

4.7—LAND USE AND PLANNING

4.7—LAND USE AND PLANNING

This section of the subsequent environmental impact report (SEIR) describes the existing land uses, adopted general plan land use classifications and zoning designations on and around the project site, and other applicable management plans and policies pertinent to the project area. This chapter also describes the applicable plans and policies that guide development in the project area, and it evaluates the project's consistency with these plans and policies and other existing land use regulations.

This chapter also identifies any potentially significant land use impacts and, if necessary, appropriate mitigation measures to avoid or reduce such impacts. Pursuant to Section 15358(b) of the CEQA Guidelines, mitigation measures are proposed only to address physical impacts that may result from the project.

4.7.1 Land Use Conditions at the Time of the LAVQAR EIR

Land use at the time of the *Livermore-Amador Valley Quarry Area Reclamation Specific Plan Environmental Impact Report* (LAVQAR EIR) included agricultural and industrial uses. Agricultural use predominated in the northern portion of the project area, on which land had not yet been quarried. Some areas functioned as open space prior to mining. The central and southern portions of the project area were used for the quarry operation, including working pits, process water storage, settling ponds, and operators' buildings and corporation yards (Alameda County 1980: 41-42).

4.7.2 Environmental Setting

The project site is predominated by mining and processing facilities associated with CEMEX's operation (see Figure 2-6, "Existing Facilities" and Figure 2-7, "Plant Site Area Utilities"). The eastern portion of the site (east of Isabel Avenue) contains Lake A, a formerly mined area that contains water primarily from groundwater infiltration. South of Lake A is the eastern portion of the segment of the Arroyo del Valle (ADV), which is a perennial drainage channel that runs east-west along the southern portion of the site. The portion of the site west of Isabel Avenue contains Lake B, which is a recently mined area with a mine pit approximately 100 to 130 feet deep. The ADV continues east-west along the southern portion of this area of the site before merging with Alameda Creek near Interstate 680. North of Lake B are CEMEX's currently operating materials processing facility and stockpile areas. CEMEX's current mining operations are being conducted in the areas referred to as Lake B and Lake J. Additional uses include processing activities, stockpiles, administrative offices, a truck scale, and other facilities related to mining and processing. Topcon Positioning Systems, Inc. (a lessee) currently operates a heavy equipment geopositioning training facility within a southern portion of the project boundary between Vineyard Avenue and the ADV. This use is temporary because it is an unpermitted facility and not authorized by the zoning ordinance. The Topcon use must be moved elsewhere to accommodate the ADV realignment (anticipated to occur between 2022 and 2023).

Land uses adjacent to the project site include other mining operations, open space areas, agricultural uses, recreational facilities, transportation corridors, and residential development (see Figure 2-6). A separate mining operation subject to Surface Mining Permit and Reclamation Plan 16 (SMP-16), currently operated by Vulcan Materials Company, abuts the project site's eastern and northern border of Lake B. The East Bay Regional Park District (EBRPD) Shadow Cliffs Recreation Area, a reclaimed surface mine that now includes a lake and shoreline facilities available for public use, abuts the project site's northwestern border. The Ruby Hills residential subdivision in the city of Pleasanton is located across Vineyard Avenue to the south of the Lake B portion of the project site. Residential uses are also located in the city

of Livermore, north of the Lake A area of the project site. Vineyards for two wineries (Ruby Hill Winery and Rubino Estates Winery) and two event centers (Casa Real at Ruby Hill Winery and Palm Event Center in the Vineyard) are also located along the south side of Vineyard Avenue. Residential uses are also located in the City of Livermore to the north of Lake A. The nearest residential developments are contiguous to the northern boundary of the Lake A area, with the nearest home approximately 35 feet from the northwest corner of the Lake A property (CEMEX 2019).

4.7.3 Regulatory Setting

The site is located in unincorporated Alameda County, in a portion of the county where the *East County Area Plan* (ECAP) serves as the applicable general plan document (County General Plan). ECAP provides overall land use policy direction, and the Alameda County Code of Ordinances provides the applicable land use regulations. Additionally, the project site is part of the *Specific Plan for Livermore-Amador Valley Quarry Area Reclamation* (LAVQAR Specific Plan) (Alameda County 1981). The LAVQAR Specific Plan comprises the 3,820 acres designated for "Sand and Gravel Quarry" use between Pleasanton and Livermore in the Livermore-Amador Valley.

Applicable county planning policies and zoning regulations that pertain to the project site are described below, as are applicable LAVQAR Specific Plan management goals and policies, followed by a discussion of the project's consistency or inconsistency with each relevant policy. Potential conflicts with planning policies as contained in the County General Plan and other applicable regulatory and management plans do not inherently result in a significant effect on the environment. Instead, "effects analyzed under CEQA must be related to a physical change in the environment" (CEQA Guidelines Section 15358.b). CEQA Guidelines Section 15125.d provides that an EIR shall discuss any inconsistencies between a proposed project and the applicable general plan in the setting section of the document rather than as an impact (see Table 4.7-1 at the end of this "Regulatory Setting" section). Appendix G of the CEQA Guidelines indicates that a project would result in a significant impact related to land use and plans if it would "conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect." Therefore, while this section of the SEIR provides an analysis of the project's consistency with applicable plans, policies, and regulations, any impacts that may result from such conflicts are analyzed elsewhere in this SEIR.

4.7.3.1 Alameda Countywide Conservation Element of the General Plan

The County General Plan consists of area plans, which contain elements for their respective geographic areas, and countywide elements. The countywide Conservation Element contains goals, policies, and actions that apply to the entire unincorporated area. This subsection lists the applicable land use goals of the countywide Conservation Element.

Minerals, Extractive Resources

Goal: To insure extraction of minerals and reclamation of land to the fullest extent possible consistent with sound management policies.

Agriculture and Soils Resources Management:

Goal: To protect agriculture and agricultural lands.

The Conservation Element also recognizes sand and gravel sourced from Alameda County as "a principle source of aggregate materials for the San Francisco Bay Area," and it identifies the ADV as one of the primary sources of sand and gravel.

4.7.3.2 Alameda County (Unincorporated Areas) Community Climate Action Plan Element of the General Plan

The County General Plan consists of area plans, which contain elements for their respective geographic areas, and countywide elements. The Alameda County (Unincorporated Areas) Community Climate Action Plan Element of the General Plan (CAP) addresses reduction of greenhouse gas emissions through a series of 37 local programs and policy measures related to transportation, land use, building energy, water, waste, and green infrastructure. The purpose of the CAP is to allow the County to reduce its community-wide emissions by more than 15 percent by the year 2020. The Plan was approved by the Board of Supervisors on February 4, 2014. This subsection lists the applicable policies of the countywide CAP Element.

Energy Performance in New Construction

Policy E-10: Require new construction to use building materials containing recycled content.

Water Conservation: Building and Landscape Efficiency

Policy WT-2: Require new landscape projects to reduce outdoor potable water use by 40 percent.

4.7.3.3 East County Area Plan

The purpose of the ECAP is to present a clear statement of the County's intent concerning future development and resource conservation within East County. The ECAP contains land use policies pertaining to quarries and Regionally Significant Aggregate Resource Areas. The goal for these special land use policies is to "recognize the regional value of the County's construction aggregate resources and to ensure compatibility between quarry operations and surrounding land uses."

The ECAP also contains policies that place strict limits on where new mine excavations may be conducted. ECAP Policy 155 provides that, "Except to the extent required by State law, no new quarry or other open-pit mine may be approved by the County outside the Urban Growth Boundary, unless approved by the voters of Alameda County. Excavation not adjacent to an existing quarry site and on the same or an adjoining parcel shall be regarded as a new quarry." The project does not propose a new quarry.

The ECAP also contains special land use policies pertaining to quarries and Regionally Significant Construction Aggregate Resource Areas. Per the ECAP, the goal for these special land use policies is to "recognize the regional value of the County's construction aggregate resources and to ensure compatibility between quarry operations and surrounding land uses."

Passed by the voters of the County in November 2000, and now fully incorporated into the Alameda County General Plan (County General Plan), Measure D placed strict limits on where new mine excavations may be conducted. The policies introduced by the initiative are intended to stay in effect indefinitely, or until modified by Alameda County voters. A quarry that has received all necessary discretionary County and other approvals and permits before the effective date of the ordinance, but that has not yet exercised those approvals and permits, is to be considered an "existing" rather than a "new" quarry. The project involves reclamation of an existing quarry.

The ECAP includes the definition and designation of various land use categories, with corresponding allowable uses, intensities, and densities. The project site is designated on the Alameda County ECAP

Land Use Diagram as Water Management and Large Parcel Agriculture. Subject to the provisions of Measure D, the Water Management land use designation provides for sand and gravel quarries, reclaimed quarry lakes, watershed lands, arroyos, and similar and compatible uses. The Large Parcel Agriculture designation provides for agricultural uses and processing facilities, limited agricultural support service uses, secondary residential units, visitor-serving commercial facilities, recreational uses, public and quasi-public uses, solid waste landfills and related waste management facilities, quarries, windfarms and related facilities, utility corridors, and similar uses compatible with agriculture.

This subsection lists the applicable land use goals, policies, and programs of the ECAP:

Allowable Uses:

Designation: Subject to the provisions of Measure D, the Water Management land use designation provides for sand and gravel quarries, reclaimed quarry lakes, watershed lands, arroyos and similar and compatible uses.

Accessory Uses:

Designation: Sand and gravel quarries allow a range of uses including sand and gravel processing, associated manufacturing and recycling uses requiring proximity to quarries, reclamation pits, and public use areas.

Parcel Size and Building Intensity:

Designation: Water Management Lands allows for a minimum parcel size of 100 acres and a maximum building intensity of .01 FAR.

Residential Use:

Designation: One single family home per parcel is allowed, provided that all other County standards are met for adequate road access, sewer and water facilities, building location, visual protection, and public services. Residential and residential accessory buildings shall have a maximum floor space of 12,000 square feet.

Development Envelope:

Designation: Apart from infrastructure (under Policy 13), all buildings shall be located on a contiguous development envelope not to exceed 2 acres, except they may be located outside the envelope if necessary for security reasons or, if structures for agricultural use, necessary for agricultural use.

Agricultural Support Services:

Policy 78: In areas designated Large Parcel Agriculture, the County shall permit agricultural processing facilities (for example wineries, olive presses) and limited agricultural support service uses that primarily support Alameda County agriculture, are not detrimental to existing or potential agricultural uses, demonstrate an adequate and reliable water supply, and comply with the other policies and programs of the Initiative.

Recreational Opportunities

Policy 101: The County shall encourage public water management agencies to explore recreational opportunities on watershed lands, particularly reclaimed quarries, where recreational use would not conflict with watershed protection objectives.

Biological Resources

- **Policy 122:** The County shall encourage that wetland mitigation be consolidated in areas that are relatively large and adjacent to or otherwise connected to open space. To the extent possible areas should be included in, adjacent to, or linked through open space corridors with lands designated as "Resource Management" that are managed specifically for the preservation and enhancement of biological resources.
- **Policy 123:** Where site-specific impacts on biological resources resulting from a proposed land use outside the Urban Growth Boundary are identified, the County shall encourage that mitigation is complementary to the goals and objectives of the ECAP. To that end, the County shall recommend that mitigation efforts occur in areas designated as "Resource Management" or on lands adjacent to or otherwise contiguous with these lands in order to establish a continuous open space system in East County and to provide for long term protection of biological resources.
- **Policy 125:** The County shall encourage preservation of areas known to support special status species.
- **Policy 126:** The County shall encourage no net loss of riparian and seasonal wetlands.
- **Policy 127:** The County shall encourage the preservation of East County's oak woodland plant communities.
- **Policy 128:** The County shall ensure that, where quarries will be reclaimed as open space, reclamation plans are designed to restore biological value to sites through appropriate revegetation, contouring of lakes to simulate natural bodies of water, and protection or in-kind replacement of significant trees.
- **Policy 129:** The County shall protect existing riparian woodland habitat present along the Arroyo Mocho, Arroyo Del Valle, Arroyo Las Positas, Arroyo de la Laguna; and Alamo, Tassajara, and Alameda Creeks. Exceptions to these requirements shall apply for those portions of the Arroyo del Valle to be excavated for water transfer Lakes A and B under the Specific Plan for the Livermore-Amador Valley Quarry Area Reclamation, which shall instead be subject to riparian habitat restoration as specified by Policies 128 and 164; and for any approved quarry operations in Regionally Significant Construction Aggregate Resource Sector C (Arroyo Mocho) or any other streambeds, which shall also be subject to habitat restoration under Policies 128 and 164, and according to applicable State Public Resources Code requirements, to the extent that proposed reclamation specifies riparian habitat as the end use.

Limitations on New Quarries:

Policy 155: Except to the extent required by State law, no new quarry or other open-pit mine may be approved by the County outside the Urban Growth Boundary, unless approved by the voters of Alameda County. Excavation not adjacent to an existing quarry site and on the same or an adjoining parcel shall be regarded as a new quarry. A quarry that has received all necessary discretionary County and other approvals and permits prior to the effective date of the ordinance — but has not yet exercised those approvals and permits — is to be considered an "existing" rather than a "new" quarry.

Development on State-Designated Regionally Significant Construction Aggregate Resource Areas:

Policy 157: The County shall review proposals for development within or adjacent to state-designated Regionally Significant Construction Aggregate Resource Sectors. If the development is proposed on unincorporated land, the County shall consider the effects of such development on the future or continued extraction of the resource and shall approve such development only if conditions are applied to minimize the potential of the new use to preclude continued or future access to the resource. If the development is proposed within a city, the County shall encourage the city to do the same.

Minimizing Conflicts

Policy 158: The County shall require that, where conflicts between a new use and existing quarry are anticipated, notifying future residents and mitigating the conflict shall be the responsibility of the new use.

Protection of Nearby Uses

Policy 159: The County shall impose conditions on approval of new Surface Mining Permits and Reclamation Plans to protect nearby uses from potential traffic, noise, dust, health and safety, visual and other impacts generated by sand and gravel quarries. Conversely, the County shall not approve land uses adjacent to any existing quarry or Regionally Significant Construction Aggregate Resource Sector if the development of the new uses would result in exposure of residential or other sensitive uses to possible adverse impacts of the quarry, unless the new uses can effectively mitigate the significant adverse impacts and notify potential homeowners of the risk, as required by Policy 158.

Reclamation for Water Management

Policy 160: The County shall ensure that where quarry operations are located in areas designated as Water Management, extraction of the aggregate resource shall be allowed in the short-term. Reclamation of the land for water management and other compatible uses shall occur subject to conditions of Surface Mining Permits and Reclamation Plans and consistent with the Specific Plan for Livermore-Amador Valley Quarry Area Reclamation or the comparable plan prepared for the Sunol Valley/San Francisco Water Department watershed lands pursuant to Policy 161 and Program 71, whichever is applicable.

Manufacturing Uses

Policy 162: The County shall allow manufacturing uses which make extensive use of harvested aggregate to locate near sand and gravel quarries.

Concurrent Mining and Agricultural Uses

Policy 163: The County shall encourage concurrent mining and agricultural uses on sites where aggregate deposits are overlain by agriculturally valuable soils to minimize the premature disturbance of such soils. To this end, the County shall consider phasing of quarry operations in the approval of Surface Mining Permits and Reclamation Plans.

Revegetation Policy 164:	The County shall ensure that where quarry operations will be reclaimed as open space, reclamation plans are designed to restore biological value to sites through appropriate revegetation, contouring of lakes to simulate natural bodies of water, and protection or in-kind replacement of significant trees.
Water Conservatio	n
Policy 165:	The County shall require that water-conserving practices are incorporated into mining and reclamation operations.
Land Use Buffers	
Program 69:	The County shall amend the Surface Mining Ordinance to require permit applicants for any Surface Mining Permit and Reclamation Plan to provide appropriate buffering of quarry operations from adjacent land uses, such as setbacks, landscaping, and use restrictions.
Consistency with Sl	MARA
Program 70:	The County shall amend the Surface Mining Ordinance to include reclamation guidelines consistent with the Surface Mining and Reclamation Act (SMARA).

4.7.3.4 County Zoning Ordinance

The zoning for the project site is principally Agriculture, but portions of the site also include Unclassified and Planned Development zoning designations (see Figure 2-9, "Zoning Designations"). Agricultural districts are established to "promote implementation of General Plan land use proposals for agricultural and other non-urban uses, to conserve and protect existing agricultural uses, and to provide space for and encourage such uses in places where more intensive development is not desirable or necessary for the general welfare."¹

Mining activities may be permitted within any County zoning designation, including lands designated as Agricultural, subject to the provisions of the County Surface Mining and Reclamation Ordinance. As the local land use authority, Alameda County authorizes mining activities on unincorporated lands through the issuance of surface mining permits and approval of reclamation plans pursuant to Alameda County Code of Ordinances, Title 6: Health and Safety, Section 6.80: Surface Mining and Reclamation. The provisions of the County's Surface Mining and Reclamation Ordinance apply to all lands within the County, both public and private. As provided by this ordinance, surface mining operations are permitted only upon County approval of a surface mining permit (or existence of vested rights), reclamation plan, and financial assurances for reclamation. Thus, the existing quarry and the proposed project are consistent with the County Zoning Ordinance.

4.7.3.5 County Surface Mining and Reclamation Ordinance

As the local land use authority, Alameda County authorizes surface mining activities on unincorporated lands through the issuance of surface mining permits pursuant to Alameda County Code of Ordinances, Title 6: Health and Safety, Section 6.80: Surface Mining and Reclamation. The project site currently operates under such a County surface mining permit (SMP-23), which was approved by Alameda County

¹ Alameda County Code of Ordinances, Title 17: Zoning, Section 17.06.010.

in 1987. This permit regulates the mining of sand and gravel within 966 acres of the project site to a depth of up to 150 feet and authorizes reclamation. Quarrying operations are vested.

The provisions of the County's Surface Mining and Reclamation Ordinance (Section 6.80 et. seq. of the County Ordinance Code) are summarized below and apply to all lands within the County, both public and private. As provided by this ordinance, surface mining operations are permitted only upon County approval of a surface mining permit (or determination of a vested right), reclamation plan, and financial assurances for reclamation.

Agricultural Use

6.80.060 (A): If a mining operation is being conducted in an A District, all other uses permitted pursuant to the district regulations may be conducted on the site provided such uses do not interfere with meeting any of the requirements of this chapter, and provided any such uses are not prohibited by conditions of the surface mining permit or approved reclamation plan.

Accessory Uses

6.80.060 (C): Sorting, crushing, reducing, refining, mixing, packaging or other processing of minerals, or the operation of an asphalt or concrete batch plant; or any operation that uses or supplies materials produced, imported or used by mining and/or processing operations or an asphalt or concrete batch plant, may be permitted in conjunction with mining operations if conducted within an A, M-1 or M-2 district, upon securing of a surface mining permit, when such uses are found by the planning commission to be an accessory use to the mining operations and when the planning commission finds that the effects of such processing, use, storage or transport of materials, including noise, odor, smoke, dust, bright lights, vibration, traffic, and production of waste, can be controlled so as to be compatible with adjacent uses and so as not to degrade natural resources.

Periodic Review

6.80.190:

Surface mining permits and approved reclamation plans shall be reviewed by the planning commission, in accordance with the schedule adopted at the time of approval according to Section 6.80.180(C) of this chapter, to consider new or changed circumstanced [sic] within the general area of the mining operations that should be accommodated by the permit or plan. The review shall include a public hearing as specified by Section 6.80.150.

At the conclusion of the public hearing, the planning commission may modify the permit or reclamation plan to conform to with this chapter [sic], and such modified permit or plan shall be binding upon the operation. Any fees for periodic reviews shall be collected as specified by Section 6.80.100.

Temporary Slopes

6.80.210 (A)(2): Temporary slopes steeper than the finished slopes, in areas where finished slopes are to occur, shall be constructed and maintained in accordance with the recommendations, as approved by the planning director, or a soil engineer or a civil engineer registered in the state or an engineering geologist registered and certified in the state. Temporary slopes shall not be created or maintained in a

manner that will interfere with the construction of finished slopes conforming to subsection (A)(1) of this section, and the soil engineer or engineering geologist shall make specific recommendations for the conversion of such temporary slopes to finished slopes.

Benches

6.80.210 (B): Benches shall be provided where necessary to control drainage on slopes or to provide for access or public safety.

Parcel Setbacks

6.80.210 (C)(1): Unless the Planning Commission approves a lesser setback pursuant to Section 6.80.210(C)(3), surface mining excavations shall not be conducted closer than twenty-five (25) feet of the common property line of any parcel, except where the adjacent property is being mined in the same manner with respect to such line; and fifty (50) feet of the right-of-way or future width line of any street.

Watercourse Setbacks

- **6.80.210 (C)(2):** Mining excavations shall be set back from water courses, flood control channels, reservoirs and water conservation facilities a distance as may be determined by the Planning Commission on recommendation of Alameda County Flood Control and Water Conservation District (including the Zone 7 Water Agency) or Community Development Agency to be sufficient to protect existing or planned facilities.
- **6.80.210 (C)(3):** The Planning Commission, after receipt of a complete application and with public notice and hearing in accordance with the provisions of Article II of this Chapter, if required by the public need, may authorize setbacks less than those provided in Section 6.80.210(C)(1)(a) and (b) if the Planning Commission makes the following findings, supported by the conclusions of a geotechnical study prepared by a qualified professional licensed by the State of California:
 - The lesser setback is required by the public need, and is not related to the demand for additional mineral resource;
 - A lesser setback and any associated resultant slope are acceptable based on the specific characteristics of the location and are supported by the conclusions of the geotechnical study prepared by a qualified professional licensed by the State of California;
 - A lesser setback and any associated resultant slope will not present a risk to the adjacent property or any users thereof;
 - A lesser setback and any associated resultant slope will permit adequate access for the owner of the mined land to the permitted area both during mining and following reclamation to the end use;
 - A lesser setback and any associated resultant slope will safely accommodate any existing or planned utilities or facilities, including, but not limited to, water diversion and conveyance structures; maintenance roads, safety berms and guardrails; drainage features; and screening landscapes, where required; and

• A lesser setback will be in the interest of, and not compromise, the public health, safety and welfare.

Use of Explosives

6.80.210 (F): No explosives shall be used except as authorized by the surface mining permit. When authorized, the specific times of use shall be approved by the director of public works.

Grading Controls

6.80.210 (G)(1): Grades in areas being mined shall be maintained so as to avoid accumulations of water that could serve as breeding areas for mosquitoes.

Groundwater Flows

6.80.210 (G)(3): Excavations that may penetrate near or into usable water bearing strata shall not reduce the transmissivity or area through which water may flow (unless approved equivalent transmissivity or area has been provided for elsewhere), nor subject such groundwater basin or sub-basin to pollution or contamination.

Water Storage

6.80.210 (G)(4): Nothing in this chapter shall be construed to prevent the use of mined lands for the conservation or storage of water, or for the control of flood or storm waters, by a public agency duly authorized to engage in such work, provided that any such use will not conflict with nor prevent reclamation required under an approved Reclamation Plan, and provided such use is approved by the County Flood Control and Water Conservation District and/or Public Works Agency.

Water Discharge Standards

6.80.210 (G)(5): Any waters discharged from the site to adjacent lands, streams, or bodies of water or to any groundwater body shall meet all applicable water quality standards of the Regional Water Quality Control Board and any other agency with authority over such discharges. Records of any water quality monitoring conducted in conjunction with the requirements of such agency or agencies shall be made available to the Planning Director and the Director of Public Works on request. Discharges of water to designated on-site settling ponds or de-silting basins shall not be deemed to be in violation of this chapter solely on the basis of sediment content.

Erosion, Sedimentation, and Pollutant Discharge

6.80.210 (H): During the period mining operations are being conducted, and prior to final reclamation of mined lands, the operator shall take measures to prevent erosion of adjacent lands from water discharged from the site of mining operations and the off-site discharge of sediment. Such measures may include the construction of properly designed retarding basins, settling ponds and other water treatment facilities, ditches, diking and revegetation of slopes. No discharge of sediment to off-site bodies of water shall be permitted that will result in higher concentrations of silt than existed in off-site waters prior to mining operations. Stockpiles of overburden and minerals shall be managed to

minimize water and wind erosion. The removal of vegetation and overburden in advance of surface mining shall be kept to a minimum.

Control of Noise, Dust, and Bright Lights

6.80.210 (I): All activities of mining and processing minerals shall be conducted in a manner that noise, dust and bright lights do not exceed levels compatible with the uses of adjacent lands as determined by the planning commission in the issuance of the surface mining permit or as a result of its periodic review of any permit.

Final Slope Gradient

6.80.240 (E): Finished slopes shall conform to the requirements of Section 6.80.240E. These requirements include; a) final slopes shall be of such gradient as necessary to provide for slope stability, maintenance of required vegetation, public safety, and the control of drainage, as may be determined by engineering analysis of soils and geologic conditions and by taking into account probable future uses of the site. Final slopes shall not be steeper than two feet horizontal to one foot vertical (2:1) unless the applicant can demonstrate to the satisfaction of the planning commission that any such steeper slope will not be incompatible with the alternate future uses approved for the site; be hazardous to persons that may utilize the site under the alternate future uses approved for the site; and reduce the effectiveness of revegetation and erosion control measures where such are necessary. In no event shall the steepness of slopes exceed the critical gradient as determined by an engineering analysis of the slope stability.

4.7.3.6 Livermore-Amador Valley Quarry Area Reclamation Specific Plan

The project site is subject to the 1981 LAVQAR Specific Plan (Alameda County 1981). The LAVQAR Specific Plan was adopted as a master reclamation plan that would shape mined pit areas into a "Chain of Lakes" and return the remaining mined lands to productive uses after the removal of sand and gravel reserves (see Figure 2-5, "Anticipated Zone 7 Land Dedications").

The general objectives of the LAVQAR Specific Plan are:

- 1. To enable the competing resources of land, water, and sand and gravel to be utilized with a minimum of conflict and disruption;
- 2. To plan for reclamation, productive reuse, and rehabilitation of the Quarry Area;
- 3. To mitigate adverse effects of mining;
- 4. To satisfy requirements of the State Surface Mining and Reclamation Act of 1975 and the Alameda County Surface Mining Ordinance;
- 5. To provide a coordinated plan for arrangement of mining-produced land and water masses into a coherent, flexible form, reflecting interrelatedness of geology, hydrology, land use, and other factors throughout the Quarry Area.

The key concept of the project is the shaping of pit areas, which will eventually contain water, into a "chain of lakes" during the course of mining over the 50- to 60-year period that sand and gravel reserves are expected to last in the quarry area. The Chain of Lakes is intended to provide a surface water storage and conveyance system to replace a portion of the preexisting subsurface water storage and conveyance

system feeding the groundwater basin. Connecting conduits between the lakes and structures necessary to capture and carry local runoff waters will be provided by the operators at no cost to the public through the Alameda County Flood Control and Water Conservation District, Zone 7. At the conclusion of mining, water from Arroyo del Valle will be capable of being diverted into the Chain of Lakes, and a bypass channel for that watercourse will also be provided to maintain downstream flows necessary to Zone 7 and Alameda County Water District.

Approved reclamation plans within the LAVQAR Specific Plan boundary provide each water body in the "Chain of Lakes" with an intended end use for water management. The LAVQAR Specific Plan requires the operators to dedicate to the Alameda County Flood Control and Zone 7, at no cost, all excavated Chain of Lakes basins within the LAVQAR Specific Plan, all exterior perimeter areas, interior perimeter areas sufficient to provide a minimum 25-foot-wide access, and appurtenant levees, conduits, and diversion structures. Areas not intended for water management in the LAVQAR Specific Plan area are designated, within approved reclamation plans, for agriculture, recreation, and open space land uses, consistent with the ECAP.

The LAVQAR Specific Plan developed staging for the Quarry Area to provide reference points as reclamation progressed to permit planning for future land and water capabilities and to ensure the feasibility of carrying out the LAVQAR Specific Plan. The LAVQAR Specific Plan assumed that sales would average 6,500,000 tons annually, gradually increasing to 8,500,000 tons over a 20-year period and maintaining that rate until depletion in about the year 2030. This estimate formed the basis for the interim staging plan years of 1995 and 2010.

Although all objectives and policies of the LAVQAR Specific Plan were analyzed, only those policies relevant to the proposed project are discussed below:

- To mitigate alteration/impedance of groundwater movement and storage due to mining operations.
- To mitigate exposure of groundwater to evaporative losses due to mining operations.
- To mitigate exposure of groundwater to increased risk of quality degradation due to surface exposure as a result of mining operations.
- To provide uninterrupted and undiminished satisfactory water quantity and quality in the upper aquifer of the mined area for beneficial uses.
- To provide a surface water storage and transmission system to replace a portion of the existing subsurface system to mitigate mining impacts and enhance the ability to utilize, develop, and manage the water resources of the Livermore-Amador Valley for public benefit.
- To provide land areas capable of productive use and with minimum residual hazards.

Policies

Policy 11:	The operators shall dedicate to Zone 7, upon terms mutually acceptable to the operators and Zone 7, all water areas and necessary supporting land areas to operate the chain of lakes in the public interest. The right of the public to
	manage and use water resources of the chain of lakes and area groundwater undiminished with respect to quantity and quality shall be expressly asserted and any other uses permitted in said areas shall be compatible with said right.

Policy 13: Land areas may appropriately be used for mining, mining-related industry in conjunction with ongoing mining, agriculture, open space, and watershed uses.

New or expanded uses in the Quarry Area shall be allowed only upon securing Zoning Approval to ensure compatibility with the LAVQAR and reclamation of the area. Reclaimed land should be capable of supporting beneficial uses. No uses shall be permitted which may unacceptably pollute the lakes.

4.7.3.7 East Alameda County Conservation Strategy

The East Alameda County Conservation Strategy (EACCS) (ICF International 2010) is a joint effort among several federal, state, and local agencies intended to provide an effective framework to protect, enhance, and restore natural resources in eastern Alameda County while improving and streamlining the environmental permitting process for impacts resulting from infrastructure and development projects. The EACCS is intended to focus on impacts on biological resources such as endangered and other special-status species as well as sensitive habitat types (e.g., wetlands, riparian corridors, rare upland communities). The EACCS will enable local projects to comply with state and federal regulatory requirements within a framework of comprehensive conservation goals and objectives, and be implemented using consistent and standardized mitigation requirements. By implementing the EACCS, local agencies can more easily address the legal requirements relevant to these species. The EACCS will not result in permits, but rather will serve as guidance for project-level permits, and the federal and state Resource Agencies are participating in the development of the EACCS with the intent that it becomes the blueprint for all mitigation and conservation in the study area.

The EACCS study area encompasses 271,485 acres, or approximately 52 percent of Alameda County, including the cities of Dublin, Livermore, and Pleasanton. The western boundary of the study area runs along the Alameda Creek watershed and the northern, southern and eastern boundaries follow the Alameda County line with its adjacent counties. The EACCS study area has been divided into 18 discrete units, or conservation zones to identify locations for conservation actions in areas with the same relative ecological function as those areas where impacts occur. The project site is located in Conservation Zone 15. The overall conservation priorities for Conservation Zone 15 are:

- protection and restoration along Alameda Creek to conserve sycamore alluvial woodland and improve habitat value for central California coast steelhead and Alameda whipsnake
- protection of critical habitat and recovery unit habitat for Alameda whipsnake
- protection of potential breeding and movement habitat for foothill yellow-legged frog
- protection of serpentine bunchgrass grassland and northern coastal scrub/Diablan sage scrub land cover
- protection and enhancement opportunities for ponds to increase potential breeding habitat for California red-legged frog
- complete surveys in annual grassland habitat for callippe silverspot butterfly larval host /food plants and map occurrences of plant populations, and
- protection of annual grassland in area between SR 84 and San Antonio Reservoir to support potential habitat for callippe silverspot butterfly, western burrowing owl and American badger.

4.7.3.8 Alameda County SMP-23

On April 6, 1987, via County Resolution 87-18, CEMEX's predecessors obtained SMP-23, a reclamation plan for the Project site on the areas of CEMEX's existing permitted rights under the Q-1 and Q-76 permits. SMP-23 was not a conditional use permit for mining; rather, it was the reclamation plan for the site as required by SMARA and the ACSMO. The County prepared and approved a Negative Declaration

for the SMP-23 Reclamation Plan, on the basis that SMP-23 was consistent with the LAVQAR Specific Plan. The SMP-23 Reclamation Plan has been modified several times since its initial approval. See Figure 2-2, "Approved 1987 Reclamation Plan," for a map of approved site boundaries.

The proposed project is being proposed in response to Condition 7 of SMP-23, as adopted under Planning Commission Resolution 12-20 on December 17, 2012. Condition 7 requires the following:

- a) The need to reflect the current boundaries of SMP-23 as referenced by lands both presently owned by CEMEX and previously authorized for mining operations and reclamation activities.
- b) As to Lake A, the need for long-term mining and reclamation plans to address geologic hazards associated with and remedied by the Lakeside Circle Corrective Action Plan.
- c) As to Lake B, the need for long-term mining and reclamation plans to address a depth and configuration which are inconsistent with the approved reclamation plans.
- d) The need for SMP-23 to include provisions for the management of water flows, during both the pre- and post-reclamation conditions, between the groundwater basin, the Arroyo del Valle, and Lakes A, B and C of the Specific Plan for Livermore-Amador Valley Quarry Area Reclamation ("Specific Plan").
- e) The need for revised plans for all water conveyance facilities that: (i) reflect existing topographic conditions and desired future topographic conditions of CEMEX; (ii) fulfill the requirements and intent of the water management objectives of the Specific Plan; and (iii) may be constructed in conformance with all laws and regulations.
- f) The need to coordinate the planning, design, and construction of all water conveyance structures between Lakes A, B, and C with adjacent mine operator, property owners and the Zone 7 Water Agency.
- g) The geographic locations of approved end uses over the entire site once reclaimed.
- h) Relative to public roadways, the need to specify, in plan and text format, authorized vehicular access points and haul routes.
- i) The need to establish an estimated schedule which correlates the timing of completion for reclamation components to specific stages in the mining plan.
- j) The need to establish reclamation plans that accommodate a trail as depicted in the Specific Plan, along the entire southern boundary of SMP-23 in the vicinity of Vineyard Avenue.

4.7.3.9 Project Consistency with Local Planning Documents

See Table 4.7-1, "Project Consistency with Local Planning Documents," below for an analysis of relevant policies and their consistency with the proposed project.

Goals/Objectives/Policies	Consistency Analysis	
ALAMEDA COUNTY CONSERVATION ELEMENT		
Minerals, Extractive Resources		
Goal: To insure extraction of minerals and reclamation of land to the fullest extent possible consistent with sound management policies.	Consistent: The proposed project provides for the ultimate reclamation of the entire project site, including post-reclamation management. No new mining operations are proposed, as the site is already permitted to be mined to the fullest extent possible.	

TABLE 4.7-1 PROJECT CONSISTENCY WITH LOCAL PLANNING DOCUMENTS

Goals/Objectives/Policies	Consistency Analysis	
Agriculture and Soils Resources Management:		
Agriculture and Soils Resources Management: Goal: To protect agriculture and agricultural lands.	Consistent: The General Plan land use designation for the project site is principally Water Management and Large Parcel Agriculture. The zoning designation is principally Agriculture, with a small portion of the site zoned as Planned Development and Unclassified. Mining activities may be permitted within any County zoning designation, including lands designated as Agricultural, subject to the provisions of the County Surface Mining and Reclamation Ordinance. As provided by this ordinance, surface mining operations are permitted only upon County approval of a surface mining permit (or existence of vested rights), reclamation. Thus, the existing quarry and the proposed project are consistent with the goal	
	to protect agriculture and agricultural lands.	
ALAMEDA COUNTY COMMUNITY CLIMATE ACTION PLAN E	LEMENT	
Energy Performance in New Construction		
Policy E-10: Require new construction to use building materials containing recycled content.	Consistent. With implementation of Mitigation Measure 4.5-1f (see Section 4.5, "Greenhouse Gas Emissions"), the proposed project would include recycling or reusing of construction waste or demolition materials, to the extent feasible.	
Water Conservation: Building and Landscape Efficiency	·	
Policy WT-2: Require new landscape projects to reduce outdoor potable water use by 40 percent.	Consistent. The proposed landscape plan at Lake and the proposed revegetation of the ADV realignment A (see Appendix B) is designed to improve water-efficiency compared to existing conditions.	
EAST COUNTY AREA PLAN		
Allowable Uses		
Designation: Subject to the provisions of Measure D, the Water Management land use designation provides for sand and gravel quarries, reclaimed quarry lakes, watershed lands, arroyos and similar and compatible uses.	Consistent: The existing use of the project site is a sand and gravel quarry with similar and compatible land uses. The project provides for the ultimate reclamation of Lakes A and B for water management.	
Accessory Uses		
Designation: Sand and gravel quarries allow a range of uses including sand and gravel processing, associated manufacturing and recycling uses requiring proximity to quarries, reclamation pits, and public use areas.	Consistent: The project site is primarily a sand and gravel quarry for processing of raw aggregate materials and includes accessory and associated manufacturing uses that benefit from (though do not necessarily require) proximity to the quarry. As a reclamation plan for the quarry, the project would not introduce new operational accessory uses.	
Parcel Size and Building Intensity		
Designation: Water Management Lands allows for a minimum parcel size of 100 acres and a maximum building intensity of .01 FAR	Consistent: The project site is approximately 920 acres under currently active quarry operations (pursuant to SMP-23). At 920-acres, a maximum floor-area ratio	

Goals/Objectives/Policies	Consistency Analysis
	(FAR) of 0.01 would permit a total of approximately 400,572 square feet of building space on-site. ² The County Code of Ordinances (Section 17.04.010) defines the term "building" to mean "any structure erected for the support, shelter or enclosure of persons, animals or property." The proposed project does not include any new structures which would qualify as buildings. Existing buildings are under the maximum square footage of building space on the
	project site.
Residential Use	
Designation: One single family home per parcel is allowed, provided that all other County standards are met for adequate road access, sewer and water facilities, building location, visual protection, and public services. Residential and residential accessory buildings shall have a maximum floor space of 12,000 square feet. Development Envelope	Consistent: The proposed project does not propose residential use at the site.
Designation: Apart from infrastructure (under Policy	Consistent: As indicated above, the proposed project
13), all buildings shall be located on a contiguous development envelope not to exceed 2 acres, except they may be located outside the envelope if necessary for security reasons or, if structures for agricultural use, necessary for agricultural use.	does not include new structures that qualify as buildings.
Biological Resources	
Policy 122: The County shall encourage that wetland mitigation be consolidated in areas that are relatively large and adjacent to or otherwise connected to open space. To the extent possible areas should be included in, adjacent to, or linked through open space corridors with lands designated as "Resource Management" that are managed specifically for the preservation and enhancement of biological resources.	Consistent. Wetland mitigation required for approval of the proposed project encompasses the entirety of the project site. The mitigation features a wetland compensation ratio of 1:1 for ground disturbing activity associated with the construction of the Lake A diversion structure, realigned Arroyo del Valle, or in other areas identified as containing wetlands in the project aquatic resource delineation report. No lands on or adjacent to the project site are designated "Resource Management."
Policy 123: Where site-specific impacts on biological resources resulting from a proposed land use outside the Urban Growth Boundary are identified, the County shall encourage that mitigation is complementary to the goals and objectives of the ECAP. To that end, the County shall recommend that mitigation efforts occur in areas designated as "Resource Management" or on lands adjacent to or otherwise contiguous with these lands in order to establish a continuous open space system in East County and to provide for long term protection of biological resources. Policy 125: The County shall encourage	Consistent. The proposed project is located outside of the Urban Growth Boundary. Numerous mitigation measures to protect biological resources are required for approval of the proposed project. These mitigation measures, described in Section 4.3, "Biological Resources," are complementary with the goals and objectives of the ECAP. Consistent. The proposed project would have a less
preservation of areas known to support special status	than significant impact on special status species with

² 920 acres x 43,560 sq.f.t/acre x 0.01 = approx. 400,572 sq. ft.

Goals/Objectives/Policies	Consistency Analysis
species.	mitigation incorporated. The project would also improve existing special status species habitat conditions compared to existing conditions. See Section 4.3, "Biological Resources."
Policy 126: The County shall encourage no net loss of riparian and seasonal wetlands.	Consistent. The proposed project would have a less than significant impact on riparian and seasonal. The project would also improve existing wetlands compared to existing conditions with the realignment and revegetation of the ADV. See Section 4.3, "Biological Resources."
Policy 127: The County shall encourage the preservation of East County's oak woodland plant communities.	Consistent. The proposed project is not expected to have an adverse impact on oak woodland plant communities. Therefore, the proposed project is consistent with this policy.
 Policy 128: The County shall ensure that, where quarries will be reclaimed as open space, reclamation plans are designed to restore biological value to sites through appropriate revegetation, contouring of lakes to simulate natural bodies of water, and protection or in-kind replacement of significant trees. Policy 129: The County shall protect existing riparian woodland habitat present along the Arroyo Mocho, Arroyo Del Valle, Arroyo Las Positas, Arroyo de la Laguna; and Alamo, Tassajara, and Alameda Creeks. Exceptions to these requirements shall apply for those portions of the Arroyo del Valle to be excavated for water transfer Lakes A and B under the Specific Plan for the Livermore-Amador Valley Quarry Area Reclamation, which shall instead be subject to riparian habitat restoration as specified by Policies 128 and 164; and for any approved quarry operations in Regionally Significant Construction Aggregate Resource Sector C (Arroyo Mocho) or any other streambeds, which shall also be subject to habitat restoration under Policies 128 and 164, and according to applicable State Public Resources Code requirements, to the extent that proposed reclamation 	Consistent. The proposed project includes reclaiming an existing quarry operation to open space and plans that restore biological value through appropriate revegetation, contouring of lakes to simulate natural bodies of water, and protection or in-kind replacement of significant trees. Consistent. Policies 128 and 164 apply to the proposed project. Therefore, the propose project meets the exception criteria. See also Impact 4.3-5 in Section 4.3, "Biological Resources."
specifies riparian habitat as the end use. <i>Limitations on New Quarries</i>	
Policy 155: Except to the extent required by State law, no new quarry or other open-pit mine may be approved by the County outside the Urban Growth Boundary, unless approved by the voters of Alameda County. Excavation not adjacent to an existing quarry site and on the same or an adjoining parcel shall be regarded as a new quarry. A quarry that has received all necessary discretionary County and other approvals and permits prior to the effective date of the ordinance — but has not yet exercised those approvals and permits — is to be considered an "existing" rather than a "new" quarry.	Consistent: The project site is located outside of the Urban Growth Boundary established under Measure D, but is not a new quarry. All sand and gravel excavations occurring at the project site occur immediately adjacent to the existing quarry (i.e., immediately adjacent to the existing SMP-23 operations). The currently effective SMP-23 was issued in 1987, well before the effective provisions of Measure D, and thus the SMP-23 quarry is an "existing" quarry. Ongoing quarrying operations at the project site are not a "new" quarry, as they occur adjacent to, and on the same and an adjoining parcel. The proposed project does not expand or address

Goals/Objectives/Policies	Consistency Analysis
	ongoing quarrying operations at the site, but only the
	final reclamation of this existing quarry.
Development on State-Designated Regionally Significant Col	~ * · ·
Policy 157: The County shall review proposals for	Consistent: The project site is within a state-
development within or adjacent to state-designated	designated Regionally Significant Construction
Regionally Significant Construction Aggregate Resource	Aggregate Resource Sector. Rather than precluding
Sectors. If the development is proposed on	continued access to that aggregate resource, the
unincorporated land, the County shall consider the	project would provide for reclamation of the site
effects of such development on the future or continued	following completion of the extraction of that
extraction of the resource and shall approve such	aggregate resource.
development only if conditions are applied to minimize	
the potential of the new use to preclude continued or	
future access to the resource. If the development is	
proposed within a city, the County shall encourage the	
city to do the same.	
Minimizing Conflicts	
Policy 158: The County shall require that, where conflicts	Consistent: The proposed project is a reclamation
between a new use and existing quarry are anticipated,	plan for the eventual closure of the existing quarry,
notifying future residents and mitigating the conflict	and thus would not conflict with the existing quarry
shall be the responsibility of the new use.	operations. The project would not introduce any new
	residents to the area, and would not create conflicts
	with existing uses.
Protection of Nearby Uses	
Policy 159: The County shall impose conditions on	Consistent: This SEIR provides an analysis of the
approval of new Surface Mining Permits and	project's potential traffic, noise, dust, health and
Reclamation Plans to protect nearby uses from potential	safety, visual, and other impacts on nearby uses and
traffic, noise, dust, health and safety, visual and other	recommends mitigation measures (where necessary)
impacts generated by sand and gravel quarries.	to avoid or reduce such impacts to less-than-
Conversely, the County shall not approve land uses	significant levels where feasible.
adjacent to any existing quarry or Regionally Significant	
Construction Aggregate Resource Sector if the	
development of the new uses would result in exposure of	
residential or other sensitive uses to possible adverse	
impacts of the quarry, unless the new uses can effectively	
mitigate the significant adverse impacts and notify	
potential homeowners of the risk, as required by Policy	
158. Redemetion for Water Management	
Reclamation for Water Management	Consistants The project site is legated in an arrest
Policy 160: The County shall ensure that where quarry	Consistent: The project site is located in an area
operations are located in areas designated as Water	designated as Water Management, and extraction of aggregate resources is expected to continue as
Management, extraction of the aggregate resource shall be allowed in the short-term. Reclamation of the land for	aggregate resources is expected to continue as previously approved, except in "Lake A." The
water management and other compatible uses shall occur	proposed reclamation plan would allow for use of the
subject to conditions of Surface Mining Permits and	completed quarry pit for Zone 7 water management.
Reclamation Plans and consistent with the Specific Plan	The portion of the site known as "Lake B," is a
for Livermore-Amador Valley Quarry Area Reclamation	recently mined area with a current pit depth of
or the comparable plan prepared for the Sunol	approximately 100 to 130 feet. At completion of
Valley/San Francisco Water Department watershed lands	quarrying, the expanded surface area of this lake will
pursuant to Policy 161 and Program 71, whichever is	have been mined to a depth of 150 to 250 feet below
applicable.	ground surface with resulting side slope of 2:1.
approable.	ground surface with resulting side slope of 2.1.

Goals/Objectives/Policies	Consistency Analysis
Manufacturing Uses	
Policy 162: The County shall allow manufacturing uses which make extensive use of harvested aggregate to locate near sand and gravel quarries.	Consistent: Within the North Reclamation Area is CEMEX's currently operating materials processing facilities and stockpile areas. Uses include processing activities, stockpiles, administrative offices, a truck scale, and other facilities related to mining and processing. The proposed project does not propose addition of any on-site manufacturing uses.
Concurrent Mining and Agricultural Uses	
Policy 163: The County shall encourage concurrent mining and agricultural uses on sites where aggregate deposits are overlain by agriculturally valuable soils to minimize the premature disturbance of such soils. To this end, the County shall consider phasing of quarry operations in the approval of Surface Mining Permits and Reclamation Plans.	Consistent: As indicated in the initial study prepared with the notice of preparation for this SEIR, the project site is not overlain by agriculturally valuable soils (neither prime, statewide significant or locally significant farm soils). Based on the current mining plan and existing conditions at the site, concurrent mining and agricultural uses on the site would not be compatible.
Revegetation	
Policy 164: The County shall ensure that where quarry operations will be reclaimed as open space, reclamation plans are designed to restore biological value to sites through appropriate revegetation, contouring of lakes to simulate natural bodies of water, and protection or in-kind replacement of significant trees.	Consistent: The proposed project provides for the ultimate use of the completed quarry pit for Zone 7's water management, and it includes planting of native plants to minimize visual impacts, and re-vegetation of stream banks in a manner that would restore habitat value.
Water Conservation	
Policy 165: The County shall require that water- conserving practices are incorporated into mining and reclamation operations.	Consistent: One of the major objectives of this project is to implement the LAVQAR Specific Plan and associated Zone 7 agreement by reclaiming the quarry pits (Lakes A and B) for use as basins for water storage, conveyance, and recharge facilities pursuant to and consistent with the LAVQAR Specific Plan. Implementation of the Chain of Lakes concept will allow Zone 7 to conserve water by enhancing and improving the reliability and sustainability of the groundwater supplies through groundwater recharge in the valley.
Program 69: The County shall amend the Surface Mining	Consistent: The Surface Mining Ordinance requires
Ordinance to require permit applicants for any Surface Mining Permit and Reclamation Plan to provide appropriate buffering of quarry operations from adjacent land uses, such as setbacks, landscaping, and use restrictions.	setbacks from adjacent uses of 25 feet or 50 feet from a right-of-way, the existing and expected future quarry operations do maintain setbacks from Vineyard Road (100 feet), from Stanley Blvd. (46 feet), from Shadow Cliffs Park (100 feet), and from the adjacent residential subdivisions (25 feet). These setbacks are consistent with the requirements of the currently effective SMP-23 issued by the County in 1987 and will be maintained as part of the reclamation plan amendment.

Goals/Objectives/Policies	Consistency Analysis
Consistency with SMARA	
Program 70: The County shall amend the Surface Mining Ordinance to include reclamation guidelines consistent with the Surface Mining and Reclamation Act (SMARA).	Consistent: The proposed project is a proposed update to the currently effective reclamation plan for SMP-23, and it specifically incorporates current reclamation standards consistent with SMARA reclamation standards pursuant to CCR Section 3700, et seq. The California Division of Mine Reclamation has review authority and reviewed the proposed project to determine consistency on May 30, 2019 with no comments (DMR 2019).
Recreational Opportunities	
Policy 101: The County shall encourage public water management agencies to explore recreational opportunities on watershed lands, particularly reclaimed quarries, where recreational use would not conflict with watershed protection objectives.	Consistent: The proposed project includes a proposal to build a trail along the southern border of Lake B, to be maintained by the East Bay Regional Park District. Additionally, the project proposes to create a total of 137 acres of open space (including a 25-foot setback) at the Lake A site. Additionally, the project proposes additional open space surrounding the approximately 5,800 linear foot reach of the to-be realigned ADV around Lake B (see Figure 2-4, "Realigned Arroyo del Valle Concept" in Chapter 2, "Project Description," of this SEIR.).
	The North Reclamation Area is located in the northwestern portion of the site, south of Stanley Boulevard and east of the Shadow Cliffs Regional Recreation Area. Mining is underway in the Lake J area, and the processing facilities that had been previously located here were relocated to areas south of the Lake J mining area. Pursuant to the proposed project, when the North Reclamation Area is reclaimed, it will not be part of the Chain of Lakes and will not be granted to Zone 7, with the exception of Pond A, Pond C, and Pond D, which will be encompassed within the ultimate footprints of Lake B, future Lake C, and future Lake D, respectively, and dedicated to Zone 7. Instead, the project proposes that the North Reclamation Area, except for Pond A, Pond C, and Pond D, be reclaimed by CEMEX or its successors for open space and/or agricultural purposes.
COUNTY SURFACE MINING AND RECLAMATION ORDINANC	E
Agricultural Use	Consistants As this provision indicates surface
6.80.060(A): If a mining operation is being conducted in an A District, all other uses permitted pursuant to the district regulations may be conducted on the site provided such uses do not interfere with meeting any of the requirements of this chapter, and provided any such uses are not prohibited by conditions of the surface mining permit or approved reclamation plan.	Consistent: As this provision indicates, surface mining activities are permitted with an A: Agriculture zoning district upon approval of a surface mining permit. The project site is located within an A: Agriculture zoning district. The proposed end use for the North Reclamation Area includes agriculture.

Goals/Objectives/Policies	Consistency Analysis
Accessory Uses	
6.80.060(C): Sorting, crushing, reducing, refining, mixing, packaging or other processing of minerals, or the operation of an asphalt or concrete batch plant; or any operation that uses or supplies materials produced, imported or used by mining and/or processing operations or an asphalt or concrete batch plant, may be permitted in conjunction with mining operations if conducted within an A, M-1 or M-2 district, upon securing of a surface mining permit, when such uses are found by the planning commission to be an accessory use to the mining operations and when the planning commission finds that the effects of such processing, use, storage or transport of materials, including noise, odor, smoke, dust, bright lights, vibration, traffic, and production of waste, can be controlled so as to be compatible with adjacent uses and so as not to degrade natural resources.	Consistent: Sorting, crushing, and other processing of aggregate is expected to continue pursuant to the previously approved surface mining permit. Changes or expansion of these activities are not proposed with this reclamation plan amendment.
Periodic Review	
 6.80.190: Surface mining permits and approved reclamation plans shall be reviewed by the planning commission, in accordance with the schedule adopted at the time of approval according to Section 6.80.180(C) of this chapter, to consider new or changed circumstanced [sic] within the general area of the mining operations that should be accommodated by the permit or plan. The review shall include a public hearing as specified by Section 6.80.150 of this chapter. At the conclusion of the public hearing, the planning commission may modify the permit or reclamation plan to conform to with [sic] this chapter, and such modified permit or plan shall be binding upon the operation. Any fees for periodic reviews shall be collected as specified by Section 6.80.100. 	Consistent. Compliance with this requirement would be required as part of Conditions of Approval for the proposed project.
Final Slope Design	
6.80.210(A)(1): Finished slopes shall conform to the requirements of Section 6.80.240E. These requirements include; a) final slopes shall be of such gradient as necessary to provide for slope stability, maintenance of required vegetation, public safety, and the control of drainage, as may be determined by engineering analysis of soils and geologic conditions and by taking into account probable future uses of the site. Final slopes shall not be steeper than two feet horizontal to one foot vertical (2:1) unless the applicant can demonstrate to the satisfaction of the planning commission that any such steeper slope will not be incompatible with the alternate future uses approved for the site; be hazardous to persons that may utilize the site under the alternate future uses approved for the site; and reduce the effectiveness of revegetation and erosion control	Consistent: Pursuant to the project, the final slopes of all quarry operations are proposed to be no steeper than 2 feet horizontal to 1 foot vertical (2:1) throughout the project site, consistent with the ordinance requirements. As indicated in Section 4.4, "Geology and Soils," proposed slope designs provide for appropriate slope stability, public safety, and drainage control. Also, as indicated in Section 4.4, "Geology and Soils," and Section 4.6, "Hydrology and Water Quality," the proposed project would be required to implement an erosion control plan for the ADV realignment (see Mitigation Measure 4.4-1 and Appendix B-4, "Improvement Plans for Arroyo del Valle Realignment"), berm and embankment grading (see Mitigation Measure 4.4-2), fill slopes at an inclination of 2H:1V or flatter (see Mitigation Measure

Goals/Objectives/Policies	Consistency Analysis
measures where such are necessary. In no event shall the steepness of slopes exceed the critical gradient as determined by an engineering analysis of the slope stability.	4.4-3), and cut slope requirements for Lake B (see Mitigation Measure 4.4-4) to provide for appropriate slope stability, public safety, and drainage control.
Temporary Slopes	
6.80.210(B)(2): Temporary slopes steeper than the finished slopes, in areas where finished slopes are to occur, shall be constructed and maintained in accordance with the recommendations, as approved by the planning director, or a soil engineer or a civil engineer registered in the state or an engineering geologist registered and certified in the state. Temporary slopes shall not be created or maintained in a manner that will interfere with the construction of finished slopes conforming to subsection (A)(1) of this section, and the soil engineer or engineering geologist shall make specific recommendations for the conversion of such temporary slopes to finished slopes.	Consistent: The extraction of raw aggregate material for the vested mining operations is expected to continue using conventional mining equipment. The sand and gravel material is usually mined by developing a working face through excavation or pushing the material down-slope into a "dozer trap," and then transporting the material to the processing plant site for processing. For excavations below groundwater levels, dewatering is customarily conducted at the site to achieve planned mining depths. Where dewatering is not practical, mining will continue to be conducted by conventional excavator, dredge, and/or drag-line excavator. These excavation processes do not require temporary side slopes to be excavated steeper than 2H:1V where finished slopes are to occur. The proposed project does not include any slope designs (permanent or temporary) that would be incompatible with the intended future use as water management, open space, or non-prime agriculture, or that would be hazardous to persons that may use the site after reclamation, or that would reduce the effectiveness of revegetation and erosion control measures.
	Consistent As according of the second site descent
6.80.210(B): Benches shall be provided where necessary to control drainage on slopes or to provide for access or public safety.	Consistent: As excavation of the quarry pits deepen, it is anticipated that temporary benches will be provided within the pits to enable large equipment to access the bottom of the pit. As discussed at Impact 4.4-1, the proposed slopes on-site would be acceptable under static and seismic conditions (Geocon 2020).
Parcel Setbacks	
6.80.210(C)(1): Unless the Planning Commission approves a lesser setback pursuant to Section 6.80.210(C)(3), surface mining excavations shall not be conducted closer than twenty-five (25) feet of the common property line of any parcel, except where the adjacent property is being mined in the same manner with respect to such line; and fifty (50) feet of the right-of-way or future width line of any street.	Consistent: The current 25-foot setback from the adjacent residential subdivision is consistent with the requirements of the currently effective SMP-23 issued by the County in 1987. The proposed project would not alter these setbacks.
Watercourse Setbacks	
6.80.210(C)(2): Mining excavations shall be set back from water courses, flood control channels, reservoirs and water conservation facilities a distance as may be determined by the Planning Commission on recommendation of Alameda County Flood Control and Water Conservation District (including the Zone 7 Water	Consistent: One of the major changes in the proposed project as compared to the approved reclamation plan is that the project proposes to realign the Arroyo del Valle to go around Lake B, rather than ultimately through Lake A and Lake B, as was indicated in the currently approved reclamation plan for SMP-23 as

Coole/Objectives/Dolisies	Consistency Analysis
Goals/Objectives/Policies	Consistency Analysis
Agency) or Community Development Agency to be sufficient to protect existing or planned facilities.	issued by the County in 1987. The project's proposal
sumclent to protect existing of planned facilities.	maintains a separation between Arroyo del Valle and
	the Lakes, and provides for creek restoration within
(20.210) (C)(2). The Discrete Commission of the maximum of	the preserved Arroyo del Valle creek corridor.
6.80.210(C)(3): The Planning Commission, after receipt of	Consistent: The project does not propose any lesser
a complete application and with public notice and	setbacks than provided under Section 6.80.210(c1a)
hearing in accordance with the provisions of Article II of	and (c1b) as described above, and no authorization for
this Chapter, if required by the public need, may	lesser setbacks need be considered for the project.
authorize setbacks less than those provided in Section $(80.210)(C)(1)(a)$ and (b) if the Planning Commission	
6.80.210(C)(1)(a) and (b) if the Planning Commission	
makes the following findings, supported by the	
conclusions of a geotechnical study prepared by a	
qualified professional licensed by the State of California:	
The lesser setback is required by the public need, and is not related to the demand for additional mineral	
resource;	
A lesser setback and any associated resultant	
slope are acceptable based on the specific	
characteristics of the location and are	
supported by the conclusions of the	
geotechnical study prepared by a qualified	
professional licensed by the State of	
California;	
 A lesser setback and any associated resultant 	
slope will not present a risk to the adjacent	
property or any users thereof;	
 A lesser setback and any associated resultant 	
slope will permit adequate access for the	
owner of the mined land to the permitted area	
both during mining and following	
reclamation to the end use;	
• A lesser setback and any associated resultant	
slope will safely accommodate any existing or	
planned utilities or facilities, including, but	
not limited to, water diversion and	
conveyance structures; maintenance roads,	
safety berms and guardrails; drainage	
features; and screening landscapes, where	
required; and	
• A lesser setback will be in the interest of, and	
not compromise, the public health, safety	
and welfare.	
Use of Explosives	Consistent: No explosives are used in the mining
6.80.210(F): No explosives shall be used except as authorized by the surface mining normit. When	Consistent: No explosives are used in the mining
authorized by the surface mining permit. When	process, and no explosives are proposed to be used
authorized, the specific times of use shall be approved by	for any reclamation purposes for the project.
the director of public works.	

Consistent: All grading and erosion control performed at the project site is required to conform to the design standards and geotechnical requirements of the Alameda County Grading Ordinance, and erosion and sedimentation control plans are submitted to the Director of Public Works for review and approval. These standards, requirements, and monitoring provisions ensure that proper grades throughout the site are maintained during active mining operations. Use of the quarried pits for water management will be implemented under Zone 7's requirements and will include appropriate mosquito
performed at the project site is required to conform to the design standards and geotechnical requirements of the Alameda County Grading Ordinance, and erosion and sedimentation control plans are submitted to the Director of Public Works for review and approval. These standards, requirements, and monitoring provisions ensure that proper grades throughout the site are maintained during active mining operations. Use of the quarried pits for water management will be implemented under Zone 7's
control.
Consistent: One of the major objectives of the proposed project is to implement the LAVQAR Specific Plan and the Zone 7 agreement for reclaiming the excavated Chain of Lakes areas (Lakes A and B) as basins for water storage, conveyance, and recharge facilities for the Chain of Lakes. Implementation of the Chain of Lakes concept will allow Zone 7 to enhance groundwater recharge and improve reliability and sustainability of groundwater supplies in the Valley. Chapter 4.6, "Hydrology and Water Quality," contains an analysis of this potential impact and provides applicable mitigation to ensure that such impacts are less than significant.
Consistent: One of the major objectives of this project is to implement the LAVQAR Specific Plan and associated Zone 7 agreement by reclaiming the quarry pits (Lakes A and B) for use as basins for water storage, conveyance, and recharge facilities pursuant to and consistent with the Chain of Lakes plan. Implementation of the Chain of Lakes concept will allow Zone 7 to enhance groundwater recharge and improve reliability and sustainability of groundwater supplies in the Valley.
Consistent: Water discharges from project site are currently regulated by the Central Valley Regional Water Quality Control Board (RWQCB) and are subject to permitting requirements of the currently applicable National Pollutant Discharge Elimination System (NPDES) General Waste Discharge Requirements for Discharges of Process Wastewaters from Aggregate Mining, Sand Washing, and Sand Offloading Facilities to Surface Waters (Aggregate Mining General Permit). The current quarry

Goals/Objectives/Policies	Consistency Analysis
be in violation of this chapter solely on the basis of	General Permit Coverage for Discharge issued by the
sediment content.	Central Valley RWQCB in October 2020, which will
	become effective on January 1, 2021 and will expire on
	December 31, 2025.
Erosion Control	
6.80.210(H): During the period mining operations are	Consistent: Based on the project's reclamation and
being conducted, and prior to final reclamation of mined	phasing plan, erosion control facilities such as silt
lands, the operator shall take measures to prevent	fences, berms, hay bales, or similar means to deter
erosion of adjacent lands from water discharged from the	erosion will be employed. The specifics of where and
site of mining operations and the off-site discharge of	when such measures will be implemented will
sediment. Such measures may include the construction of	depend upon the particular configuration of grading
properly designed retarding basins, settling ponds and	work being conducted at any given time.
other water treatment facilities, ditches, diking and	
revegetation of slopes. No discharge of sediment to off-	
site bodies of water shall be permitted that will result in	
higher concentrations of silt than existed in off-site	
waters prior to mining operations. Stockpiles of	
overburden and minerals shall be managed to minimize	
water and wind erosion. The removal of vegetation and	
overburden in advance of surface mining shall be kept to	
a minimum.	
Land Use Compatibility	
6.80.210(I): All activities of mining and processing	Consistent: The potential noise, dust, and lighting
minerals shall be conducted in a manner that noise, dust	and glare impacts associated with ongoing quarrying
and bright lights do not exceed levels compatible with	operation are not addressed in this SEIR, but they are
the uses of adjacent lands as determined by the planning	conducted pursuant existing permits. The potential
commission in the issuance of the surface mining permit or as a result of its periodic review of any permit.	for lighting and glare and noise impacts related to the proposed project are addressed in Section 4.1,
of as a result of its periodic review of any period.	"Aesthetics," and Section 4.8, "Noise," respectively.
	Those impacts would be less than significant.
LIVERMORE-AMADOR VALLEY QUARRY AREA RECLAMATIO	
Water from Arroyos del Valle and Mocho (and possibly	Consistent: The proposed project continues to
Las Positas and other waters) will be diverted into the	provide for the diversion of water from Arroyo del
Chain of Lakes.	Valle into to the Chain of Lakes. The project proposes
	to accomplish this objective without relying on direct
	flow of the Arroyo through the lakes, but rather by
	maintaining the separation between the Arroyo and
	the lakes and using a diversion structure to convey
	Arroyo water into Lake A.
The diversion structure from Arroyo del Valle within	Consistent: Although the proposed project no longer
Lake A and into Lake C will be capable of diverting at	provides for Arroyo del Valle to flow through Lake A,
least the first 500 cubic feet per second of flow from the	the proposed project does maintain the 500 cubic feet
Arroyo.	per second diversion capability from Arroyo del Valle
	at its Lake A diversion structure. Furthermore, water
	will still be conveyed from Lake A to future Lake C
	via a water conveyance pipeline.
The operators will dedicate to Zone 7, at no cost, all lakes	Consistent: The proposed project adheres to the
comprising the chain of lakes, all exterior perimeter	general requirement to dedicate to Zone 7, at no cost,
areas, sufficient interior perimeter areas to provide a	all excavated Chain of Lakes basins within the
minimum 2.5' wide access, and appurtenant levees,	LAVQAR Specific Plan, all exterior perimeter areas,
conduits, and diversion structures.	interior perimeter areas sufficient to provide a

Goals/Objectives/Policies	Consistency Analysis
Policy 11: The operators shall dedicate to Zone 7, upon terms mutually acceptable to the operators and Zone 7, all water areas and necessary supporting land areas to operate the chain of lakes in the public interest. The right of the public to manage and use water resources of the chain of lakes and area groundwater undiminished with respect to quantity and quality shall be expressly asserted and any other uses permitted in said areas shall be compatible with said right.	 minimum 25-foot-wide access, and appurtenant levees, conduits, and diversion structures. Areas not intended for water management in the LAVQAR Specific Plan are designated under the proposed project for agriculture and open space end uses, consistent with the ECAP. Consistent: As stated above, the proposed project adheres to the general requirement under the LAVQAR Specific Plan that the operators are to dedicate to Zone 7, at no cost, all excavated Chain of Lakes basins within the LAVQAR Specific Plan, all exterior perimeter areas, interior perimeter areas sufficient to provide a minimum 25-foot-wide access, and appurtenant levees, conduits, and diversion structures. Areas not intended for water management in the LAVQAR Specific Plan area are designated, within the proposed reclamation plan for agriculture and open space end uses, consistent with the ECAP.
Policy 13: Land areas may appropriately be used for mining, mining-related industry in conjunction with ongoing mining, agriculture, open space, and watershed uses. New or expanded uses in the Quarry Area shall be allowed only upon securing Zoning Approval to ensure compatibility with the LAVQAR and reclamation of the area. Reclaimed land should be capable of supporting beneficial uses. No uses shall be permitted which may unacceptably pollute the lakes.	Consistent: The proposed project does not propose new or expanded uses.

4.7.4 Significance Thresholds and Analysis Methodology

The project description was compared to the local governing plans that are applicable to the physical location of the project site. It was determined which policies within those plans are applicable to the project. In this case, the project is an amendment to an existing operation and not a proposed new development. Therefore, only those policies where changes to the existing project that have the potential to be inconsistent with the local plans are listed in the analysis.

4.7.4.1 Significance Criteria

Based on Appendix G of the CEQA Guidelines, the proposed project would have a significant impact to land use and planning if it would:

- a) physically divide an established community; or
- b) cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

4.7.4.2 Analysis Methodology

The above methodology was used to determine whether the project conflicts with the above significance criteria for land use polices as found in Appendix G of the CEQA Guidelines.

4.7.5 Project Impacts and Mitigation Measures

4.7.5.1 LAVQAR EIR Impact Analysis

Under the LAVQAR EIR, land use and planning impacts were determined to be less than significant with mitigation. The 1981 project included mining and reclamation activities in an area zoned for agricultural and open space uses.

The approved project includes the following mitigation measures relevant to land use and planning impacts:

- To mitigate impacts of untimely or illogical development on reclaimed lands, policies should be adopted in the Specific Plan to implement the Reclamation Plan as part of Livermore-Amador Valley General Plan to guide such uses during the Plan period. To avoid impacts of commitment to intensive land uses, an assumption could be made in the Specific Plan that Open Space and mining related industrial uses of reclaimed lands are appropriate as a present designation until it can be demonstrated that agricultural, industrial, or residential uses would not conflict with other land uses, policies, plans, and environmental quality existing at that future time. If it can be so demonstrated, then commitment to such uses should be made through revisions in the Specific Plan as early as possible. As quarrying is phased out and much land becomes available for development, planning will have to continue to ensure minimization of impacts. This can be accomplished through the 5-year review of Reclamation Plans required by the Alameda County Surface Mining Ordinance. It is impossible to be more specific at this time with scarce knowledge to predict what environmental and other issues will dominate planning for the area 50 years hence. Any specific land uses or infrastructure (roads, utility extensions, etc.) would undergo environmental review at the time of proposal.
- Impacts caused by 1:1 slopes could be reduced if 2:1 slopes were adopted as the conceptual standard in reclamation. This measure is discussed in Section IV.C.l.c. (Mitigation of Topographic Impacts). An explicit trade-off is involved between this mitigation measure and maximization of extraction and sale of the gravel resource. For example, assuming a yield of saleable materials at 90% of total volume of materials, average excavation depth of 100' and weight of saleable materials of 100 pounds per cubic foot, the difference between 1:1 and 2:1 is approximately 225 tons per foot of frontage. Taken altogether, the 10 lake pits proposed have a combined frontage of about 142,000 feet. Of this total, about 60% is interior frontages which abut impermeable fills, which are not critical for groundwater movement and which thus can be excavated and then backfilled to 2:1. The remaining frontage, if harvested to only 2:1, represents a loss of about 12.6 million tons of gravel resource, about 3.2% of the 400 million tons expected to be excavated from the Quarry Area. The actual loss would be less because of overburden and the thinning of deposits to the north and west, where much exterior frontage is concentrated. Perhaps between 2% and 3% would be lost, roughly equivalent to about one to one and one-half years current production in the Quarry Area. (Alameda County 1980: 43)

Project Revisions

The proposed project does not include mining and would consist of reclamation activities, similar to the 1981 project. Therefore, as discussed in section 4.7.5.2, below, the proposed project would not create a new or increased significant impact.

Changed Circumstances

Since 1981, new residential subdivisions have been developed to the north of Lake A (e.g., Pulte Oaks and Kristopher Ranch) and to the south of Lake B (e.g. Ruby Hills). SMP-23 was originally approved when this property was zoned agricultural and was within the jurisdiction of the County. Over the years, the property was annexed to the City of Livermore, the zoning was changed to residential, and the houses were built adjacent to Lake A. These land uses are changed circumstances that could create a new or increased significant impact.

New Information

Current regulatory requirements are addressed above. No new information of substantial importance is available that was not known and could not have been known with the exercise of reasonable diligence at the time the LAVQAR EIR was adopted.

Significance Determination

Based on project revisions and changed circumstances that may create a new or increased significant impacts, the County has amplified and augmented the analysis contained in the LAVQAR EIR. This evaluation is provided in the following impact analysis.

4.7.5.2 Subsequent Environmental Analysis

Impact 4.7-1: Physically Divide an Established Community

The proposed project is adjacent to several established communities. However, the proposed project would occur on an existing mining operation and does not include modified boundaries or any action that would result in the physical division of any of these existing communities.

The project site is situated between the cities of Pleasanton and Livermore. The project site is already an established, operating quarry, and no aspect of the proposed project would result in a division, physically or perceptually, of these adjacent communities. A triangular-shaped property within the reclamation plan boundary was originally included as part of the 1987 approved reclamation plan, but was subsequently sold by the project Applicant's predecessor to a housing developer and currently is a residential subdivision. The proposed project adjusts the reclamation plan boundary to exclude this subdivision. Therefore, the proposed project would have no impact related to physically dividing an established community.

Level of Significance: Less than significant.

Mitigation Measure: None required.

Impact 4.7-2: Conflict with Land Use Plans, Policies, and Regulations

The proposed project would not conflict with applicable land use plans, policies, and regulations adopted for the purpose of avoiding or mitigating an environmental effect.

Conflicts between a project and applicable land use policies do not constitute significant physical environmental impacts in and of themselves. A policy inconsistency is considered a significant adverse environmental impact only when it is related to a policy adopted for the purpose of avoiding or mitigating an environmental effect, and if it is anticipated that the inconsistency would result in a significant adverse physical impact based on established significance criteria.

Under the proposed project, Lake B would not transfer to Zone 7 until 2056, which would be beyond the date anticipated in the LAVQAR Specific Plan (2030). However, the 2030 horizon anticipated in the Specific Plan was an estimate at the time of the Specific Plan's adoption. Determining consistency with the LAVQAR Specific Plan primarily depends on whether the proposed project is consistent with the physical elements of the staging plans outlined in the LAVQAR Specific Plan, with less importance attributed to dates of implementation. The proposed project implements the key elements of the LAVQAR staging plans, despite the later transfer date of Lake B to Zone 7.

As discussed in detail in Table 4.7-1, the proposed project would not substantially conflict with any land use policies adopted by Alameda County for the purpose of avoiding or mitigating environmental effects. As a result, no significant land use impacts related to the project's consistency with land use policies would occur. The changes related to reclamation plans for the existing quarry are consistent with the County's General Plan land use designations, ECAP policies, and applicable zoning regulations. The project's ultimate reclamation plan is also substantially consistent with the LAVQAR Specific Plan goals, policies, actions, and guidelines applicable to the project site, as more fully discussed above. Therefore, this impact would be less than significant.

Level of Significance: Less than significant.

Mitigation Measure: None required.

THIS PAGE INTENTIONALLY LEFT BLANK