4.11 MINERAL RESOURCES

This section describes mineral resource classifications and regulations, and evaluates potential impacts from the proposed Project.

IMPACTS EVALUATED IN OTHER SECTIONS

The following subject is related to Mineral Resources, but is evaluated in another section of this document:

• Impacts related to compatibility of surrounding land uses are addressed in Section 4.10, Land Use, Population and Housing.

SETTING

Mapped mineral resources zones (MRZs) approved by the State Mining and Geology Board within unincorporated Solano County are identified on Figure RS-4 of the Solano County General Plan (Solano 2008). Figure RS-4 indicates the Project site is designated as MRZ 2, "areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood for their presence exists."

REGULATORY FRAMEWORK

California Surface Mining and Reclamation Act of 1975

The California Surface Mining and Reclamation Act of 1975 (SMARA) was enacted by the California Legislature to address the need for a continuing supply of mineral resources, and to prevent or minimize the negative impacts of surface mining to public health, property and the environment. The Department of Conservation's Office of Mine Reclamation (OMR) and the State Mining and Geology Board (SMGB) are jointly charged with ensuring proper administration of the SMARA requirements. The OMR provides an ongoing technical assistance program for lead agencies and operators, maintains a database of mine locations and operational information statewide, and is responsible for compliance related matters. The SMGB promulgates regulations to clarify and interpret the SMARA provisions, and also serves as a policy and appeals board.

SMARA also mandates the California Geological Survey (CGS) to provide objective economic-geologic expertise to assist in the protection and development of mineral resources through the land-use planning process. The primary products are mineral land classification maps and reports. Local agencies are required to use the classification information when developing land-use plans and when making land-use decisions.

The process of reclamation includes maintaining water and air quality, minimizing flooding, erosion and damage to wildlife and aquatic habitats caused by surface mining. The final step in this process is often topsoil replacement and re-vegetation with suitable plant species.

The Act's requirements apply to surface mining operations in California which disturb more than one acre or remove more than 1,000 cubic yards of material. This includes, but is not limited to: prospecting and exploratory activities, dredging and quarrying, streambed skimming, borrow pitting, and the stockpiling of mined materials.

Assembly Bill AB 3098 List

The Office of Mine Reclamation periodically publishes a list of mines regulated under SMARA that meet provisions set forth under California's Public Resources Code, Section 2717(b). This list is generally referred to as the AB 3098 List, in reference to the 1992 legislation, that established it. Sections 10295.5 and 20676 of the Public Contract Code preclude mining operations that are not on the AB 3098 List from selling sand, gravel, aggregates or other mined materials to state or local agencies.

Solano County 4.11-1 July 2013

Solano County

Implementation of SMARA is conducted through the adoption of ordinances by city and county "lead agencies" for land use permitting and reclamation procedures. These ordinances provide the regulatory framework under which local mining and reclamation activities are conducted.

Solano County is the lead agency for the proposed Project. Chapter 29 Surface Mining and Reclamation of the Solano County Code was adopted to comply with the SMARA directive and fulfill various purposes of the act in unincorporated areas of Solano County. Chapter 29 requires the Project proponent to obtain: (1) a use permit from the planning commission; and (2) approval by the planning commission of a reclamation plan. Chapter 29 also requires the project proponent to submit for approval a financial assurances plan, which must be approved prior to any new operation being initiated.

As the SMARA lead agency, Solano County reviews applications for permits and/or reclamation plans, submits reclamation plans and financial assurances to the State for technical review and comment prior to approval, annually reviews financial assurances, annually inspects mining operations for compliance, and takes enforcement actions where necessary.

Goals and Policies of the Solano County General Plan and Tri-City and County Cooperative Plan

The following are the mineral resource policies and implementation plans from the Solano County General Plan and Tri-City and County Cooperative Plan that are applicable to the proposed project. Those policies related to mining and compatible land uses are addressed in section 4.10 Land Use.

Solano County General Plan

- RS.P-33 The County shall preserve, for future use, areas with important mineral resources by preventing residential, commercial, and industrial development that would be incompatible with mining practices to the extent feasible.
- RS.I-16 Designate land uses in mineral areas appropriately to ensure compatibility between mineral extraction and surrounding uses.
- RS.P-34 Ensure that mineral extraction operations are performed in a manner compatible with land uses on the site and surrounding area and do not adversely affect the environment. At the end of such operations, ensure that the site is restored to conform with Surface Mining and Reclamation Act requirements and to a use compatible with surrounding land uses.
- RS.I-17 Evaluate impacts related to extracting mineral resources from new areas as part of the required permitting process to ensure that remediation occurs after minerals are extracted. Comply with regulations found in the Surface Mining and Reclamation Act.

Tri-City and County Cooperative Plan for Agriculture and Open Space Preservation

- 3.1.6 Mineral resource extraction activities within the Cooperative Planning Area shall be conducted in compliance with the Surface Mining and Reclamation Act of 1975 so that mined lands area reclaimed to a condition compatible with other open space uses.
- 3.4.2 Mineral resource extraction activities shall be compatible with open space uses and shall be subject to the approval of a conditional use permit from the agency having jurisdiction of the property and with the approval of the reclamation plan pursuant to SMARA.
- 3.4.4 Mineral extraction within the Cooperative Planning Area shall be accomplished by state-of-the-art quarrying methods that will be compatible with surrounding land uses. The use of earthen berms, trees and other landscaping shall conceal a significant portion of the mining activities from view except for those roads necessary to haul quarry materials from the site.

EVALUATION CRITERIA WITH THRESHOLD OF SIGNIFICANCE

Table 4.11-1 lists the evaluation criteria and significance thresholds used to address potential impacts to mineral resources.

TABLE 4.11-1
Evaluation Criteria with Threshold of Significance – Mineral Resources

| Evaluation Criteria | As Measured by | Significance Threshold | Sources of Criteria |
|--|---|---------------------------|--|
| MR-1: Will the Project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state, or a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? | Acres lost due to incompatible land use | Greater than 0 acres. | CEQA Guidelines Appendix G, Checklist Item XI (a, b) |
| MR-2: Will mineral extraction operations be managed and recovered in accordance with applicable requirements? | Conformance with requirements. | Greater than 0 conflicts. | SMARA Solano County General Plan Policy RS.P-34 Tri-City and County Cooperative Plan |

IMPACTS AND MITIGATION MEASURES

Impact: MR-1: Will the Project result in the loss of availability of a known mineral resource

that would be of value to the region and the residents of the state, or a locally-important mineral resource recovery site delineated on a local general plan,

specific plan or other land use plan?

Analysis: No Impact

The Solano County General Plan has mapped the project site as MRZ 2, "areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood for their presence exists." By virtue of the Project these mineral deposits would be utilized and not lost. Therefore, there would be no impact.

Mitigation: No mitigation is necessary.

Impact: MR-2: Will mineral extraction operations be managed and recovered in

accordance with applicable requirements?

Analysis: No Impact

The current Lake Herman Quarry site is included on the AB 3098 List dated January 7, 2011 (Department of Conservation 2011). The AB 3098 List is a list of mines regulated under SMARA that meet the required provisions. For the Office of Mine Reclamation to place a mining operation on the AB 3098 List, the operation must meet all of the following conditions:

• The operation has an approved reclamation plan;

The operation has an approved financial assurance;

- The operation has filed its annual report;
- The operation has paid its reporting fee;
- The operation has had its annual inspection by the lead agency which reflects the operation is in full compliance with the law.

The proposed Project would expand operations at the existing Quarry. The Project is required to obtain a use permit from the Solano County Planning Commission. A use permit application was received by the County in 2008, which included a Mining and Reclamation Plan for the Quarry expansion. In accordance with Chapter 29 of the County Code, the issuance of a Conditional Use Permit and approval of the Mining and Reclamation Plan will be considered and, if deemed adequate, approved by the Planning Commission. After approval of the new use permit, the Lake Herman Quarry would continue to maintain its status on the AB 3098 list.

The proposed Project would be required to provide environmental management and reclamation, which would include maintaining water and air quality, and minimizing flooding, erosion and damage to wildlife and aquatic habitats caused by surface mining. The final step would involve topsoil replacement and re-vegetation with suitable plant species. Final reclamation would leave the site suitable for extensive agriculture, which would be compatible with surrounding land uses. The Project would comply with all applicable requirements and therefore there is no impact.

Mitigation: No mitigation is necessary.

CUMULATIVE IMPACTS

Impact: MR-C1: Will the Project's incremental effect on mineral resources be cumulatively

considerable based on evaluation criteria 1 and 2?

Analysis: No Impact

The Project does not have any impacts related to mineral resources and therefore it

cannot contribute to a cumulative impact.

Mitigation: No mitigation is necessary.

REFERENCES

State of California, Department of Conservation. 2011. *Mine Reclamation – AB 3098 List*. January 7. Accessed on January 20, 2011 at http://www.coservation.ca.gov/omr/ab 3098 List/Pages/Index.aspx

Solano County. 2008. Solano County General Plan. December.

Solano County. 1994. Tri-City and County Cooperative Plan. March 31.

Solano County. County Code - Chapter 29 Surface Mining and Reclamation.

Syar Industries, Inc. 2013. Mining and Reclamation for Syar Solano Quarry. April.

Syar Industries, Inc. 2008. Lake Herman Quarry, Quarry Expansion Plan 2008, Solano County Use Permit Application. Revised April 28.