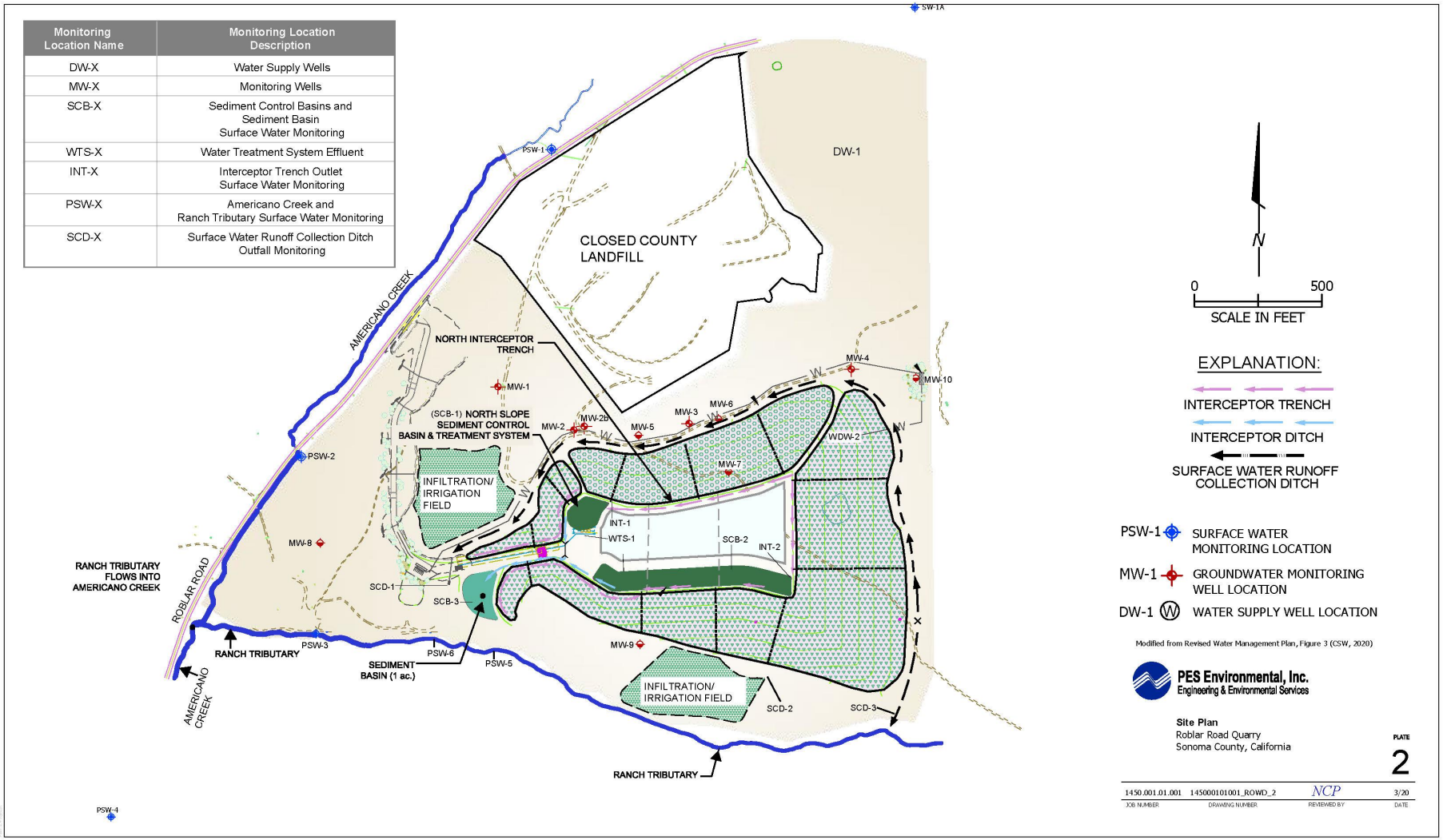

FIGURE A-1. Roblar Road Quarry Surface Water and Groundwater Monitoring Locations