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Compliance Summary Table

Surface Mining Permit #P08-00337

Syar Napa Quarry 5-year Status Report #P08-00337-SMP

Planning Commission Hearing - Wednesday, June 23, 2021

Compliance Summary Table¹

Syar Napa Quarry, Surface Mining Permit No. P08-00337-SMP

1. SCOPE		
No.	Condition of Approval ¹	Compliance Summary Data
1A	1. The excavation, production, processing, and sales of up to a maximum of 1.3 million tons of aggregate and related aggregate materials (including recycled concrete, asphalt, and reclaimed asphaltic product) from the Quarry annually for the next 35 years beginning on the Effective Date of this Permit;	Annual sales reports and DMR Mining Operation Annual Reports (MRRC-2) are provided to PBES. Since 2016 verified production levels have been below the SMP's baseline production level (810,363 tpy) and asphalt production has not exceed 300,000 tpy. This information is proprietary and reported to the PBES in separate confidential reports. The SMP is currently in the fifth year of its term.
	2. Annual production shall not exceed 1.3 million tons per year (tpy) for aggregate, and asphalt production shall not exceed 300,000 tpy inclusive of the overall 1.3 million tpy limitation.	See No. 1(A).
	3. Operation of the Quarry in accordance with the 2016 Mining and Reclamation Plan (MRP) and excavation limits, as modified by SMP conditions of approval.	Based on ongoing site inspections, and documentation in both the Syar Annual Compliance Reports and Annual Surface Mining inspection Reports (MRRC-1) the Quarry is operating in substantial compliance with this provision.
	4. An increase in mining depth to no greater than 50 feet above mean sea level;	Based on ongoing site inspections, and documentation in both the Syar Annual Compliance Reports and Annual Surface Mining inspection Reports (MRRC-1) the Quarry is operating in substantial compliance with this provision. Also see Conditions Nos. 11(T) and 11(U).
	5. Installation and operation of Reclaimed Asphaltic Product (RAP) handling equipment at the facility's existing asphaltic batch plant;	The RAP system has been constructed (Building Permit No. B18-01920) and is awaiting its final authority to operate by the BAAQMD.
	6. Provide additional visual screening in the Pasini Parcel expansion area by planting oak trees as shown in Figure 3F of the 2016 Mining and Reclamation Plan. These trees shall be planted within 24 months of the Effective Date of this Permit;	The required Pasini Parcel tree planting was completed in 2018, per the Oak Woodland Establishment and Restoration Plan (Sequoia Ecological Consulting Inc., July 2017). The Syar Annual Compliance Reports include required yearly monitoring reports associated with this effort and condition of approval.

¹The conditions herein have been summarized and/or abridged for the sole purpose of this Summary Table. They are neither intended to alter, revise or replace the approved Permit conditions pursuant to Resolution Nos. 2106-152, 2016-153, and 2016-154, nor should they be considered an attempt to do so. Conditions identified with an asterisk (*) have not been summarize or abridged. For a complete Permit condition language please refer to the aforementioned Resolutions, which can also be access at: [Files - PBES Cloud](#).

	7. Ongoing operation of existing Quarry Facility, including the placement and utilization of portable equipment necessary for quarry operations and reclamation; and the installation, maintenance and realignment of internal access and mine roads per the SMP;	Based on ongoing site inspections, and documentation in both the Syar Annual Compliance Reports and Annual Surface Mining inspection Reports (MRRC-1) the Quarry is operating in substantial compliance with this provision. Operation of the Quarry outside the approved boundaries identified in the SMP has not been identified.
	8. Reclamation of all areas in conformance with the 2016 MRP as modified by SMP conditions: In the event of conflict between the 2016 MRP and SMP conditions of approval the conditions of approval shall control; and	Syar is aware of and acknowledges the requirements of this condition.
	9. An increase in Quarry Operation employees from approximately 55 to a maximum of 75 total Quarry employees.	Syar Annual Compliance Reports show Napa Quarry employees have not exceed 75 employees.
1B	Quarry operation and reclamation shall be carried out in substantial conformance with the 2016 MRP as modified by SMP conditions of approval. It is the responsibility of the Permittee to communicate the requirements of these conditions of approval and all mitigation measures to all contractors, employees, and customers of the Quarry. Any expansion or change in the SMP or Quarry mining and operations shall require a modification to the SMP pursuant to applicable local and State law.	Syar is aware of and acknowledges the requirements of this condition. Operation of the Quarry outside of SMP requirements and provisions has not been identified through ongoing inspections and annual reporting.
1C*	Reserved	-NA-
1D	Within 12 months of the Effective Date of this Permit, the Permittee shall execute a License Agreement with the County (in cooperation with the Napa County Parks and Open Space District and the Skyline Park Citizens Association) that shall allowing all the existing trails located on Syar holdings to remain in place for the life of this Permit and to allow continued public access.	The license agreement was recorded July 7, 2017: Instrument # 2017-0015368 and #2017-0015370.
1E	The Permittee shall protect all "Exclusion Areas" as identified within Figure 3f of the 2016 MRP via deed restriction within 12 months of the Effective Date of the Permit	The deed restriction was recorded on July 7, 2017: Instrument #2017-0015369 and #2017-0015371.
1F	This Project shall be reviewed by the Planning Commission every 5 years at a noticed public hearing to determine compliance with SMP conditions of approval and the 2016 MRP. The Commission may impose additional conditions as necessary to address compliance issues. If after conducting inspections required by NCC Section 16.12.500, or upon the receipt of a verified complaint, the Planning Director finds that Quarry Operations are not in substantial compliance with this SMP or other applicable laws. Compliance procedures pursuant to Article VI (Enforcement) (NCC Section 16.12.600 et seq - Enforcement.) shall be immediately commenced so that any significant compliance issues can be brought before the Planning Commission atthe earliest opportunity provided Permittee has failed to timely cure the violation.	The Planning Commission review of this SMP is being conducted on June 23, 2021, at a duly noted public hearing. As documented in Syar Annual Compliance Reports and County Annual Surface Mining Inspection (MRRC-1) Reports, the Quarry is being operated in substantial compliance with its SMP, and no new conditions are being proposes at this time.
1G*	All prior mining-related discretionary permits on the Property including, but not limited to, Permit Numbers UP-128182 and UP-27374 authorizing current mining, quarrying, associated operation of the Quarry, and reclamation shall be superseded and replaced by this Permit.	-NA-

2. PROJECT SPECIFIC CONDITIONS

2A	Permit Compliance: The Permittee shall comply with all SMP conditions of approval and mitigation monitoring and reporting program, NCC Chapter 16.12, SMARA, and Californian Code of Regulations Title 14, Division 2, Chapter 8, during and throughout mining and reclamation activities at the Quarry site.	Syar is aware of and acknowledges the requirements of this condition. As documented in Syar Annual Compliance Reports and County Annual Surface Mining Inspection (MRRC-1) Reports, the Quarry is being operated in substantial compliance with its SMP and applicable laws.
2B	Permit Term: All Quarry Operations shall permanently cease and reclamation shall begin upon expiration of this Permit, unless a modification to this Permit approved by the County.	The SPM is currently in the fifth year of its 35 year term. No pending modifications are on file.
2C	Permit Limitation: The introduction of additional uses, aggregate products, expansion of the mined/excavated area, installation of equipment or construction of facilities including roads outside of the identified excavation areas shown in the 2016 MRP, or other changes to Quarry Operations shall be prohibited, unless the SMP modification(s) are approved pursuant to NCC Sections 16.12.520 and 16.12.530	No additional uses, aggregate products, or Quarry Operations are occurring outside the scope of the SMP or identified excavation areas.
2D	Groundwater Supply and Use: Groundwater use and pumping for all Quarry Operations and reclamation shall not exceed 140.6 acre-feet per year (AF/yr). All monitoring reports and data specified in this condition, shall be submitted to PBES monthly and as prescribed pursuant to COA No. 2(L), and as necessary to demonstrate compliance.	Since October 2016 water use at the Quarry has been monitored daily and reported monthly as provided in the Syar Annual Compliance Reports. Annual monitoring and reporting has shown the has not exceed the 140.6 AF/yr use limitation.
2E	Hours of Operation: Generally Quarry Operations are allowed Monday through Friday 6:00 am to 6:00 pm, with the ability to operate outside of these hours (or non-traditional hours) provided the County is provided notification of operations during non-traditional hours. This conditions also requires the use of night-silent, discriminating, or other type of back-up alarm as opposed to conventional back-up alarms during non-traditional hours.	Since SMP approval Syar has provided non-traditional (off hour) notifications to PBES. Between October 2019 and September 2020 eight notices were provide to the PBES Department. Since the 2016 Annual Inspection and all subsequent on-site quarry inspections Staff has confirmed and witnessed the use of quiet alarms on a vast majority of equipment in operation, which are used during non-traditional operation hours.
2F	Blasting: Blasting operations shall be conducted as specified below and in accordance with Syar's Blasting Procedures: 1) Monday through Friday 10:00 AM to 3:00 PM, 12:00 PM to 3:00 PM within 400 feet of SWP; no blasting on weekend or any Major holiday; 2) prohibited during high wind conditions; 3) measure and record wind speeds throughout blast event days which shall be included in required blasting logs; 4) Provide email notification via e-mail to required entities and any other agencies, businesses, and local residents requesting such notice, at least 48 hours in advance of any blasting events; and 5) record each blast event and maintain blasting logs for 5 years. Blasting logs/records shall be submitted to the PBES Department annually as required by COA No. 2(L).	Blast monitoring and reporting has occurred since October 2016, which has been included in all Syar Annual Compliance Reports. Syar has been providing notices to all interested parties 48 hours in advance of each blast event, and blasting has not occurred outside of prescribed hours or wind limitations.
2G	Safety and Security: The Permittee shall install fencing along the perimeter of Quarry boundaries and/or exclusion areas to the extent necessary to prevent the public from accessing active Quarry areas: without preventing use of existing Skyline Wilderness Park trails.	In 2018 Syar repaired and replaced the existing fence line along the northeast border between Skyline Park and Syar. Syar personnel monitor the

		fence line and “No Trespassing” signage annually repair and/or replacing fencing as necessary.
2H	Contact List: Within 30 days of the Effective Date of this Permit, the Permittee shall mail a Quarry contact list with Quarry contact names and phone numbers to the following: each property owner within a 3,000 foot radius of the exterior boundary of the project site as listed on the most recent tax roll listing, required entities, and those persons or organizations who have requested to be on the Quarry contact list.	A bilingual (English/Spanish) Quarry Contact List Notice/Letter was sent to all owners and within 3,000 feet of the Quarry and identified entities on November 1, 2016. The Notice/Letter included two phone numbers to the Napa Quarry, the contact person for PBES Department and Syar’s Napa Quarry website address.
2I*	Site Maintenance: All trash, unnecessary or un-useable equipment, scrap, and installations of the Quarry operation shall be removed as necessary in a timely manner, and properly disposed of to maintain a neat and orderly site	Syar has maintained a neat and orderly site based on ongoing site inspections. In 2017 non-mine related scrap and debris was removed from the boneyard; however PBES has informally been encouraging the Quarry to remove of additional scrap from the boneyard.
2J*	Public Roads: All loaded trucks leaving the site shall be properly trimmed, maintain the required 2 feet of freeboard, and/or secured so as to prevent spillage of materials onto the public roadway. In the event that spillage onto the road does occur, Permittee shall immediately remove said spillage	Syar acknowledges the requirements of this condition. Trucks are loaded as specified. Syar regularly sweeps the Napa Quarry entrance road and surrounding areas with a powered sweeper.
2K*	Other Regulatory Permits: The Permittee shall obtain and maintain permits from State, Federal, and local regulatory agencies as applicable to the activities authorized herein, including but not limited to permits and approvals from: the Napa County Building Division; the Napa County Public Works Department; the Napa County Engineering and Conservation Division; the U.S. Army Corps of Engineers; the California Department of Fish and Wildlife; the Bay Area Air Quality Management District; the Regional Water Quality Control Board; and the U.S. Fish and Wildlife Service	Syar is aware of and acknowledges the requirement of this condition. Syar has obtained building permits for the RAP and Blue Smoke equipment, and has obtained and/or applied for other applicable permits related to Quarry Operations and Reclamation. Based on Syar Annual Compliance Reports and County Annual Surface Mining Inspection (MRRC-1) Reports, Syar is in compliance with the requirements of this condition.
2L	Annual Compliance and Assurance Update Report (Annual Compliance Report). During the life of this Permit, the Permittee shall annually prepare and submit an Annual Compliance Report to PBES, as part of Operations and annual inspection and reporting requirements pursuant to applicable laws, SMP and as specified in this condition. The Annual Compliance Report shall accompany the Annual Mining Plan specified in the project’s MRP dated September 2016. The first Annual Compliance Report shall be submitted to the County within 12 months of the Effective Date of this Permit. Thereafter the Annual Compliance Report shall be submitted annually, and as necessary at the request of the County, to demonstrate compliance. If determined necessary by the PBES Director, the County may either hire a consultant (at the Permittee’s expense) to prepare this Annual Compliance Report and/or retain a third party independent review of the report to assess and determine compliance with this Permit, conditions of approval, mitigation measures, and NCC Chapter 16.12.	Syar Annual Compliance Reports have been submitted since October 2017, in compliance with this condition, that also provide documentation and verification of provisions specified therein. In 2019 PBES contracted with Land Logistics, a firm that specializes in assisting government agencies only with SMARA inspection and reporting, to provide a more robust and consistent inspection and reporting process, and PBES Annual Surface Mining Inspection Reports (i.e. MRRC-1 Reports).

2M	<p>Air Quality: The Permittee shall implement the following Air Quality Best Management Practices (BMPs) during Quarry operational activities and reclamation in addition to Mitigation Measures 4.3-2a, 4.3-2b, and 4.3-3: 1) All exposed surfaces shall be covered, vegetated, or watered or treated with dust suppressants as necessary to minimize particulate (dust) emissions; 2) sweep daily with a high efficacy vacuum street sweepers site access road, adjacent public roads, and paved areas within the proximity of the scales and Quarry office and if visible soil material is carried/tracked out onto roadways; 3) limit traffic on unpaved areas and roads to 15 mph; 4) suspend grading and earthmoving activities when 2-minute average wind speed exceeds 20 mph; 5) minimize idle times consistent with Title 13 CCR Section 2485; 6) maintained all equipment in accordance with manufacturer's specifications, including inspection by a certified mechanic to ensure equipment is running in proper condition prior to operation; 7) install within 30 days of permit issuance a sign with the telephone numbers and persons to contact at Napa County and the BAAQMD regarding dust and odor complaints; and 8) within 5 years of the Effective Date of this Permit, the Permittee shall retire at least 3 pieces of mobile quarrying equipment from the Quarry fleet that have Tier 0 motors and replace with Quarry equipment that has higher Tier motors (i.e., Tiers 1, 2, 3, or 4), and as necessary to comply with applicable project Mitigation Measures.</p>	<p>Syar has implemented a site-specific Dust Management Plan for the Napa Quarry. The plan includes dust mitigation practices for specific work areas and/or activities conducted on the site. There are monitoring parameters and a chain of command list for dust related issues. Syar uses a combination of techniques (vegetation, water, and dust suppressants) to minimize dust emissions from the mining, processing and hauling activities.</p> <p>The sign required pursuant to Condition 2(A)(7) was installed in the week of November 14th 2016.</p> <p>Fleet make up prior to SMP approval was as follows: 22 pieces of equipment with Tier 0 engines, 6 pieces with Tier 1 engines, 4 pieces with Tier 2 engines, and, 1 piece with Tier 3 engine. Presently the fleet includes: 2 pieces of equipment with Tier 0 engines, 0 pieces with Tier 1 engines, 1 piece with Tier 2 engine, 3 pieces with Tier 3 engines, and 50 pieces with Tier 4 engines, in compliance with COS #2.M(8). As indicated 20 pieces of equipment with Tier 0 engines are no longer utilized in the fleet.</p> <p>Also see Condition Nos. 11(A)and 11(B) below, and the Syar Annual Compliance Reports.</p>
2N	<p>Creek Protection: The Permittee shall implement the following measures to prevent the inadvertent encroachment into specified creek setbacks during Quarry Operations and reclamation: Prior to any earthmoving or mining activities adjacent to Arroyo Creek, the location of the 60-foot creek setback for Lower Arroyo Creek and the 85-foot creek setback for Upper Arroyo Creek pursuant to Mitigation Measures 4.4-7 and 4.4-10), shall be clearly demarcated in the field with temporary construction fencing, which shall be placed at the outermost edge of required setbacks shown on the project plans.</p>	<p>Mining activities have not been conducted in the proximity of Arroyo Creek since approval of the Permit.</p>
2O	<p>Tree and Woodland Protection: The Permittee shall implement the following Tree/Woodland Protection measures: 1) Prior to any mining activities occurring adjacent to trees or woodlands to be retained, the Permittee shall install temporary fencing at the edge of the drip line of the trees to be retained that are located within 50-feet of the project area; 2) the Permittee shall refrain from severely trimming trees and vegetation which are to be retained and are adjacent to mining and quarrying activities; and 3) in accordance with NCC Section 18.108.100 trees that are inadvertently removed that are not within the project boundary or not identified for removal as part of this Permit shall be replaced onsite with fifteen-gallon trees at a ratio of 2:1 at locations approved by the PBES Director.</p>	<p>Based on Syar Annual Compliance Report, County inspections and Annual Surface Mining Inspection Reports (MRRC-1 Reports), no trees located outside the mining boundaries are known to have been removed.</p>
2P	<p>Because this Permit supersedes prior surface mining approvals, the Permittee shall cooperate with the County in terminating Napa County Agreement No. 2225 to the extent such action is deemed necessary by the County.</p>	<p>-NA-</p>

3. RECLAMATION

3A*	Applicability: Reclamation of all mined and quarried areas shall be in conformance with the 2016 Mining and Reclamation Plan.	Syar is aware of and acknowledges the requirements of this condition.
3B	<p>Timing. Commencement of reclamation in areas where mining is complete shall be initiated by the Permittee within 12 months of completion of aggregate Quarry Operations within that area. Final reclamation shall commence in the following areas within the identified timeframes:</p> <ol style="list-style-type: none"> 1. Short-term (within 1 year of Permit approval) - the State Blue Pit identified as Area 3 in Figure 3F (Mining Plan) in the 2016 MRP, and the area occupied by the "Former Grey Rock Plant" identified as Area 3 in the 2016 MRP. 2. Midterm - Aggregate Mining Operation areas that have reached the Limits of Vertical Excavation and have reached the minimum 10 feet vertical separation from the regional groundwater elevation, including any areas identified through annual inspections. 3. Long-term (i.e., generally occurring within the last 5 years of the Permit term) - Processing Area shown on the MRP including any areas identified through the annual inspections. <p>Interim reclamation of the areas identified as R-1 and R-2 in the 2016 MRP shall commence within 12 months of the Effective Date of this Permit.</p>	<p><u>Short Term</u> The State Blue Pit (Area 4 on Figure 3F) is currently being filled with overburden to create the required buttress at the western slope of the pit. The reclamation plan for this pit was designed by Triad and Associates with geotechnical requirements designed by Kleinfelder. Based on recent production levels it is anticipated that it may be approximately 10 years before adequate overburden is generated to fill the pit and to create the buttress.</p> <p>The Former Grey Rock Plant (Area 3 on Figure 3f) and associated areas of concrete and retaining wall have been removed (Demolition Permit No. B18-01256). The remaining conveyor belt will be removed mid-2021. Additionally, during this inspection cycle a deteriorated steel outfall structure was replaced, and rock dissipater installed on the storm water ponds. It is anticipated that the storm water ponds and vegetated swale will be completed in 2021</p> <p><u>Mid-Term</u> No mid-term reclamation is not being conducted.</p> <p><u>Interim Reclamation</u> Area 1 (on Figure 3f) will continue to be filled up with overburden and following the completion of grading the area will be revegetated pursuant to the 2016 MRP.</p> <p>Area 2 (on Figure 3f) has been filled and contoured, and hydroseeded. During final reclamation this area will be regraded to a more permanent slope, and be revegetated pursuant to the 2016 MRP.</p>
3C	Completion: Reclamation of any area shall not be considered complete until the performance standards established in the SMP identified in the "Planting Success Criteria Table of this Condition of Approval have been met and documented to be in a stabled condition (i.e. not needing supplemental human invention).	<p align="center">-NA-</p> <p>Current reclamation efforts have not yet reached this level of consideration.</p>

4. - 10. STANDARD CONDITIONS		
4*	Enforcement: Enforcement of the provisions of this Permit, ongoing Quarry Operations and activities, and site reclamation shall be governed by Article VI (Enforcement) of NCC Chapter 16.12 (Surface Mining and Reclamation), in addition to any other remedies (civil or criminal) as may be available to the County.	Syar is aware off and acknowledges the requirements of this condition.
5*	SIGNS: Prior to installation of any new Quarry identification or directional signs, detailed plans, including elevations, materials, color, and lighting, shall be submitted to the PBES Department for administrative review and approval. All signs shall meet the design standards as set forth in NCC Chapter 18.116.	No new Quarry identification signs have been constructed or installed.
6	LIGHTING: All exterior lighting, including Quarry Operations and support facility lighting, shall be shielded and directed downward, located as low to the ground as possible, the minimum necessary for security, safety, or operations. Prior to and issuance of building permits and installation of any new lighting at the Quarry, a detailed lighting plan showing the locations and specifications for all lighting fixtures to be installed on the Facility shall be submitted to the Planning Division for review and approval.	No new lighting subject to this conditions has been constructed or installed. Syar is aware of and acknowledges the requirements of this condition and maintains lighting accordingly.
7	COLOR: The colors used for any new Quarry facilities or structures shall be limited to earth tones that will blend into the surrounding site: the Permittee shall obtain the written approval of the PBES Department prior to painting the facility structures.	No new Quarry structure have been constructed, and colors of the Blue Smoke Control Equipment and RAP Handling Equipment are either earth tone or not visible from off-site locations.
8*	Reserved	-NA-
9*	AFFORDABLE HOUSING MITIGATION: To the extent applicable, prior to County issuance of any building permits necessary for the project, the Permittee shall pay the Napa County Affordable Housing Mitigation Fee in accordance with the requirements of NCC Chapter 18.107.	Building permits issued to the Quarry have been subject to requisite and applicable fees.
10	MONITORING COSTS: All staff costs associated with monitoring compliance with these conditions, permit conditions, and project revisions shall be borne by the Permittee. <u>The Planning Commission may implement an audit program if compliance deficiencies are noted.</u> If evidence of compliance deficiencies is found to exist by the Commission the Commission may institute the audit program at the Permittee's expense as needed until compliance assurance is achieved. The Planning Commission may also use audit data to commence enforcement actions pursuant to NCC Chapter 16.12, if warranted.	Applicable fees for required annual inspections have been paid by Syar. Staff time for compliance and other on-site and off-site inspections have been attributed to the Permit and paid by Syar. This status update report and associated efforts are being attributed to the Permit and being paid by Syar.
11. MITIGATION MEASURES		
11A	Mitigation Measure 4.3-2a: Reduce NOx: Any time production of 810,363 tons (i.e., the Baseline Condition) of Aggregate or Aggregate-related Materials has been achieved within the previous 12-month period, the Permittee shall demonstrate that project NOx emissions are less than 10 tons per year. The Permittee shall implement one or more the following options to reduce NOx emissions increase to less than 10 tons per year above baseline. <u>Option 1.</u> Operating cleaner off-road vehicle engines as conditioned below: a) Baseline conditions are established at 810,363 tons with a fleet mix of 39 percent Tier 0, 49 percent Tier 1, 10 percent Tier 2 and 2 percent Tier 3.	Verified production levels have shown that they have not exceed 810,363 tons since approval of the SMP; therefore, no specific NOx reduction measures are required at this time. Also see Condition Nos. 1(A) and 2(M)(8) However, Syar has continually upgraded the Quarry fleet sine Permit approval. Under baseline conditions the following sum of horsepower-hours for each Tier of engine utilized in the fleet was as

	<p>b) Production up to 945,000 tons per year shall be allowed upon continued demonstration that 12 percent of horsepower-hours operated are Tier 2 or better.</p> <p>c) Production up to 1,100,000 tons per year shall be allowed upon continued demonstration that 44 percent of the horsepower-hours are Tier 2 or better.</p> <p>d) Production up to 1,300,000 tons per year shall be allowed upon continued demonstration that 5 percent of horsepower-hours are Tier 3 or better and 72 percent of the horsepower-hours are Tier 2 or better.</p> <p>Consistency with Condition of Approval No. 1(a) through 1(d) above demonstrates that NOx emissions are consistent with those calculated in the EIR and have increased by an amount less than (10) tons per year.</p> <p>As necessary the County will either hire a consultant (at the Permittee's expense) or enlist the BAAQMD to assess and determine compliance.</p>	<p>follows: Tier 0, 39%; Tier 1, 49%; Tier 2, 10%, Tier 3, 3 3%, and Tier 4, 0.</p> <p>As a result of ongoing quarry fleet upgrades and retirement of lower Tier engines current emission totals are as follows: Tier 0, 1%; Tier 1, 0%; Tier 2, 5%; Tier 3, 5%; and Tier 4, 89%.</p>
<p>11B</p>	<p>Mitigation Measure 4.3-2b: Reduce Fugitive Dust (PM10 and PM2.5): Any time production of 810,363 tons (i.e. the Baseline condition) has been achieved within the previous 12-month period, the Permittee shall demonstrate that PM10 and PM2.5 emissions have not increased above baseline levels.</p> <p>The Permittee shall reduce PM10 and PM2.5 through compliance with the following items: 1) clean internal paved roads daily, 2) prohibited blasting during high wind conditions, 3) apply water to blast sites where and when feasible, 4) limit speeds on unpaved areas to less than 15 MPH; and either one or more of the following items, 5) maintain dust suppressant on unpaved road surfaces, or 6) reduce on-site emissions by some other means such as installing or utilizing water spray systems, electrifying processes that require off-road equipment, utilizing filter bags with higher removal efficiencies in existing bag houses, or installing scrubbers.</p> <p>The effectiveness of this measure shall be demonstrated to the County by submittal of an Emissions Calculations report prepared by a qualified professional and supporting data. The Emissions Calculations report shall be submitted to the County for review in the Annual Compliance Report required by COA No. 2 (L), to demonstrate compliance. As necessary, the County will either hire a consultant or enlist the BAAQMD to assess compliance.</p>	<p>Verified production levels have shown that they have not exceed 810,363 tons since approval of the SMP; therefore, no specific dust reduction measures are required at this time. Also see Condition Nos. 1(A)</p> <p>However, Syar has implemented items 1-4. For Item 5, Syar continues to use dust suppressants on high use roads as appropriate. For Item 6, Syar implements various on-site emission reduction techniques and operates emission reduction equipment at the site (i.e. water buffalos and spray bars).</p> <p>Also see the 2020-21 Inspection Log: Attachment B, to the June 23, 3021 Commission Staff Report</p>
<p>11C</p>	<p>Mitigation Measure 4.3-3: Reduce Health Risk: The Permittee shall implement the following mitigation measures to reduce health risk at sensitive receptors:</p> <p>1. Using the Log described in COA No. 11(A) (Mitigation Measure 4.3-2a), the following tiered approach shall be followed: a) Production up to 810,363 tons per year (tpy) shall be allowed upon the Permittee's continued demonstration that at least 12 percent of horsepower-hours operated are Tier 2 or better; b) Production up to 950,000 tpy shall be allowed upon the Permittee's continued demonstration that 44 percent of horsepower-hours operated are Tier 2 or better; c) Production up to 1,100,000 tpy shall be allowed upon the Permittee's continued demonstration that at least 56 percent of horsepower-hours operated are Tier 2 or better; and d) Production up to 1,300,000 tpy shall be allowed upon the Permittee's continued demonstration that 5 percent of horsepower-hours operated are Tier 3 or better and 72 percent of horsepower-hours operated are Tier 2 or better.</p> <p>The effectiveness of this mitigation measure shall be demonstrated to the County by submittal of the Horsepower-Hour Log described in COA No. 11(A) (Mitigation Measure 4.3-2a) and blasting activity logs. The Log shall be submitted to the County for review semiannually and in the</p>	<p>Verified production levels have shown that production has not exceed 810,363 tons since approval of the SMP; therefore, no specific Health Risk of horsepower-hour levels are required. Also see Condition Nos. 1(A) and 11(A).</p> <p>However, Syar has continually upgraded the Quarry fleet sine Permit approval. Under baseline conditions the following sum of horsepower-hours for each Tier of engine utilized in the fleet was as follows: Tier 0, 39%; Tier 1, 49%; Tier 2, 10%, Tier 3, 3 3%, and Tier 4, 0.</p> <p>As a result of ongoing quarry fleet upgrades and retirement of lower Tier engines current emission totals are as follows: Tier 0, 1%; Tier 1, 0%; Tier 2, 5%; Tier 3, 5%; and Tier 4, 89%.</p>

	Annual Compliance Report required by COA No. 2(L), or as necessary to demonstrate compliance. As necessary the County will either hire a consultant (at the Permittee's expense) or enlist the BAAQMD to assess compliance.	Presently 99% of the horsepower-hours were performed with equipment powered by Tier 2 or better engines, which exceeds the 12% baseline requirement.
11D	<p>Mitigation Measure 4.4-1a: Holly-leaf Ceanothus (<i>Ceanothus purpureus</i>) impact reduction:</p> <ol style="list-style-type: none"> <u>Avoidance and Preservation.</u> Revise the 2016 Mining and Reclamation Plan to clearly delineate the 5-acre "Ceanothus Preservation and Replanting Area" required by this measure. Avoidance and Preservation areas shall also be established and identified in the field through the placement of signage that clearly identifies the area(s) to be avoided so that accidental encroachment or removal of vegetation does not occur. Sign design and locations shall be included in the 2016 MRP. <u>Plant Replacement.</u> Each holly-leaf ceanothus plant removed shall be replaced at a 3:1 ratio within the 5-acre Ceanothus Preservation Area: no less than 96 individual holly-leaved ceanothus plants shall be planted to mitigate this impact. <u>Planting Plan.</u> A qualified biologist shall prepare a Planting Plan for holly-leaf ceanothus for review and approval by the Napa County PBES Department 12 months prior to any quarrying or mining activities occurring in any undisturbed areas where ceanothus plants would be removed. <u>Additional Planting Specifications.</u> Replacement plants shall be from one-gallon size or larger containers and shall be planted in the fall in clusters of 3 to 20 individual plants, based on details provided in the Planting Plan. <u>Monitoring and Success Criteria.</u> A qualified biologist shall monitor the enhanced habitat and plantings on an annual basis to ensure the replanting achieve a minimum of 80 percent success/survival rate after 3 years, and to ensure habitat conditions remain adequate to support target species. Documentation of monitoring shall be provided to the County on an annual basis, in conjunction with the Annual Compliance Report required by COA No. 2(L). 	<p>The MRP was updated on September 29, 2016 to include the Ceanothus Preservation Area.</p> <p>The Ceanothus planting plan was submitted to Napa County in July 2017.</p> <p>In February 2020, 83 holly-leaf ceanothus plants were installed within the Ceanothus preservation area. Plants were spaced a minimum of 3 feet from each other. Sequoia has been monitoring the plants as required in our planting plan dated July 2017. As of September 1, 2020, 73 plants are alive and 10 plants have died. Sequoia will plant an additional 20 ceanothus plants in December 2020 as required. See the Syar Annual Compliance Reports for additional reporting and details.</p>
11E	<p>Mitigation Measure 4.4-1b: Special-status plant species protection:</p> <ol style="list-style-type: none"> Preparation of updated plant surveys prior to initiation of any quarrying or mining activities in undisturbed areas that contain potential habitat for special-status plant species, no greater than 3 years prior to planned quarrying or mining activities in undisturbed areas. Preparation of a plant replacement plan for any newly listed CNPS List 1 or 2 plants identified in undisturbed areas to be mined. The plant replacement plan shall among other things specify a replant/replacement area, a 3:1 replacement ratio. Preparation of an annual motioning report for replacement plantings. The Permittee shall submit documentation of monitoring to the County on an annual basis for a minimum of 3 years or until success criteria are achieved. All surveys, plans, and reports required by this measure shall also be included in the Annual Compliance Report required by COA No. 2(L), to demonstrate compliance. 	<p>Syar has contracted with Sequoia Ecological Consulting to complete all required pre-construction surveys annually for undisturbed areas that are anticipated to be disturbed during any given mining year. All pre-construction surveys are included the Syar Annual Compliance Reports.</p>
11F	<p>Mitigation Measure 4.4-2: American Badger protection measures:</p> <ol style="list-style-type: none"> Perform preconstruction surveys for American badger prior to initiation of quarrying or mining activities occurring in any undisturbed areas that occur in potential badger habitat. 	<p>Syar has contracted with Sequoia Ecological Consulting to complete all required pre-construction surveys annually for undisturbed areas that are anticipated to be disturbed during any given mining</p>

	<ol style="list-style-type: none"> 2. No more than 2 weeks before quarrying activities begin in undisturbed areas determined to be potential badger habitat, a qualified biologist shall conduct a survey for burrows/dens and American badgers of onsite areas within 500 feet of new quarrying or earthmoving activities. 3. If occupied burrows are found during surveys, the biologist shall consult with CDFW and the County to determine if project activities would adversely disrupt the badger. 4. Occupied areas shall be provided a 500 foot avoidance area from March through August, and mining and quarrying activities shall be delayed until a qualified biologist can determine that juvenile badgers have moved from their natal burrow. 5. All surveys, plans, and reports required by this measure shall be included in the Annual Compliance Report required by COA No. 2(L) to demonstrate compliance. 	<p>year. All pre-construction surveys are included the Syar Annual Compliance Reports.</p>
<p>11G</p>	<p>Mitigation Measure 4.4-3: Special-status bird species protection: The Permittee shall retain a qualified biologist to conduct preconstruction surveys for raptors and passerine birds for project activities occurring during the nesting season (i.e., February 1st through August 31st).</p> <ol style="list-style-type: none"> 1. For vegetation or Overburden removal, earthmoving, earth-disturbing activities, or quarrying activities within previously undisturbed areas (including areas of grassland, shrubs, and trees) occurring between February 1st and August 31st, a qualified wildlife biologist shall conduct preconstruction surveys for passerine bird and raptor nests (including offsite areas with public access, excluding offsite private property). 2. In the event that nesting passerine birds and/or raptors are found, the biologist shall consult with CDFW and the County to obtain approval for specific nest-protection buffers as appropriate based on the species. Nest protection measures shall apply to both onsite and offsite active nests that are located within 300 feet of project activities. Buffer zones shall be fenced with temporary construction fencing, which shall remain in place until the end of the breeding season or until it has been determined young have fledged. 3. If project-related work lapses for 15 days or longer during the breeding season, a qualified biologist shall conduct another bird and raptor preconstruction survey and consult with CDFW as set forth above before project work may be reinitiated. 4. All surveys, plans, and reports required by this mitigation shall be included in the Annual Compliance Report required by COA No. 2(L), to demonstrate compliance. 	<p>Syar has contracted with Sequoia Ecological Consulting to complete all required pre-construction surveys annually for undisturbed areas that are anticipated to be disturbed during any given mining year. All pre-construction surveys are included the Syar Annual Compliance Reports.</p>
<p>11H</p>	<p>Mitigation Measure 4.4-5: Special-Status Bat Species protection and avoidance: Prior to commencement of any project or quarrying activities within any undisturbed areas that contain trees, the Permittee shall implement the following measures:</p> <ol style="list-style-type: none"> 1. The Permittee shall retain a qualified biologist to conduct a habitat assessment for special-status bat habitat within 14 days of project initiation or tree removal. 2. If the habitat assessment identifies suitable special-status bat habitat and/or habitat trees, the biologist shall submit an avoidance plan for review and approval by the County, who may consult with CDFW if determined to be necessary. 3. All surveys, plans, and reports required by this measure shall be included in the Annual Compliance Report required by COA No. 2(L), to demonstrate compliance. 	<p>In January of 2018 a Special-status Bat Avoidance Plan was prepared and submitted that included a habitat assessment and avoidance measures.</p> <p>Syar has contracted with Sequoia Ecological Consulting to complete all required pre-construction surveys annually for undisturbed areas that are anticipated to be disturbed during any given mining year. All annual pre-construction surveys are included the Syar Annual Compliance Reports.</p>
<p>11I</p>	<p>Mitigation Measure 4.4-7: Wetlands and riparian communities: To reduce potential wetland impacts, the Permittee shall:</p>	<p>Reclamation of the Former Grey Rock Plant would affect area C1. Currently, Syar has just completed</p>

	<ol style="list-style-type: none"> 1. Prior to initiation of project or quarrying activities that may affect the areas identified as C1 and C2 in the USACE-jurisdictional determination (USACE File Number 200900284N), the Permittee shall obtain other necessary local, State and Federal permits. The Permittee shall compensate for the loss of wetland habitat in these areas need to ensure no net loss of habitat functions and values. The Permittee may purchase mitigation credits from an approved mitigation bank at a ratio of 2:1, to replace removed wetlands. 2. Prior to initiation of project or quarrying activities that may affect sensitive wetland habitats in non-USACE-jurisdictional areas, the Permittee shall obtain other necessary local, State and Federal permits, and shall replace wet areas, at a 2:1 ratio or as directed by the RWQCB, CDFW, and/or the County, to ensure no net loss of habitat functions and values. 3. A 50-foot setback is included from the main stem of Arroyo Creek for new project elements beyond the extent of existing roads and development. The 50-foot setback shall be flagged in the field for review and approval by state and/or local jurisdictions. 4. All surveys, plans, and reports required by this mitigation measure shall also be included in the Annual Compliance Report required by COA No. 2(L), to demonstrate compliance. 	<p>the first stage of this project, the removal and replacement of a deteriorated steel riser and outfall structure. A rock dissipater was also constructed on the stream side of the storm water ponds. Clean up of the area in and around the outfall has also occurred to remove debris. Storm water are currently being installed in the disturbed area to control erosion. This work has all been completed in compliance with the applicable resource agency permits issued by the USACE, the RWQCB and the (CDFW). The current project plans, the governing permits and the biological monitoring reports are all included in Appendix R of the 2019 Syar Annual Compliance Report.</p> <p>Mining activities have not been conducted in the proximity of Arroyo Creek since approval of the Permit.</p>
<p>11J</p>	<p>Mitigation Measure 4.4-8: Invasive Species Management within Preservation/Replanting Areas:</p> <ol style="list-style-type: none"> 1. The Permittee, shall prepare an Invasive Species Management Plan (ISMP) for protected native perennial grassland areas (Purple Needlegrass Series) and replanted mitigation areas (i.e., the Ceanothus Preservation/Replanting Area described by Mitigation Measure 4.4-1) within 12 months of the Effective Date of this Permit.. 2. The ISMP shall be implemented by the Permittee within 12 months of approval of the ISMP by PBES. 3. All surveys, plans, and reports required by this mitigation measure shall also be included in the Annual Compliance Report required by COA No. 2(L) to demonstrate compliance. 	<p>An invasive species report was completed by Sequoia Ecological Consulting in September 2017.</p>
<p>11K</p>	<p>Mitigation Measure 4.4-9: Oak Woodland Avoidance, Replacement, and Preservation: The Permittee shall compensate for direct and indirect impacts to approximately 121 acres of native oak woodlands at a total mitigation ratio of 2:1, including combination of onsite avoidance and preservation, onsite replacement, and offsite as summarized in this measures summary table.</p> <p><u>Avoidance.</u> The proposed project would avoid 136 acres of onsite oak woodlands in the exclusion areas shown on Figure 4.4-3 of the DEIR and as modified by the Permittee. These areas shall be protected via deed restriction prior to commencement of any mining activities in any previously undisturbed areas.</p> <p><u>Replacement.</u> A qualified biologist shall prepare an oak woodland establishment and restoration plan subject to County approval. Prior to the commencement of any mining activities in any previously undisturbed area or any new vegetation or Overburden removal activities within the project area the Oak Woodland Establishment and Restoration Plan shall be initiated and completed. The Plan shall specify the location of a minimum of 12 acres onsite for oak replacement/restoration. The plan shall also specify minimum success criteria consistent with those identified in Section 6.3.2 (Planting Success Criteria) of the 2016 MRP and COA No. 3(C). The Plan and documentation demonstrating planting, survival and success shall be included in</p>	<p>The deed restriction was recorded on July 7, 2017: Instrument #2017-0015369 and #2017-0015371.</p> <p>Syar submitted the draft Oak Woodland Establishment and Restoration Plan (dated November 2016) consistent with the specification of this measure, and the final plan was submitted to the County in July 2017, based on review comments provided by the County.</p> <p>At this time, off-site mitigation is not required for this project.</p>

	<p>the Annual Compliance Report required by COA No. 2(L), to demonstrate compliance.</p> <p><u>Offsite Preservation.</u> An additional 85-acres offsite shall be permanently preserved via a conservation easement. Offsite preservation shall be phased in as part of the project. Based on implementation of provisions H1 and H2 above the removal of approximately 78-acres of oak woodland could occur before offsite mitigation is necessary.</p>	
11L*	<p>Mitigation Measure 4.4-10: Creek Buffer Establishment: The Permittee shall provide a setback of a minimum of 85 feet from the upper reaches of Arroyo Creek and provide a setback of a minimum of 60 feet from the lower reach of Arroyo Creek (as shown in Figure 4.4-4 of the project's DEIR) to reduce potential impacts on biological resources and functions consistent with the measurement requirements contained in NCC Chapter 18.108.025</p>	<p>Mining activities have not been conducted in the proximity of Arroyo Creek since approval of the Permit.</p>
11M	<p>Avoid or Minimize Impacts to Unknown Historical or Archaeological Resources: In accordance with CEQA Guidelines Section 15064.5(f), should any previously unknown prehistoric or historic archaeological resources, such as, but not limited to, obsidian and chert flaked-stone tools or tool making debris, shellfish remains, stone milling equipment, concrete or stone footings, filled wells or privies, or deposits of metal, glass, or ceramic refuse be encountered during vegetation or Overburden removal or other ground disturbing activities, work within 100 feet of these materials shall be stopped, and the Permittee shall, at the Permittee's expense, consult with a professional archaeologist. The Permittee shall notify the County within 24 hours of encountering any cultural resources as a result of mining and quarrying activities and operations, and the County shall inspect the site immediately thereafter to ensure the find is adequately protected.</p> <p>Documentation of any occurrence that triggers the provisions above shall be included in the Annual Compliance Report required by COA No. 2(L), and as necessary to demonstrate compliance. The County Engineering and Conservation Division shall monitor this requirement.</p>	<p>Syar acknowledges the requirements of this condition. No unknown historical or archeological resources were encountered during operations in the past 12 months.</p>
11N	<p>Mitigation Measure 4.5-5: Avoid or Minimize Impacts to Unknown Human Remains: Should human remains or items of cultural patrimony be encountered during Quarrying activities, the Permittee shall comply with the procedures as required by PRC Section 5097.9 and HSC Section 7050.5, and there shall be no further excavation of the site and nearby area reasonably suspected to overlie adjacent remains until the Napa County Coroner has determined that the remains are not subject to their authority. If the remains are determined to be Native American, the Permittee shall contact within 24 hours, the County and State Native American Heritage Commission (NAHC).</p> <p>Documentation of any occurrence that triggering this measure shall be included in the Annual Compliance Report required by COA No. 2(L), to demonstrate compliance.</p>	<p>Syar acknowledges the requirements of this condition. No human remains, associated grave goods, or other items of cultural patrimony were encountered during operations in the past 12 months.</p>
11O	<p>Mitigation Measure 4.5-6: Evaluation and Treatment of Paleontological Resources: If paleontological resources (e.g., vertebrate bones, teeth, or abundant and well- preserved invertebrates or plants) are encountered during project activities, work in the immediate vicinity shall be diverted away from the find and protective fencing shall be installed a minimum of 50 feet from the exterior bounds of the find to protect it until a professional paleontologist assesses and salvages the resource, if necessary.</p> <p>Documentation of any occurrence that triggers the provisions above shall be included in the Annual Compliance Report required by COA No. 2(L), to demonstrate compliance.</p>	<p>Syar acknowledges the requirements of this condition. No paleontological resources were encountered during operations in the past 12 months.</p>

11P	<p>Mitigation Measure 4.6-2a: Supplemental Geotechnical Design Criteria: The Permittee shall not locate facilities on unstable slopes, to the extent feasible. Prior to construction of any roads, berms or dams associated with detention/sedimentation basins, or related structures, the Permittee shall retain a licensed geotechnical engineer and, when appropriate, a structural engineer to conduct a construction-level geotechnical investigation for the facility(ies). The slope stability inspection reports required by Mitigation Measure 4.6-2b may be included in this report.</p> <p>Project facilities shall be designed and constructed in conformance with the specific recommendations contained in design-level geotechnical studies, including recommendations for grading and ground improvement.</p> <p>The geotechnical investigations and any associated documents or reports required by this measure shall be submitted within 12 months of approval of this Permit and shall be included in the Annual Compliance Report required by COA No. 2(L), to demonstrate compliance.</p>	<p>Annually Supplemental Geotechnical Design Criteria and Slope Stability Criteria reports are submitted in the Syar Annual Compliance Reports. A soils report/geotechnical study was completed for the RAP system installed at the site. This report is on file at Syar Industries.</p>
11Q	<p>Mitigation Measure 4.6-2b: Slope Stability Criteria: A California registered geotechnical engineer, retained and paid by the Permittee, shall conduct slope stability inspections during excavation of undisturbed areas including the expansion areas. If a slope condition presents a risk to safety or the potential for mass movement, repair measures shall be recommended and promptly implemented by the Permittee. This may include repair, stabilization, or avoidance of landslides and areas of soil creep or possible debris flow.</p> <p>Slope stability inspection reports/memorandums and any associated documents or reports required by this measure shall be submitted within 12 months of approval of this Permit and shall be included in the Annual Compliance Report required by COA No. 2(L), to demonstrate compliance.</p>	<p>Annually Supplemental Geotechnical Design Criteria and Slope Stability Criteria reports are submitted in the Syar Annual Compliance Reports.</p>
11R	<p>Mitigation Measure 4.7-2: Standard operating procedures (SOPs) and Hazardous Material Business Plan (HMBP): Syar shall develop SOPs for the use of hazardous materials including fuels and lubricants used onsite prior to implementation of the project including any vegetation or Overburden removal, mining or quarrying activities, or earth-disturbing occurring in undisturbed areas. Quarry personnel shall follow written SOPs during onsite operation and maintenance of all equipment. The SOPs, which are designed to reduce the potential for incidents involving hazardous materials, shall include the following information and protocols</p> <p>Syar's Hazardous Materials Business Plan (HMBP) shall be updated annually as required by law. Syar shall amend the existing HMBP inventory form for the Syar Napa Quarry, in accordance with state law</p>	<p>Syar has adopted and implemented an SOP and HMBP in compliance with this requirement. The SOP and the HMBP are included in the Syar Annual Compliance Reports.</p>
11S	<p>Mitigation Measure 4.8-1: Update Industrial Storm Water Pollution Prevention Plan: Prior to initiation of any quarrying or mining activities occurring in any undisturbed areas and annually as necessary, the Permittee shall update Syar Napa Quarry's existing Industrial SWPPP (WDID No. 228I005111) to reflect additional areas of land disturbance and changes in operation resulting from the project. The Permittee shall modify the SWPPP as the project progresses and as conditions warrant to remain consistent and compliant with SWRCB Order No. 2014-0057-DWQ, Waste Discharge Requirements for Industrial Activities.</p>	<p>Syar annual maintains its SWPPP in compliance with this requirement. The current SWPPP is included in Appendix B of the 2020 Syar Annual Compliance Report.</p>
11T	<p>Mitigation Measure 4.8-2: Avoid depleting groundwater supplies or interfering with groundwater recharge mechanisms, and maintaining a 10-foot vertical separation between final grade and regional groundwater potentiometric elevation: The Permittee shall maintain existing volumes of groundwater recharge and shall ensure that a vertical buffer of</p>	<p>Hazen and Sawyer was contracted by the PBES Department in January 2017 to complete the Annual Groundwater Elevation Monitoring and Use Report required pursuant to condition No. 11(U) to satisfy</p>

undisturbed native soil/rock remains in place which maintains the final grade elevation no closer than 10 feet above the spring season regional groundwater potentiometric elevation.

To avoid depleting groundwater supplies in all mined areas within the Syar Napa Quarry the grade of the excavation shall be maintained at a minimum of 10 feet above the elevation of the regional groundwater potentiometric elevation. To ensure that groundwater infiltration/recharge volumes are maintained, pre-project (baseline) infiltration volumes shall be compared with project groundwater infiltration volumes. Pre- project infiltration volumes were calculated at 685 acre-feet per year in the Arroyo Creek watershed/drainage and 442 acre-feet in the State Blue watershed/drainage, totaling 1,067 acre-feet per year (see Figure 4.8-2 of the DEIR).

The Permittee shall provide the County with an Annual Groundwater Elevation Monitoring and Use Report, prepared under the direction of a qualified Professional Engineer or Professional Geologist, that quantifies the groundwater potentiometric elevations during spring of each year and through the following means:

1. The Permittee shall monitor stream flow and pond elevation throughout every year the Quarry is in operation. This information, along with publicly available climactic data, shall be used to calculate the groundwater infiltration volumes quarterly, in a manner consistent with Appendix J of the DEIR. The results of the monitoring and water balance infiltration analysis shall be provided to the County quarterly and be included in the Annual Groundwater Elevation Monitoring and Use Report.
2. The Permittee shall install piezometers or monitoring wells as required to quantify the regional groundwater potentiometric elevation in areas of active mining prior to any mining excavation that will cause an increase in mining depth beyond existing conditions and/or is likely to extend to within 50 feet of the groundwater elevations presented on Figure 4.8-6. All excavation activity at the Quarry shall be conducted to maintain a 10- foot separation of undisturbed native soil/rock between the finished grade and the underlying groundwater elevation. Increased mining depth in areas that are already at or below the groundwater potentiometric elevation, including but not limited to the State Blue Pit, shall not occur.
3. The Permittee shall provide a monitoring piezometer/well plan prepared by a qualified Professional Engineer, Professional Geologist, or Professional Hydrogeologist to the County for review and approval prior to commencing any mining activities that would increase the depth of mining beyond existing conditions. The monitoring piezometer/well plan shall also be included in the Annual Groundwater Elevation Monitoring and Use Report.
4. The Permittee shall also ensure that any subsurface flow in fractures or soil that is exposed or intercepted by the excavation shall be reinfiltred within the same watershed boundaries. If persistent springs are formed by mining activities the Permittee shall hire a qualified professional to assess springs and provide an evaluation to the County to determine if the elevation of these springs are part of the regional groundwater potentiometric surface; if so, mining shall not advance further below this elevation.
5. Existing Well No. 4 could be activated for groundwater extraction. The extraction of groundwater from Well No. 4 shall be subject to the groundwater extraction limitation of 140.6 acre-feet per year pursuant to Mitigation Measure 4.4-8 and COA No. 2(D) and 11(V).

Any documentation required by this mitigation measure shall also be included in the Annual Compliance Report required by COA No. 2(L), to demonstrate compliance.

this condition and Condition No. 11(U). However, Hazen and Sawyer were unable to complete the Annual Groundwater Elevation Monitoring and Use Report

In 2020 Syar contracted with GHD directly to complete the Annual Groundwater Elevation Monitoring and Use Report based on the work already completed by Hazen and Swyer. The groundwater, water use, groundwater elevations and precipitation information gathered by Syar for the preparation of the Groundwater Elevation Monitoring and Use Report is included in the Syar Annual Compliance Reports.

As note herein, annual water use monitoring and reporting is included in the Annual Compliance Reports.

<p>11U</p>	<p>Mitigation Measure 4.8-3: Avoid reducing the groundwater potentiometric elevation by increasing consumptive use of surface water or surface occurrence of regional groundwater as a result of Quarry activities: The Permittee shall ensure that all water extracted from open bodies of water that are at the regional groundwater potentiometric elevation shall be reinfiltred in surface detention/infiltration basins within the same watershed from which the extraction occurs or it will be considered a consumptive use of groundwater. This Measure shall not apply to the draining of ponded surface water which is at an elevation higher than the underlying regional groundwater potentiometric elevation.</p> <p>As part of Quarry activities, water may be pumped from open water bodies such as State Blue Pit for consumptive Quarry activities such as dust control and other uses where the water is not reinfiltred. The volume of groundwater that is pumped from those water bodies where the water surface elevation is effectively the same as the regional groundwater potentiometric elevation (i.e., State Blue Pit) shall be considered part of the maximum allowable annual groundwater use allocation of 140.6 acre-feet per year for the project.</p> <p>To help ensure that groundwater infiltration volumes are not decreased, pre-project infiltration volumes shall be compared with project groundwater infiltration volumes. If there is a deficit, BMPs shall be adjusted or consumptive use of water shall be curtailed until groundwater recharge volumes are greater than or equal to pre-project volumes. Pre- project infiltration volumes were calculated at 685 acre-feet per year in the Arroyo Creek drainage and 442 acre-feet in the State Blue Pit drainage, totaling 1,067 acre-feet per year.</p> <p>Monitoring reports shall be submitted within 12 months of approval of this Permit and shall be included within the Annual Groundwater Elevation Monitoring and Use Report required pursuant to COA No. 11(T). Reports required by this measure shall be included in the Annual Compliance Report required by COA No. 2(L) to demonstrate compliance.</p>	<p>GHD has been contracted by Syar to complete the infiltration calculations and report for the Quarry. The infiltration report is being completed at this time.</p> <p>Once GHD completes the infiltration report it will forward it to the County. The report is anticipated to be completed in 2021.</p>
<p>11V</p>	<p>Mitigation Measure 4.8-4: Avoid depleting groundwater supplies by water reuse.</p> <p>The Permittee’s maximum allowable annual groundwater usage for all Quarry Operations and associated activities shall not exceed 45.8 million gallons (or 140.6 acre-feet) per year.</p> <p>In order to document the use of the existing water sources, the Permittee shall continuously monitor, meter and maintain records of all water use at the Quarry site. The Permittee shall review the monitoring data on a monthly basis to confirm the status of its annual water use. The total of groundwater/surface water used for Quarry Operations shall be totaled and reported monthly to the County. These monitored sources shall include: 1) Groundwater from the Quarry Well and Latour Well, or Well No. 4; 2) Water collected from open water bodies in contact with the regional groundwater potentiometric elevation (as identified in Mitigation Measures 4.8-2 and 4.8-3); and/ or 3) Impounded surface water that would otherwise infiltrate to groundwater.</p> <p>Monitoring reports required by this measure shall be submitted to the County within 3 months of approval of this permit and shall also be included within the Annual Groundwater Elevation Monitoring and Use Report required pursuant to Mitigation Measure 4.8-2. These reports shall also be included in the Annual Compliance Report required by Condition of Approval No. 2(L) to demonstrate compliance.</p> <p>The Permittee shall also off-set additional water demands by reusing water and increasing processing efficiencies. This could include gravel, pavement, and surfactant application to roadways and production areas to reduce dust generation and the need for dust suppression by</p>	<p>Water use is monitored and reported as required by, and in compliance with, this condition. See the Syar Annual Compliance Reports for this monitoring data.</p>

	<p>water application.</p> <p>This Permit does not authorize the consumptive use of water from any source in excess of 140.6 acre-feet per year. This Permit does not authorize the importation of water from any off-site source. The County shall monitor this requirement. Compliance of this measure shall be subject to Article VI (Enforcement) of NCC Chapter 16.12.</p>	
11W	<p>Mitigation Measure 4.8-5: Reduce Potential for Offsite Runoff: The Permittee shall design and construct detention ponds in the mined watersheds to reduce storm water runoff volume, rates and sedimentation in addition to maintaining infiltration to groundwater. The Permittee shall submit a final detailed design-level hydrologic and hydraulic analysis within 12 months of approval of this Permit as part of the annual mining plan (per the 2016 MRP) detailing the implementation of the proposed drainage plans, including detention pond facilities that shall conform to the following standards and includes the following components: 1) Peak runoff in 2, 10, 50, and 100-year storm events during the years of active mining and at the end of mining shall not exceed existing conditions; 2) The County shall review and approve the grading and drainage plans prior to implementation; 3) Once constructed drainage facilities shall be inspected by the County's annually to ensure they are maintained per the Napa Quarry SWPPP; and 4) all calculations, plans, and reports required by this measure shall be included in the Annual Compliance Report required by COA No. 2(L) to demonstrate compliance.</p>	<p>Syar has contracted with GHD to complete a drainage report for the existing configuration and to complete a detention basis analysis for areas to be mined in the next 5 years. The 2018 existing conditions report and the 2019 future conditions report and available in Appendix Q of the 2019 Syar Annual Compliance Report.</p>
11X	<p>Mitigation Measure 4.8-6: Update Industrial Storm Water Pollution Prevention Plan to address hazardous materials spill response actions: The Permittee shall revise its Spill Prevention and Countermeasure Plan (SPCP), Hazardous Materials Business Plan (HMBP), and Emergency Response Plan (ERP) as necessary to directly address the potential for a spill or release of hazardous material near or into a water body that is directly connected to the regional aquifer. These revisions shall be incorporated into the SWPPP by summary and reference. The Permittee shall provide the revised SPCP, HMBP, and ERP to the County for review and approval within 12 months of approval of this Permit.</p> <p>Thereafter, any time the SPCP, HMBP, and ERP is revised or updated it shall also be submitted to the County in the Annual Compliance Report required by COA No. 2(L).</p>	<p>Syar has adopted and maintains a SWPPP, HMBP, Spill Prevention and Countermeasure Plan, and Emergency Response Plan in compliance with this condition. The Syar Annual Compliance reports contain these documents and plans.</p>
11Y	<p>Mitigation Measure 4.11-1: Noise Restrictions in Expansion Area North and East of the State Blue Pit and Snake Pit (Pasini Parcel): To reduce noise impacts of mining, quarrying, and associated operations the Permittee shall adhere to the following:</p> <ol style="list-style-type: none"> 1. No Aggregate Mining Operations shall occur between the hours of 6:00 PM and 7:00 AM in mining expansion areas to the north and east of the State Blue Pit. 2. With the exception of blasting and the removal of Overburden the Permittee shall: a) Limit Aggregate Mining Operations to between 7:00 AM and 12:00 PM in areas to the north and east of the State Blue Pit or Snake Pit areas within 2,500 feet of the nearest sensitive receptors; and b) Ensure that noise levels at the nearest receptors north or east of the Quarry not exceed 50 dBA L50 from 7:00 AM to 10:00 PM and 45 dBA L50 from 10:00 PM to 7:00 3. Utilization of the following measures or equivalent: a) Maintain acoustical shielding for receivers north or east of the Quarry so that existing terrain features provide the maximum amount of shielding for the longest time possible; b) Use the quietest available equipment when removing Overburden such as equipment with higher Tier engines; c) Conduct noise monitoring and maintain noise monitoring reports to ensure that daytime noise levels from 	<p>The approved SMP for the Quarry does not allow mining to the north or east of the former State Blue Pit.</p> <p>The noise meters were installed in February 2018. The noise meters are generally located to the northeast of the State Grey Pit and on the northwest slope of the Pasini parcel. Noise meter information and data is submitted to the county on a monthly basis and is included in the Syar Annual Compliance Reports.</p> <p>Based on the noise monitoring data the Quarry has not exceeded the specified limits in the SMP.</p>

	<p>aggregate mining and operations do not exceed 50 dBA L50 at the nearest receptor locations north and east of the Quarry; and d) Noise monitoring results shall be submitted to the County in the Annual Compliance Report required by COA No. 2(L) to demonstrate compliance.</p>	<p>Also see Condition Nos. 11(A) and 11(C) for details regarding equipment engine Tiers.</p>
<p>11Z</p>	<p>Mitigation Measure 4.11-2: Blasting Vibration Reduction Measures: To reduce vibration impacts, the Permittee shall:</p> <ol style="list-style-type: none"> 1. Monitor peak particle velocity and peak sound pressure during each blast event to ensure that vibration levels are under 0.20 in/sec peak particle velocity (PPV) and air- blast overpressures are under 133 dB(L) at sensitive land uses (residences and schools). Monitoring sites shall be located along the northern property boundary and along Imola Avenue adjacent to sensitive land uses. 2. The effectiveness of this measure shall be demonstrated to the County by submittal of vibration calculations/measurements and monitoring records for each blast. Monitoring records shall be provided to the County to demonstrate and verify compliance with this measure. 3. Conduct stemming and burdening of the blast holes to confine the blast charges into the ground and to minimize acoustic overpressure levels. 4. Vibration monitoring records shall be submitted to the County in the Annual Compliance Report required by COA No. 2(L) to demonstrate compliance. As necessary the County may hire a qualified professional (at the Permittee’s expense) to assess compliance. 	<p>Blasting vibration and air-blast overpressure (blast noise) measurements has been conducted during all blast events since November 2016, and in August 2017, a Quarry specific Noise and Vibration Plan was developed (Ilingworth & Rodkin Inc., August 2017). Since November 2016 monitoring has been taken at the south end of the Napa County Office of Education parking lot (2121 Imola Avenue), and since November 2017 measurements have also been taken from the corner of Imola Avenue and Penny Lane.</p> <p>Based on review of the blasting logs and vibration measurements no exceedances of the levels specified in this measure as a result of basting have occurred. The Annual Compliance Reports submitted by Syar include monthly blasting logs with vibration and blast noise measurements for all blast events.</p>
<p>11AA</p>	<p>Greenhouse Gas Emission Reduction: To reduce greenhouse gas emissions, the Permittee shall prepare a Greenhouse Gas Reduction Plan (GHG Reduction Plan). The GHG Reduction Plan shall identify the measures to be used to reduce the GHG emissions associated with the project below the 1,100 MT CO₂e annual land use threshold (or increase of 1,100 MT CO₂e over baseline conditions). The effectiveness of each measure in the GHG Reduction Plan shall be quantified, indicating its contribution to the reduction of GHG emissions. The Permittee shall choose from, but is not limited to, the measures identified therein to incorporate into the GHG Reduction Plan. The GHG Reduction Plan shall be reviewed and approved by PBES Department and shall be updated as necessary to address changing conditions and regulations. Prior to implementing the GHG Reduction Plan, the Permittee shall monitor GHG emissions bi-annually in a GHG inventory submitted to the County for review. The first inventory shall be calculated as a 3-year average after issuance of the use permit (for example, if the use permit is issued in 2014, then the first inventory shall be performed in 2018 for years 2015 through 2017). A 3-year average would accommodate the variability in aggregate sales from year to year. The inventory shall follow the most recent version of the General Reporting Protocol of the California Climate Action Registry or other protocol as appropriate and approved by the County (CCAR 2007). The purpose of the inventory is to compare emissions from project operations to the baseline emissions established in this EIR, which is approximately 7,200 MT CO₂e per year (if new baseline emissions are established as a result of refined reporting methods, the use of a different baseline is acceptable with approval by the County). At such time as the inventory indicates GHG emissions are at or over baseline conditions (7,200 MT CO₂e per year), then the Permittee</p>	<p>The Quarry SMP was approved in in October 2016. Therefore, the first GHG inventory would be performed in 2020 for years 2017 through 2019. Appendix T of the Syar 2020 Annual Compliance Report contains the GHG inventory and report.</p> <p>As noted in this measure Prior to implementing the GHG Reduction Plan, the Permittee shall monitor GHG emissions bi-annually in a GHG inventory. The first inventory shall be calculated as a 3-year average after issuance of the use permit as noted above.</p> <p>The GHG Reduction Plan is anticipated to be prepared during the 2021 inspection cycle. As noted in Condition Nos. 11(A) and 11(C) Syar has replace diesel-powered vehicles with newer model, low-emission/Tier equipment and replace diesel engines with higher fuel efficiency engines that have significantly reduced GHG emissions.</p> <p>Additionally, Syar purchases 100% renewable electricity from Marin Clean Energy as part of the “Deep Green” program, which also significantly</p>

	shall implement measures in the GHG Reduction Plan as necessary to avoid emissions above the 1,100 metric ton threshold (i.e.: 8,300 MT CO ₂ e per year – baseline plus threshold).	reduces GHG emissions from the project operations.
12. DEFINITIONS		
12*	<p>The definitions of those words or phrases found in Section 16.12.030 of the NCC are incorporated herein by reference. In addition, unless context otherwise requires, the words and phrases below shall have the following meanings related to this Permit:</p> <p>“Aggregate” or aggregate materials shall mean basalt and rhyolite which are the primary mineral resources mined at the facility.</p> <p>“Aggregate Mining Operations” shall mean those activities associated with aggregate extraction and harvesting including removal of vegetation and Overburden, blasting, sorting and transport of aggregate and aggregate-related materials, and/or Overburden to aggregate processing facilities or stockpile locations.</p> <p>“Aggregate Processing Operations” shall mean those activities associated with aggregate crushing, sorting and processing occurring only at the Primary Aggregate Processing plant (i.e., the Blue Rock Plant), the Aggregate Base (AB)/Recycling plant, and the Sand Plant.</p> <p>“Aggregate-Related Materials” shall include; asphalt, sand, recycled concrete, reclaimed asphaltic product, materials that are used as a component in the production of other materials, and onsite and interplant transfers.</p> <p>“Aggregate Sales” shall mean those activities associated with the sale of aggregate materials.</p> <p>“Asphalt” shall mean asphaltic concrete (AC) produced at the facilities 2 existing hot mix AC plants.</p> <p>“Asphalt Plant Operations” shall include those activities associated with processing and manufacturing of asphalt concrete at the facility’s 2 AC plants.</p> <p>“Asphalt Sales” shall mean those activities associated with the sale of asphalt.</p> <p>“Blasting” and “blasting operations” or “events” shall mean the component of Aggregate Mining Operations that utilizes explosives to dislodge and extract aggregate materials.</p> <p>“Completion of Mining” in areas of identified and/or active Aggregate Mining Operations, shall mean when Aggregate Mining Operations have reached the Limits of Vertical Excavation identified in the 2016 Mining and Reclamation Plan and/or has reached the minimum 10 feet of vertical separation from the regional groundwater potentiometric elevation prescribed by Mitigation Measure 4.8-2, and/or that have not been actively mined for 3 years. The determination that Aggregate Mining Operations are complete in any give operational area of the Quarry Facility shall be at the discretion of the Planning Director.</p> <p>“Construction Season” shall mean activities occurring from June 1st to November 30th.</p> <p>“Effective Date of this Permit” shall mean the later of the date of approval or resolution of appeal and/or litigation.</p> <p>“Emergency” shall mean the existence of conditions of disaster or of extreme peril to the safety of persons and property within the county caused by such conditions fire, flood, storm, earthquake or other natural disaster.</p> <p>“Major Holidays” shall mean all federally recognized holidays</p>	-NA-

<p>“MRP” shall mean the Syar Industries Napa Quarry Mining and Reclamation Plan (September 29, 2016) and as revised and updated pursuant to the conditions of approval and mitigation measures of Permit No. P08-00337-SMP.</p> <p>“NCC” means the Napa County Code.</p> <p>“Off Season” shall mean activities occurring from December 1st to May 31st.</p> <p>“Overburden” means soil, rock or other materials that lie above a mineral deposit or in between mineral deposits, before or after their removal by aggregate or surface mining operations.</p> <p>“Pasini Parcel” shall mean the project parcel identified as Assessor’s Parcel Number 046-390-002-000.</p> <p>“Permit” shall mean Surface Mining Permit No. P08-00337-SMP.</p> <p>“Permittee” means the Applicant, owner, the operator, or any duly authorized representative of the owner or operator, and/or any successor in interest.</p> <p>“project” shall be the project authorized and regulated under this Permit.</p> <p>“Property” shall mean the parcels within the project area holding identified as Assessor’s Parcels Numbers: 045-360-005, 046-370-012, 046-370-013, 046-370-015, 046-370-022, 046-370-025, 046-390-002, 046-390-003 and 046-450-071.</p> <p>“Quarry Facility” shall include all mining/quarry areas as identified in the Mining and Reclamation Plan and associated support facilities identified in Figure 3.</p> <p>“Quarry Operations” shall include all Aggregate Mining, Aggregate Processing, and Asphalt Plant Operations (as defined) including operational components associated with the Quarry support facilities identified in Figure 3 (<i>Attached to this Compliance Table</i>).</p> <p>“tpy” means tons per year.</p>	
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FIGURE 3

Syar Napa Quarry Aggregate Processing, Sales, and Office Facilities

The proposed project includes the continued operation of the existing Syar Napa Quarry facilities listed below. These facilities are all located in the western portion of the quarry property within the main processing area, west of SR 221. No area expansion and no increased capacity demands are proposed for the following facilities:

- Main Quarry Office - quarry operation offices and restrooms.
- Scale house - located at the entrance of the quarry, used to weigh loaded and unloaded on-road highway trucks.
- Material and equipment storage yards - located primarily in the western portion of the quarry near the main processing area.
- Aggregate and aggregate products testing laboratory - testing is done on aggregate and aggregate products to ensure compliance with required specifications.
- Maintenance and service buildings – area used for the purpose of storing and maintenance equipment and materials used in maintenance activities. Minor maintenance of vehicles and equipment are completed on the quarry property in designated areas. Large scale maintenance is completed at the maintenance shop located on the west side of SR 221.
- Stockpiles of overburden and topsoil – existing overburden and topsoil piles are located in multiple areas of the quarry. These stockpiles are stored for use as engineered fill or used in interim and final reclamation activities.

The proposed project includes the continued operation of the existing Syar Napa Quarry facilities listed below. No area expansion is proposed; however, increased throughput (i.e. an increase in production inputs and end-product yield) is expected in association with the project for the following facilities:

- Primary aggregate processing plant – located in the western portion of the quarry property. This is the main aggregate processing area for basalt and rhyolite rock.
- Two asphaltic concrete plants - located in the western portion of the quarry property within the main processing area. These facilities consist of the equipment used to manufacture asphaltic concrete (AC) and other asphalt products.
- Sand plant - used primarily to wash sand. Secondly this plant is used to sort an uneconomical aggregate material into aggregate products that can be crushed or sold.
- Aggregate Base (AB)/recycling plant - located in the central portion of the quarry property. This area is used to store and process recycled concrete and asphalt. This area is also the main processing plant for rhyolite rock products.

- Haul Roads - are located throughout the quarry property. The haul roads are used primarily by on-highway trucks and off-highway trucks to transport aggregate materials from active mining sites to the appropriate processing areas.
- Barge landing area located adjacent to the Napa River - located adjacent to the Napa River on the west side of SR 221. This area is connected to the main quarry property by a paved haul road. This area is used to barge in sand from the San Francisco Bay or to barge out rock products.
- Railroad spur - located on the west side of SR 221. This area is used to rail in products used in the manufacturing of saleable products and to rail out aggregate products.

The proposed project includes the continued operation and an expected increase in throughput of the existing Syar Napa Quarry facilities listed below. Relocation and/or an increase in footprint area are also expected in association with the following facilities as a result of the project:

- Process water ponds - are located in the northwest corner of the quarry property. These ponds capture the water and fine sediment from the sand plant.
- Drainage swales - located throughout the quarry property. The drainage swales are used to convey surface water to the appropriate location.
- Sediment control ponds - located throughout the quarry property. These ponds are used to capture surface water allowing the fine sediment from mining activities to settle out prior to the surface water either being released from the site from controlled location or to be absorbed into the groundwater.
- Haul Roads - used to haul material in both highway and off-road vehicles, and are used as the primary access routes throughout the quarry.