

**SOLANO COUNTY PLANNING COMMISSION
RESOLUTION NO. 4613**

**RESOLUTION APPROVING USE PERMIT U-08-09
AND RECLAMATION PLAN RP-08-01
FOR THE LAKE HERMAN QUARRY EXPANSION PROJECT**

WHEREAS, the Solano County Planning Commission has considered Use Permit Application No. U-08-09 and Reclamation Plan Application No. RP-08-01 for the Lake Herman Quarry Expansion Project ("Project"), a proposal to expand quarry operations at the existing Lake Herman Quarry, including expanding the active quarry pit from 113 acres to 211 acres, increasing the depth of the existing quarry pit from 200 feet above mean sea level (msl) to 0 feet above msl, changing the allowable hours of operation, and updating the reclamation plan for the quarry; and

WHEREAS, the Project is located on an approximately 468-acre site adjacent to Lake Herman Road immediately east of the City of Vallejo and within the "A-20," Exclusive Agricultural zoning district; and

WHEREAS, an Environmental Impact Report ("Final EIR") for the Project was prepared by the County's consultant and processed by the Department of Resource Management pursuant to the California Environmental Quality Act and the State CEQA Guidelines, and has been circulated to both the public and to governmental agencies for review and comment; and

WHEREAS, on December 4, 2014, the Planning Commission certified the Final EIR for the Project; and

WHEREAS, the Planning Commission has reviewed the Final EIR and considered the information presented therein prior to approving the proposed Project; and

WHEREAS, the Final EIR concludes that the Project, as proposed, has the potential to cause significant environmental impacts in the following areas: air quality, biological resources, cultural resources, geology and soils, greenhouse gases and energy use, hydrology and water quality, and transportation; and

WHEREAS, the Final EIR further concludes that all potentially significant environmental impacts of the proposed Project can be avoided or substantially lessened through the imposition or adoption of specific mitigation measures; and

WHEREAS, Findings pursuant to the California Environmental Quality Act (CEQA), presented in Attachment 1 to this Resolution and incorporated herein by this reference, explain how all potentially significant environmental effects of the proposed Project will be mitigated through conditions imposed on the Project by Solano County; and

WHEREAS, the proposed mitigation monitoring and reporting program described in the Lake Herman Quarry Expansion Mitigation and Monitoring Plan, attached to the Planning Commission staff report, will ensure that all mitigation measures recommended in the Final EIR to reduce the potentially significant environmental effects of the Project to a less-than-significant level that are within the jurisdiction of the County of Solano to adopt and implement will in fact be implemented by the County; and

WHEREAS, although the Final EIR identified and analyzed a No Project Alternative and a Reduced Biological Impacts Alternative, the No Project Alternative does not meet the objectives of the Project and the Reduced Biological Impacts Alternative does not substantially lessen environmental impacts more than the Project with mitigation, as more fully described in Attachment 1 to this Resolution and incorporated herein by this reference; and

WHEREAS, the Solano County Planning Commission has considered, in a properly noticed public hearing, the application of Syar Industries, Inc., for Use Permit U-08-09 and Reclamation Plan RP-08-01; and

WHEREAS, said Commission has reviewed the report of the Department of Resource Management and heard testimony regarding the proposed Project at the duly noticed public hearing held on December 4, 2014; and

WHEREAS, based on the complete record presented to it as well as the testimony presented in public hearing, the Planning Commission generally finds that the proposed Project is consistent with the Solano County General Plan, will be served by adequate facilities, and will not be a nuisance or detrimental to the public health, safety, peace, or welfare; and

WHEREAS, after due consideration, the Planning Commission makes the following specific findings in regard to the proposed Project:

- 1. The establishment, maintenance or operation of a use or building applied for are in conformity to the General Plan for the County with regard to traffic circulation, population densities and distribution, and other aspects of the General Plan considered by the Zoning Administrator or the Planning Commission to be pertinent.**

The construction, maintenance and continued operation of the proposed project are consistent with all pertinent goals, policies, and programs of the Solano County General Plan. The Final EIR addresses all environmental issues pertaining to the use permit, including traffic circulation, population density and distribution. The proposed project is in conformance with all pertinent provisions of the Solano County General Plan.

- 2. Adequate utilities, access roads, drainage and other necessary facilities have been or are being provided. Adequate facilities will be provided.**

The project site is currently served by Lake Herman Road and Columbus Parkway. Improvements to Lake Herman Road and the quarry entrance are conditioned as

part of this project. Drainage will be accommodated by the existing drainage facilities such as the ponds and basins. Electrical utilities are currently at the site. No changes are proposed to the existing septic and restroom facilities and there is an existing bottled water program for Syar employees.

3. **The applicant exhibits proof that such use will not, under the circumstances of the particular case, constitute a nuisance or be detrimental to the health, safety, peace, morals, comfort or general welfare of persons residing or working in or passing through the neighborhood as such proposed use, or be detrimental or injurious to property and improvements in the neighborhood or to the general welfare of the County; provided that if any proposed building or use is necessary for the public health, safety or general welfare, the finding shall be to that effect.**

The applicant has shown evidence to support making this mandatory finding. The project presents insignificant environmental impacts and the Resource Management Department has recommended the adoption of an Environmental Impact Report (EIR) for the project. The project has been designed and conditioned to resolve concerns identified during the preparation of the EIR regarding aesthetics, agricultural resources, air quality, biological resources, cultural resources, geology and soils, greenhouse gases, hazardous materials, hydrology and water quality, land use, population and housing, mineral resources, noise, public services, utilities and recreation and transportation.

4. **The proposed Reclamation Plan, as amended by the applicant and proposed conditions of approval is consistent with the requirements of the Surface Mining and Reclamation Act of 1975 (SMARA) and Chapter 29 of the Solano County Code. The Reclamation Plan provides for the reclamation of disturbed lands, prevention of adverse effects, and protection of the public health and safety.**
5. **A copy of the application, Reclamation Plan and other documents submitted by the applicant was submitted to the Office of Mine Reclamation (OMR) and the comments submitted have been considered by the County in the review of this project.**
6. **The proposed use is compatible with surrounding land uses and will not conflict with the long term open space land use potential of the project site.**
7. **The use will not have a negative effect on neighboring properties or pose a threat to health or safety.**
8. **The project is in conformance with the Solano County General Plan and provides for returning the proposed mine area to open space.**
9. **A surety bond for \$1,409,563.17 (as may be adjusted consistent with the requirements of SMARA) is necessary to comply with the financial assurance requirements of SMARA and to guarantee completion of the Reclamation Plan.**

WHEREAS, the Solano County Department of Resource Management is the custodian of the documents and other material which constitute the record of proceedings upon which the County's decision on the Project is based.

RESOLVED, the Solano County Planning Commission approves Use Permit Application No. U-08-09, subject to the Conditions of Approval attached hereto as Attachment 1 and incorporated herein by this reference, and Reclamation Plan RP-08-01.

RESOLVED, the Mitigation and Monitoring Plan, attached to the Planning Commission staff report as Exhibit C, is adopted and shall be implemented by County staff.

I hereby certify that the foregoing resolution was adopted at the special meeting of the Solano County Planning Commission on December 4, 2014, by the following vote:

AYES:	Commissioners	<u>Rhoads-Poston, Cayler, Walker, Hollingsworth</u> <u>and Boschee</u>
NOES:	Commissioners	<u>None</u>
EXCUSED:	Commissioners	<u>None</u>

By: 
Bill Emlen, Secretary

U-08-09/RP-08-01 SYAR CONDITIONS OF APPROVAL

General Conditions

1. The project shall be established and operated in substantial conformance with the plans and descriptions submitted with Use Permit Application Number U-08-09, as subsequently revised, and as described and analyzed in the Final Environmental Impact Report (FEIR), prepared by GHD and certified by Solano County, subject to the terms and conditions imposed on the use permit by the Solano County Planning Commission, and as conditioned herein.
2. This permit shall be valid for a period of thirty-five (35) years, ending December 4, 2049. Prior to expiration of this permit, the Permittee may apply for an extension to the term of this permit. An application for extension must be submitted, in writing, at least six months prior to expiration. An extension of the term of this permit shall be a discretionary action, and the County may impose additional conditions or restrictions upon the project when granting a permit extension.
3. Any substantial change in the permitted operation, facilities, or structures, as determined by the Director of Resource Management, shall require a revision or amendment of the use permit. A revision or amendment of the permit shall be a discretionary action, and the County may impose additional conditions or restrictions upon the permit when granting a permit revision or amendment.
4. Non-compliance with any condition(s) of the use permit shall be cause for revocation of the use permit, in accordance with County procedures, and for payment of bonds to the County.
5. Site inspections of the construction and operation of the project may be conducted by the Department of Resource Management at any time, at the discretion of said Department, in order to assess compliance with project plans and all conditions of the use permit.
6. The County of Solano, its officers and employees shall not be responsible for injuries to property or person arising from the issuance or exercise of this permit or by the negligence or wrongful act of the permittee. The permittee shall defend, indemnify, and hold harmless the County of Solano, its officers, employees, and agents, from any claim, liability, loss, or legal action arising from such injuries, and shall reimburse the County for all legal costs and attorney fees related to any claim or litigation based on such injuries.
7. By signature of this permit, the permittee and its successors in interest agree to defend, indemnify and hold the County and its officers, employees and agents harmless from claims, demands, losses or expenses, including attorneys' fees and costs, occurring directly or indirectly by reason of or in connection with any negligent or intentionally wrongful acts of the permittee or its agents, employees or subcontractors in the exercise of this permit with respect to claims by third parties for personal injury, property damage or other loss. The permittee further agrees to hold the County harmless from all claims, demands, loses or expenses occurring by reason of or in connection with the issuance of this permit, any condition therein, and any and all associated approvals (including

CEQA-related claims) and further, to reimburse the County for all County costs, attorneys' fees and any other fees incurred in the litigation thereof. This agreement is a covenant that runs with the land and shall be binding on all successors in interest of the permittee.

8. If the Permittee challenges the approval by the Planning Commission and/or Board of Supervisors of any condition of approval in an action filed in a court of law, which action is brought within the time period provided for by law, the approval of this project by the Planning Commission and/or Board of Supervisors shall be suspended pending dismissal or final resolution of such action.
9. If any condition of approval of this project is invalidated by a court of law, the entire Project shall be reviewed by the Planning Commission and/or Board of Supervisors and substitute conditions may be imposed at the Planning Commission and/or Board of Supervisors.
10. The use shall be operated in such a manner as to not constitute a nuisance or be detrimental to health, safety, comfort, or general welfare of the people of the County, or be detrimental to adjacent properties or improvements or to the general welfare of the County.
11. The Permittee shall be responsible for taking reasonable measures as may be required by the County to prevent light, glare, traffic congestion, visual distraction or other impacts which constitute a nuisance to the adjacent properties, persons or property in the surrounding area.

Department of Resource Management Conditions

12. All requirements of the Solano County Department of Resource Management's Building Division shall be met including:
 - a) Prior to any construction or improvements taking place, a Building Permit Application shall first be submitted as per Section 105 of the 2013 California Building Code, or the latest edition of the codes enforced at the time of building permit application. "Any owner or authorized agent who intends to construct, enlarge, alter, repair, move, demolish, or change the occupancy of a building or structure, or to erect, install, enlarge, alter, repair, remove, convert or replace any electrical, gas, mechanical or plumbing system, the installation of which is regulated by this code, or to cause any such work to be done, shall first make application to the building official and obtain the required permit."
 13. All requirements of the Solano County Department of Resource Management's Planning Division shall be met including:
 - a) The Permittee shall work with County staff to identify possible trail easements on the Lake Herman Quarry property for trail routes shown in Figure 6 of the Tri-City and County Cooperative Plan (Chapter 11 of the General Plan). Acquisition of trail easements shall be consistent with applicable Tri-City and County Cooperative Plan policies.
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14. All requirements of the Solano County Department of Resource Management's Public Works Engineering Division shall be met including:
 - a) Syar shall improve Lake Herman Road from the City of Vallejo City Limit to 700 feet east of the Syar driveway. The improvements shall be in substantial conformance with the plans prepared by Solano County in 2003 (revised in 2014) in accordance with the 2002 agreement between Solano County and Syar, except that Syar does not need to include a concrete pad at the driveway entrance on the west side of the road nor the signalization of the driveway entrance. Prior to the start of construction, Syar shall submit an encroachment permit application with the appropriate paperwork for review and approval by Public Works Engineering. Syar shall pay all Solano County costs associated with the project including plan check, inspection and encroachment costs, and shall provide appropriate deposits as determined by Solano County. These improvements shall be completed by September 15, 2018.
 - b) Within 30 days after approval, Syar shall submit a construction bond for the improvements to Lake Herman Road discussed above in condition a). The bond shall be no less than 125% of the engineers estimate.
 - c) Syar shall enter into a maintenance agreement with the Solano County for the maintenance of Lake Herman Road from the quarry entrance to the Vallejo City limit. Should the County of Solano determine that the roadway is in need of maintenance such as new striping and street sweeping, Syar Industries shall perform the necessary repairs within 30 days of notification.
 - d) Syar truck traffic shall continue to be restricted to the portion of Lake Herman Road north of the existing driveway, except for local deliveries.

 15. All requirements of the Solano County Department of Resource Management's Environmental Health Division shall be met including:
 - a) California Code of Regulations (CCR) Section 3704(b) Office of Mine Reclamation (OMR) requires stockpiles and debris slopes shall not exceed 2:1 (horizontal : vertical), except when site-specific analysis demonstrate that the proposed final slope will have a minimum slope stability factor of safety that is suitable for the proposed end use. Annual and periodic slope stability inspections shall include inspecting overburden stockpile areas along with active operation areas and finished slopes for potentially adverse geologic conditions.
 - b) As recommended by OMR, kinematic analysis to evaluate the slope stability effects of groundwater and/or surface water in fractures in the rock mas shall also be conducted based on recommendations in the annual slope stability inspections.
 - c) All applicable documents regarding geotechnical condition inspection reports shall be prepared pursuant to the professional Engineers Act, Geologist and Geophysicist Act, and Professional land Surveyor's Act (Business and Professions Code Sections 6700-6799, 7800-7887, and 8700-8805).
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- d) Hazardous Material Business Plans (HMBPS) are required by state law and regulations when chemicals store on-site meet or exceed 55 gallons liquid, 200 cubic feet of gas and/or 500 pounds of solids, including any hazardous wastes. Hazardous Materials Business Plans which include, chemical inventories, site diagram, emergency response plan, and employee training plan shall be entered and uploaded to the California Environmental Reporting System (CERS). The chemical inventories and facility information shall be submitted to CERS annually. Chemical inventory and facility information shall be submitted to CERS when there are additional materials, quantities increase or decrease or there is a change to the facility information. The emergency response plan and training plan shall be reviewed and submitted to CERS at least triennially and whenever changes occur.
- e) Concurrence with the State of California Department of Public Health, Division of Drinking Water should be obtained for the existing bottled water program to provide drinking water to employees at the site. At this time there is not a potable water connection to the property.

OPERATIONAL REQUIREMENTS

- 16. The applicant shall file with the Department of Resource Management the name, address, and phone number of the Facility Manager. The Facility Manager shall be available to County officials at all times (24 hours) during facility construction and operation and shall be responsible for the control of operations and for keeping specific records of operations to be made available upon request of, and in conformance with the requirements of the Department of Resource Management.
 - 17. The applicant shall comply with the hours of operations as follows:
 - Regular Aggregate Processing Operation Hours
 - Construction Season – Monday thru Saturday, 6:00 am to 10:30 pm
 - Off Season – Monday thru Friday, 6:00 am to 10:30 pm
 - Regular Aggregate Mining Operation Hours
 - Construction Season – Monday thru Saturday, 6:00 am to 10:30 pm
 - Off Season – Monday thru Friday, 6:00 am to 2:30 pm

Construction Season is typically April thru October. Off Season is considered November thru March. Aggregate processing would continue to operate outside the regular hours of operation approximately 60 days per year and asphalt plant operations approximately 90 days per year.
 - 18. The maximum annual sales of rock products including asphalt paving materials, ready-mix concrete, overburden for fill material, and recycled asphalt and concrete shall not exceed 3.0 million tons per year.
 - 19. Exterior facility lighting shall be limited to focused beam lighting fixtures, shielded lamps, and other appropriate devices that reduce light emitted to other than the direct facility work areas.
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20. The noise levels generated by this facility including the operation of any equipment shall not exceed 60 dBa CNEL measured at the property line of any residential or commercial developed property along Lake Herman Road.
21. This project shall be designed for and constructed following all local, state and federal codes, laws, ordinances, rules and regulations.
22. On-site signage is limited to that specified in Solano County Zoning Regulations Section 28-96.
23. Sewage disposal systems and portable toilets shall be maintained so as not to create a public health nuisance.
24. The project site shall be maintained in a neat and orderly manner and kept free of accumulated junk and debris.

RECLAMATION PLAN REQUIREMENTS

25. The permittee shall submit a revised Mining and Reclamation Plan and revised plot plan drawings incorporating revisions called for by the mitigation measures and these conditions, including amended plan drawings.
 26. Prior to issuance of Use Permit No. U-08-09 and Reclamation Permit No. RP-08-01 by signature of the Director of Resource Management, the Director shall approve a Financial Assurance Program which provides financial assurances covering all closure, post closure, and environmental impairment issues identified in the Environmental Impact Report, the Mitigation and Monitoring Plan, and the Conditions of Approval as approved by the Planning Commission. The elements and structure of the Financial Assurance Program shall be outlined in the revised Mining and Reclamation Plan. Minor deviations from the elements of the Reclamation Plan structure may be administratively approved at the discretion of the Director of Resource Management. Substantial deviations shall be submitted to the Planning Commission for review and approval.
 27. Prior to issuance of this Use Permit, the permittee or authorized agent shall post a surety bond or other financial assurance mechanism acceptable to the County made payable to the County of Solano and the Department of Conservation in the amount of \$1,409,563.17 to guarantee completion of the Reclamation Plan including revegetation, erosion control measures and removal of abandoned equipment. The bond shall remain in effect and be in the possession of the Department of Resource Management until after all phases of reclamation, revegetation and erosion control are completed. The permittee shall secure the bond through a company that is rated "A" by the A.M. Best Company Guide. The bond shall not be released, except as authorized by the Director of the Department of Resource Management, until the receipt of a written request and submission of satisfactory evidence that the Reclamation Plan has been completed; and shall be forfeited to the County of Solano if the reclamation is not adequate or completed within the period of this permit. Except as provided for above, the original bond or instrument shall not be released from the control of Solano County other than through a direct exchange in a Solano County office for a new acceptable bond or instrument which does not place an unwarranted expense, workload or risk on the County of Solano.
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28. Final reclamation at the termination of mining operations shall return the lands to a usable ending condition compatible with open space which is consistent with the Solano County Zoning Regulations.
29. The permittee shall submit an annual compliance report by October 1 of each year on the status of the following facility elements:
 - a) The status of implementation of the Lake Herman Quarry Mining and Reclamation Plan.
 - b) The adequacy of the financial assurances posted for the facility as required by SMARA, CA Public Resources Code Section 2773.1(a)(3).
 - c) Status of compliance with each condition of approval of Use Permit U-08-09.
 - d) Annual production in cubic yards and tons in the previous production year.
 - e) Copies of all permits issued for the facility obtained during the previous year, including permit amendments, issued by other regulatory agencies.
 - f) Copy of the Annual Report submitted to the State Department of Conservation, Office of Mine Reclamation.
30. The permittee shall make an annual deposit against inspection, enforcement and verification staff costs for these permits sufficient to fund 20 hours of professional staff time. Additional time shall be billable as specified in the Department's Fee Schedule pursuant to applicable requirements of the Solano County Code and Section 21081.6 of the Government Code with a refund due if the monies are not expended.
31. The requirements of the Reclamation Plan shall be in effect until permanent revegetation has been established as documented to the satisfaction of the Department of Resource Management by annual site inspections after completion of reclamation activities. Financial assurances shall not be released to the permittee until the entire Reclamation Plan is implemented including the compliance with all performance standards specified in the Revegetation Plan and all corrective actions directed by the Department of Resource Management.

Conditions Pursuant to CEQA Mitigation Measures and Mitigation and Monitoring Plan

The following mitigation measures are included in the Environmental Impact Report and Mitigation Monitoring Plan for the project.

32. Mitigation Measure AQ-2a: Basic Measures for Construction. The applicant shall implement the following measures during construction of the Sulphur Springs Creek Bridge and Lake Herman Road improvements:
 - a) All exposed surfaces (staging areas, soil piles, graded areas, and unpaved access roads) shall be watered at least two times per construction day.
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- b) All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
 - c) All visible mud or dirt tract-out onto Lake Herman Road shall be removed using wet power vacuum street sweepers at least once per construction day.
 - d) All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.
 - e) Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes. Clear signage shall be provided for construction workers at all access points.
 - f) All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running proper condition, at least once per year, prior to operation.
33. Mitigation Measure AQ-2b Fugitive Dust Reduction during Operation. The applicant shall implement the following:
- a) All exposed surfaces (unpaved roadways, extraction, and overburden areas) actively used shall be watered a minimum of two times per day.
 - b) A water spray system shall be used in the rock processing plant.
 - c) A water spray bar shall be used to moisten loose materials on loaded trucks prior to leaving the site. For solid material, either a 2-foot freeboard shall be maintained or the material shall be covered.
 - d) All visible mud or dirt track-out onto Lake Herman Road at the Quarry entrances shall be removed using wet power vacuum street sweepers at least once per day, seven days per week, excluding days the quarry is closed.
 - e) All vehicle speeds on unpaved road shall be limited to 15 mph.
 - f) Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air Districts phone number shall also be visible to ensure compliance.
34. Mitigation Measure BIO-1a California Red-Legged Frog. Within 1 (one) year of Use Permit approval, applicant shall submit Monitoring Plan for review and approval. The Catraio Ranch Management Plan may be submitted in lieu of Monitoring Plan if it contains the same performance standards.
- a) *Permanent Impacts to Aquatic Breeding:* Avoidance of habitat is preferred. If this is not feasible, the Applicant shall mitigate permanent impacts to aquatic breeding habitat and upland habitat within 200 feet of breeding habitat at a 4:1 ratio, or as approved by US Fish & Wildlife Service. The mitigation can occur through preserving and enhancing aquatic breeding habitat within the Project
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site, on adjacent property, or through purchasing credits in an approved conservation bank. Permanent impacts from the bridge installation shall be mitigated prior to the start of construction.

- b) *Permanent Impacts to Upland Dispersal Habitat:* The Applicant shall mitigate permanent impacts to upland dispersal habitat at a 3:1 ratio, or as approved by US Fish & Wildlife Service. The mitigation can occur through preserving or restoring suitable equivalent upland habitat within the Project site, on adjacent property, or purchasing credits through an approved mitigation bank. Mitigation for the permanent impacts to the upland dispersal habitat shall be complete within 5 years of the issuance of the Use Permit or prior to the quarry pit expansion encroaching within 200 feet of the upland dispersal habitat, whichever occurs first.
- c) *Temporary Impacts to Upland Refugia Habitat:* The non-native grassland/upland refugia habitat temporarily impacted during construction shall be revegetated within two weeks after construction of the replacement bridge is complete. Revegetation shall be with common grass species typical to the area such as wild oats (*Avena* sp.) and bromes (*Bromus hordeaceus*). Grass cover shall be greater than 80 percent after three years from re-seeding. Aggressive weeds shall be controlled. Invasive species ranked High or Moderate on the Cal-IPC noxious weed list (excluding grasses) shall be kept at less than 5 percent cover. Annual monitoring shall be conducted for three years to document grass establishment and weed control needs. Annual monitoring reports shall be submitted to the County to ensure the area is properly restored. A planting species list and monitoring requirements, including success criteria, shall be identified in the Monitoring Plan discussed below.
- d) *General Provisions – Bridge Site:* Temporary disturbance, such as the staging area for the bridge replacement, to CRLF aquatic habitat or upland refugia habitat or upland dispersal habitat within 200 feet of aquatic habitat shall be limited to April through October to avoid potential impacts to dispersing frogs during the rainy season. The access route and staging area at the bridge site shall be limited to the minimum necessary to achieve the project goal. Routes and boundaries shall be clearly demarcated and these areas shall be outside of the riparian area.

A US Fish & Wildlife Service-approved biologist shall survey the bridge site two weeks before the onset of activities. If CRLFs, tadpoles, or eggs are found the approved biologist shall contact the Service to determine if moving any of the life-stages is appropriate. If the Service approves moving animals, the approved biologist shall be allowed sufficient time to move CRLFs from the work site before work activities begin.

During project activities, all trash that may attract predators shall be properly contained, removed from the work site and disposed of regularly. Following construction, all trash and construction debris shall be removed from the work area. All fueling and maintenance of vehicles and other equipment and staging areas shall occur at least 65 feet from any riparian habitat or water body.

- e) *General Provisions – Main Quarry:* The Applicant shall install silt fencing along the eastern perimeter of the Quarry Pit Expansion Area to prevent siltation in CRLF aquatic breeding habitat. A qualified biological monitor shall supervise installation of the silt fencing and monitor on a semi-annual basis to ensure the fencing remains installed and functioning properly to prevent siltation.

The Applicant shall have a Monitoring Plan for the mitigation of the biological impacts of the expansion of the Lake Herman Quarry prepared by a qualified biologist. The Plan shall be submitted to the US Fish & Wildlife Service for approval prior to the issuance of the Use Permit. The Plan shall identify the location, implementation, and monitoring of the CRLF mitigation. In addition, the Plan shall include a schedule indicating the timing of the implementation of the CRLF mitigation. It is anticipated that the Plan would be reviewed by the appropriate agencies during a formal Section 7 Consultation process that would be initiated during approval of the Section 404 Corps permit.

The location and quantities of impacts to aquatic breeding, upland dispersal, and upland refugia habitats are shown on Figure 4.4-3 of the Draft EIR.

35. Mitigation Measure BIO-1b Callippe Silverspot Butterfly. Within 1 (one) year of Use Permit approval, applicant shall submit Monitoring Plan for review and approval by the Department of Resource Management. The Catraio Ranch Management Plan may be submitted in lieu of Monitoring Plan if it contains the same performance standards.

The applicant shall mitigate direct permanent impacts to core habitat at a 3:1 ratio, or as approved by US Fish & Wildlife Service. Indirect impacts to core habitat within 300 feet of ground disturbances shall be mitigated at a 1.5:1 ratio. Both direct and indirect impacts to non-core habitat shall be mitigated at a ratio of 1:1. The mitigation can occur through preserving or creating habitat within the Project site or on adjacent property, or through purchasing credits in an approved mitigation bank.

Because one acre of the impacted core habitat also is classified as native grassland, the habitat that is preserved, created, or purchased shall include 2 acres of native grassland CSB habitat. The quarry pit area is already encroaching on CSB habitat; therefore the mitigation shall be implemented prior to implementation of quarry expansion.

The Applicant shall have a Monitoring Plan for the mitigation of the biological impacts of the expansion of the Lake Herman Quarry prepared by a qualified biologist. The Plan shall be submitted to the US Fish & Wildlife Service for approval prior to the issuance of the Use Permit. The Plan shall identify the location, implementation, and monitoring of the CSB mitigation. It is anticipated that the Plan would be reviewed by the appropriate agencies during a formal Section 7 Consultation process that would be initiated during approval of the Section 404 Corps permit. Implementation of this mitigation measure shall occur as indicated here or as prescribed by US Fish & Wildlife Service through the Section 7 Process.

The location and quantities of direct and indirect impacts to callippe silverspot butterfly core and non-core habitats are shown on Figure 4.4-5 of the Draft EIR.

36. Mitigation Measure BIO-1c Birds and American Badger. During annual reporting if work in a new area is anticipated within the coming year, this shall be reported in the

Compliance Report. Prior to new ground disturbance, conduct surveys, and install buffers if necessary.

General Construction-Earthmoving Activities: Prior to any new ground disturbance or vegetation clearing in habitat areas that have not previously been disturbed, pre-construction surveys shall be conducted by a qualified biologist within two weeks of the start of the new ground disturbing activities. The purpose of the survey shall be to determine if any special-status bird, nests, or badger burrows/dens are present within the area to be disturbed for that construction year. Surveys shall not be required for areas that are already disturbed and where there is no wildlife habitat present. During the nesting season, if work is stopped in an area for more than two weeks, a new survey shall be done in the area prior to new disturbance commencing, to ensure nesting birds have not moved in during the lull.

If nests, roosts, burrows, or dens of sensitive species are present, a 200-foot temporary protective breeding season buffers shall be established.

The removal of suitable nesting habitat outside of the nesting period would avoid the need for pre-construction surveys. The breeding or roosting periods when pre-construction surveys shall be required are February through August for birds, and spring and summer for American badger. Therefore, if new ground disturbance in a previously undisturbed area were to occur in September or October pre-construction surveys shall not be necessary.

37. Mitigation Measure BIO-2a Riparian Vegetation. Within 1 (one) year of Use Permit approval, applicant shall submit Monitoring Plan for review and approval.

The Applicant shall restore a minimum of two acres of riparian habitat for every acre of riparian habitat impacted. Mitigation may include restoration of degraded stream reaches along Sulphur Springs Creek or tributaries to the creek within the vicinity of the Project site. If onsite mitigation is not feasible, mitigation shall be implemented at a 3:1 ratio at an approved location, or as otherwise directed by regulatory agencies. The CDFW may require mitigation on a per-stem-impacted ratio which will be decided during permit negotiations. Since the riparian vegetation to be impacted at the bridge replacement site overlaps with potential CRLF upland refugia, CRLF mitigation under BIO-1a may include all the required riparian mitigation acreage for the bridge site.

The Applicant shall have a Monitoring Plan for the mitigation of the biological impacts of the expansion of the Lake Herman Quarry prepared by a qualified biologist. The Plan shall be submitted to the County for approval, and implemented, prior to impacts to riparian vegetation occurring. The Plan shall identify the location, implementation, and monitoring of the riparian habitat mitigation.

The location and quantity of impact to riparian vegetation is shown on Figure 4.4-5 of the Draft EIR, labeled as Arroyo Willow Riparian.

38. Mitigation Measure BIO-2b Oak Woodlands. Twelve months prior to impacting oak woodland, applicant shall submit Monitoring Plan for review and approval.

The Applicant shall mitigate impacts to oak woodlands at a ratio of two acres for every one acre impacted. Mitigation can be accomplished onsite or offsite or through mitigation

bank credits such as the Oak Woodlands Conservation Fund. Mitigation may include oak woodland restoration and enhancement and may include providing linkages and corridors between stands, restoration and prevention of damage from cattle or erosion, planting and protection of acorns and native understory species, and control of invasive species. Mitigation shall include a representative sample of the species and sizes of the individual native oaks that are to be removed within the oak woodland areas.

The Applicant shall have a Monitoring Plan for the mitigation of the biological impacts of the expansion of the Lake Herman Quarry prepared by a qualified biologist. The Plan shall be submitted to the County for approval, and implemented, prior to impacts to oak woodlands occurring. The Plan shall identify the location, implementation, survival standards, maintenance, and monitoring of the oak woodland mitigation.

The location and quantity of impact to oak woodland is shown on Figure 4.4-5 of the Draft EIR.

39. Mitigation Measure BIO-2c Native Grasslands. Twelve months prior to impacting native grasslands, applicant shall submit Monitoring Plan for review and approval.

Permanent impacts to native grasslands shall be mitigated at a ratio of two acres for every one acre impacted. Mitigation shall be accomplished either onsite or offsite or through mitigation bank credits. Mitigation may include restoration and enhancement of native grasslands. Mitigation may include restoration and prevention of damage from cattle or erosion, planting of native grasses and forbs, and control of invasive species. One acre of native grassland to be impacted also overlaps with CSB habitat, which is also mitigated for under Mitigation Measure BIO-1b. CSB mitigation may satisfy native grassland mitigation depending on the mitigation proposed and habitats present.

The Applicant shall have a Monitoring Plan for the mitigation of the biological impacts of the expansion of the Lake Herman Quarry prepared by a qualified biologist. The Plan shall be submitted to the County for approval, and implemented, prior to impacts to native grasslands occurring. The Plan shall identify the location, implementation, and monitoring of the native grassland mitigation.

The location and quantity of impact to native grasslands is shown on Figure 4.4-5 of the Draft EIR.

40. Mitigation Measure BIO-2d Non-Native Grasslands. Within 1 (one) year of Use Permit approval, applicant shall submit Monitoring Plan for review and approval.

Permanent impacts to non-native annual grasslands shall be mitigated at a ratio of one-half acre for every one acre impacted. Mitigation shall be accomplished either onsite or offsite or through purchase of mitigation bank credits. Mitigation may include grassland restoration and enhancement and can include restoration and prevention of damage from cattle or erosion, planting of native grasses and forbs, and control of invasive species. A portion of the non-native grassland to be impacted includes overlapping CSB habitat and CRLF upland dispersal habitat which is mitigated for under BIO-1a and BIO-1b.

The Applicant shall have a Monitoring Plan for the mitigation of the biological impacts of the expansion of the Lake Herman Quarry prepared by a qualified biologist. The Plan

shall be submitted to the County for approval, and implemented, prior to impacts to non-native grasslands occurring. The Plan shall identify the location, implementation, and monitoring of the non-native grasslands mitigation.

The location and quantities of permanent and temporary impacts to non-native grassland are shown on Figure 4.4-5 of the Draft EIR.

41. Mitigation Measure BIO-3 Wetlands and Waters. Within 1 (one) year of Use Permit approval, applicant shall submit Monitoring Plan for review and approval.

To mitigate for permanent impacts to waters and/or wetlands, the Applicant shall purchase credits from an approved mitigation bank at a ratio of two acres for every one acre impacted, or as otherwise directed by the Regional Water Quality Control Board and the US Army Corps. Alternatively, creation, restoration, or preservation could be carried out onsite or in the vicinity. Mitigation shall be implemented prior to filling jurisdictional waters and/or wetlands. Since the waters to be impacted by the bridge replacement overlap with potential CRLF aquatic habitat, CRLF mitigation described in Mitigation Measure BIO-1a may incorporate all the required stream mitigation acreage.

The Applicant shall have a Monitoring Plan for the mitigation of the biological impacts of the expansion of the Lake Herman Quarry prepared by a qualified biologist. The Plan shall be submitted to the US Army Corps for approval prior to the issuance of the Use Permit. The Plan shall identify the location, implementation, and monitoring of the mitigation.

The location and quantity of impact to wetlands and waters are shown on Figure 4.4-5 of the Draft EIR.

42. Mitigation Measure CR-1a Minimize Impacts to Significant Historic Structures and Equipment

Brownlie Mercury Mining Complex District

To mitigate the loss of value of the district under California Register Criterion 1, prior to disturbance of any of the mining sites that constitute the district, the Applicant shall prepare a website or public document that interprets the history of mining in Solano County, and the role played by the Brownlie Mercury Mining District, and shall provide the document to local historical societies and libraries.

Because under Criterion 1, the district is significant for its association with events that have made a significant contribution to the broad patterns of Solano County history, providing a detailed interpretation of the history of mining in Solano County, including the contributing role of the Brownlie Mercury Mining Complex District, and making this documentation readily available to the public, would reduce the impact to this district to a less than significant level.

To reduce the potential for inadvertent damage or destruction of the historic kiln site (ASC-36-09-05), the Applicant shall fence the area containing the kiln and nearby features (e.g. rock retaining wall, wooden beams, and brick fragments) or otherwise protect the area from damage by ongoing quarry maintenance. The fencing shall be monitored on an annual basis and maintained for the length of the Use Permit.

Historic Bridge

Prior to removal of the historic bridge structure, the applicant shall retain a historian or architectural historian to evaluate the structure under California Register evaluation criteria. If it is found to meet the criteria, the structure must be formally documented, including providing a detailed description, and taking measurements and photographing all structural elements. The documentation shall be provided to Syar Industries, Solano County Resource Management, and the Northwest Information Center at Sonoma State University.

Syar Industries Buildings and Mining Equipment

Prior to removal or relocation of buildings and mining equipment within the quarry site, a qualified historian or industrial archaeologist shall evaluate their potential historic significance. If found to be significant, appropriate mitigation of impacts as identified by the qualified historian or industrial archaeologist, shall be implemented. For example, adequate mitigation could consist of detailed recordation, in-place preservation, or, for pieces of equipment, placement on display at a public facility.

43. Mitigation Measure CR-1b Avoid or Minimize Impacts to Unknown Archaeological Resources

Should archaeological materials be encountered during quarry expansion and related activities, the piece of equipment that encounters the materials must be stopped, and the find inspected by a qualified archaeologist. If the deposit contains significant archaeological materials the archaeologist should undertake data recovery of the deposit unless the project can be modified to allow the materials to be left in place. Data recovery efforts must follow standard archaeological methods.

44. Mitigation Measure CR-2 Treatment of Human Remains, Associated Grave Goods, or Items of Cultural Patrimony

Should human remains, associated grave goods, or items of cultural patrimony be encountered during quarry expansion or during other ground-disturbing activities, the following procedures shall be followed as required by Public Resources Code § 5097.9 and Health and Safety Code § 7050.5.

In the event of discovery or recognition of any human, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the Solano County Coroner has determined that the remains are not subject to his or her authority. If the coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the State Native American Heritage Commission (NAHC). The NAHC shall assign a Most Likely Descendent (MLD). A qualified archaeologist, in consultation with the MLD, shall provide, in writing recommendations Regarding the treatment of the human remains and any associated cultural materials. Copies of the recommendations shall be provided by Syar Industries, the County, the MLD, and the NWIC at Sonoma State University.

45. Mitigation Measure CR-3 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 quarry expansion or other activities, work in the immediate vicinity shall be diverted away from the find until a professional paleontologist assesses and salvages the resource, if necessary.

46. Mitigation Measure GEO-2a Geotechnical Study

An independent California licensed Geotechnical Engineer or Engineering Geologist shall conduct a design-level geotechnical study for new structures, including the bridge replacement across Sulphur Springs Creek. The geotechnical study shall evaluate seismic hazards and provide recommendations to mitigate the effect of strong ground shaking and unstable soils. The geotechnical study shall provide design criteria to mitigate strong seismic ground shaking in adherence with current California Building Code standards for earthquake resistant construction. The seismic criteria shall take into account the active faults in the Vallejo area and beyond, and ground motions and shaking related to the faults shall be accounted for.

The geotechnical study shall include evaluation of unstable land in the area of the bridge replacement, including areas susceptible to liquefaction or settlement, and areas containing expansive soils. The study shall provide measures to repair, stabilize, or avoid such soils, and may include, but would not be limited to:

- Removal of native soils and replacement with engineered fill materials not prone to seismically-induced liquefaction or shrinking and swelling;
- Soil stabilization, such as lime treatment to alter soil properties to reduce shrink-swell potential to an acceptable level.
- Deepening support structures to a depth where unstable soils are no longer present.

The Project shall be designed and constructed in conformance with the specific recommendations contained in a design-level geotechnical study, including recommendations for grading, ground improvement, and foundation support for the bridge. The recommendations made in the geotechnical study shall be incorporated into the final plans and specifications and implemented during construction. Professional inspection of foundation and excavation, earthwork and other geotechnical aspects of site development shall be performed during construction in accordance with the current version of the Uniform Building Code.

47. Mitigation Measure GEO-2b Slope Stability Inspections

A California licensed Geotechnical Engineer or Engineering Geologist shall conduct slope stability inspections of the expansion area. Scheduled geologic reconnaissance (frequency and timing dependent upon operation progress but shall occur at least once per year) shall be performed to assess the slope stability of quarry operation areas, including, but not limited to, areas where the operation is approaching the proposed "finished" slope location and configuration. The reconnaissance shall be conducted to identify potentially adverse conditions which could negatively affect both local and global stability of the slope. The inspections shall also evaluate the stability of existing overburden stockpile areas. Inspections shall include mapping and movement

monitoring of the slopes to assess the potential for project excavation, grading, and overburden storage to trigger movement of debris flow and landslides.

In areas where adverse conditions are identified, the following actions shall be completed. These actions shall also be completed in areas where landslide deposits, rhyolite and rhyolitic tuff, or other non-consolidated basaltic materials, may be encountered, as summarized in the November 10, 2011 Kleinfelder Preliminary Slope Stability Analysis. An independent California licensed Geotechnical Engineer or Engineering Geologist shall conduct an in-depth geotechnical investigation of the proposed cut slope area. The geotechnical investigation shall include:

1. A kinematic analysis to evaluate the structure of the rock mass and the slope stability effects of groundwater and/or surface waters in fractures in the rock mass.
2. A global stability analyses based on data collected in the investigation, including consideration of effects (if any) of the proposed excavation on the mapped landslide deposits, both during excavation and following reclamation.
3. A rockfall hazard analysis to evaluate the potential for rockfall from the proposed cut slope (where it will remain exposed), and validate the proposed slope and bench configuration.

A memorandum summarizing the findings of the inspections and any recommendations shall be prepared and submitted to the County of Solano and Syar Industries after each reconnaissance. Engineering recommendations for slope repair or stabilization shall be approved by the County of Solano and incorporated into the Project.

48. Mitigation Measure HWQ-1 Update Industrial Storm Water Pollution Prevention Plan

The Applicant shall amend the Quarry's existing Industrial SWPPP to reflect additional areas of land disturbance and changes in operation resulting from the Project. The SWPPP shall be modified as the Project progresses and as conditions warrant to remain consistent and compliant with State Water Resources Control Board Water Quality Order no. 97-03-DWQ National Pollutant Discharge Elimination System General permit No. CAS000001 Waste Discharge Requirements for Discharges of Storm Water associated with Industrial Activities Excluding Construction Activities.

The updated SWPPP shall identify the sources of pollution that may affect the quality of industrial stormwater discharges and authorized non-storm water discharges, and describe and ensure the implementation of best management practices to reduce or prevent pollutants in industrial stormwater discharges. The updated SWPPP shall also include monitoring measures and other requirements contained in Order No. 97-03. Implementation of the SWPPP shall include inspections and monitoring.

49. Mitigation Measure HWQ-5 Sulphur Creek Bridge Design

The Applicant shall design the bridge replacement to be compliant with the Solano County Road Improvement and Land Development Guidelines and subject to review and approval by the Local Solano County Floodplain Administrator. Components of the design shall address the following Guideline components:

1. Streams, which carry large floating debris, may require greater freeboard.
2. Abutments shall be protected from erosion damage. This may necessitate the use of rock slope protection or other suitable materials and methods.

Abutments on fill material will not be allowed unless supported on piles and the fill is adequately protected from erosion.

50. Mitigation Measure TR-4 Traffic Control Procedures

The applicant shall obtain an Encroachment Permit from the County of Solano prior to beginning work on Lake Herman Road and the bridge off Sky Valley Road. Standard conditions of Solano County Encroachment Permits require providing for public safety and convenience and proper traffic control during construction in accordance with the requirements set forth in the current Manual of Uniform Traffic Control Devices (MUTCD), the MUTCD California Supplement, and in Sections 7-1.08 and 7-1.09 of the Caltrans Standard Specifications.

Construction shall be coordinated with facility owners or administrators of police and fire departments, ambulance companies, and hospitals. Emergency service providers shall be notified in advance of the timing, location, and duration of construction activities and the locations of any lane closures or detours.

Pedestrian and bicycle access and circulation shall be maintained during project construction where safe to do so. If construction activities encroach on a bicycle lane, warning signs shall be posted that indicate bicycles and vehicles