

Initial Study/Proposed Mitigated Negative Declaration for the Ready-Mix Concrete Plant Project

Prepared for:
Port of Redwood City
675 Seaport Boulevard
Redwood City, CA 94063

December 2021

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for the
Ready-Mix Concrete Plant Project

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675 Seaport Boulevard
Redwood City, CA 94063

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December 2021

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LIST OF ABBREVIATIONS

AB	Assembly Bill
APN	Assessor Parcel Number
AST	aboveground storage tank
BAAQMD	Bay Area Air Quality Management District
BAAQMD	Bay Area Air Quality Management District
BAWSCA	Bay Area Water Supply and Conservation Agency
BMP	best management practice
CAA	federal Clean Air Act
CAAQS	California ambient air quality standards
Cal EPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
CAP	Climate Action Plan
CARB	California Air Resources Board
CBC	California Building Code
CCAA	California Clean Air Act
CDFW	California Department of Fish and Wildlife
CEMEX	Cemex Construction Materials Pacific, LLC
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFC	California Fire Code
City	Redwood City
CNEL	Community Noise Equivalent Level
CO	Carbon monoxide
CO ₂	carbon dioxide
diesel PM	diesel particulate matter
draft IS/MND	Initial Study/Mitigated Negative Declaration
DTSC	California Department of Toxic Substances Control's
EIR	Environmental Impact Report
EO	Executive Order
ESA	federal Endangered Species Act
EV	electric vehicle
FAR	Floor Area Ratio
FHSZ	Fire Hazard Severity Zone

FICON	Federal Interagency Commission on Noise
FTA	Federal Transit Authority
gal/year	gallons per year
GHG	greenhouse gas
GI	General Industrial
Hz	Hertz
IS/MND	Initial Study/Mitigated Negative Declaration
kWh/year	kilowatt-hours per year
lb/day	pounds per day
Ldn	Day-Night Level
Lmax	Maximum Sound Level
LOS	level of service
LUST	leaking underground storage tank
MBTA	migratory bird treaty act
mgd	million gallons per day
MND	mitigated negative declaration
MTCO _{2e}	metric tons of carbon dioxide equivalent
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
ND	negative declaration
NO ₂	Nitrogen dioxide
NO _x	nitrogen oxides
NPDES	National Pollution Discharge Elimination System
NWIC	Northwest Information Center
OPR	Governor's Office of Planning and Research
Ox Mountain	Corinda Los Trancos
PCE	Peninsula Clean Energy
PG&E	Pacific Gas and Electric
PM ₁₀	particulate matter less than or equal to 10 microns in diameter
PM _{2.5}	particulate matter less than or equal to 2.5 microns in diameter
Port	Port of Redwood City
ppm	parts per million
proposed project	Ready-Mix Concrete Plant project
ROG	reactive organic gases
RPS	renewables portfolio standard

RWCmoves	Redwood City Moves
SB	Senate Bill
SFBAAB	San Francisco Bay Area Air Basin
SFPUC	San Francisco Public Utilities Commission
SIP	State Implementation Plan
SLF	Sacred Lands File
SO ₂	Sulfur dioxide
SR	State Route
SVCW	Silicon Valley Wastewater Treatment
SWPPP	storm water pollution prevention plan
SWRCB	State Water Resources Control Board
TAC	from toxic air contaminant
Technical Advisory	<i>Technical Advisory on Evaluating Transportation Impacts in CEQA</i>
TPA	Transit Priority Areas
TPH	petroleum hydrocarbons
TPZ	Timber Production Zones
US 101	US Route 101
USGS	US Geological Survey
UWMP	Urban Water Management Plan
VMT	vehicle miles traveled
WDR	General Waste Discharge Requirement
WETA	Water Emergency Transportation Authority

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1 INTRODUCTION

1.1 INTRODUCTION AND REGULATORY GUIDANCE

The Port of Redwood City, as the lead agency, prepared this Initial Study/Mitigated Negative Declaration (IS/MND) to evaluate the potential environmental effects resulting from the Ready-Mix Concrete Plant project (proposed project). Chapter 2, "Project Description," provides the detailed project information.

This document has been prepared in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations Section 15000 et seq.). An initial study is prepared by a lead agency to determine if a project may have a significant effect on the environment (State CEQA Guidelines Section 15063[a]), and thus to determine the appropriate environmental document. In accordance with State CEQA Guidelines Section 15070, a "public agency shall prepare...a proposed negative declaration or mitigated negative declaration...when: (a) The Initial Study shows that there is no substantial evidence...that the project may have a significant impact on the environment, or (b) The Initial Study identifies potentially significant effects but revisions to the project plans or proposal are agreed to by the applicant and such revisions would reduce potentially significant effects to a less-than-significant level." In this circumstance, the lead agency prepares a written statement describing its reasons for concluding that the project would not have a significant effect on the environment and, therefore, does not require the preparation of an environmental impact report (EIR). By contrast, an EIR is required when the project may have a significant environmental impact that cannot clearly be reduced to a less-than-significant effect by adoption of mitigation or by revisions in the project design.

1.2 WHY THIS DOCUMENT?

The purpose of this document is to present to decision-makers and the public information about the environmental consequences of implementing the project. As described in Chapter 3, "Environmental Checklist," the project would not result in any significant environmental impacts that cannot clearly be reduced to less than significant level. Therefore, an IS/MND is the appropriate document for compliance with the requirements of CEQA.

Under CEQA, the lead agency is the public agency with primary responsibility over approval of the project. The Port of Redwood City is the CEQA lead agency because they are responsible for approving the proposed project on land that is located within the Port's jurisdiction.

This IS/MND will be circulated for a 30-day public review period, from, December 13, 2021, to January 11, 2022. Comments on this IS/MND must be received by 5:00 p.m. on January 11, 2022, Year. Comments can be emailed to twagner@redwoodcityport.com or sent to the following address:

Trish Wagner
Business Development Manager
Port of Redwood City
675 Seaport Boulevard
Redwood City, CA 94063

Following receipt of comments from the public and reviewing agencies, the Port of Redwood City may (1) adopt the MND and approve the project; (2) undertake additional environmental studies; or (3) abandon the project. If the project is approved, the project proponent may proceed with the project.

1.3 SUMMARY OF FINDINGS

Chapter 3, "Environmental Checklist," contains the analysis and discussion of potential environmental impacts of the project. The Environmental Checklist for this IS/MND includes the checklist questions from Appendix G of the State CEQA Guidelines. The analysis of Chapter 3 determined that the proposed project would have either no impact or a less-than-significant impact for the following environmental issue areas:

- ▶ Aesthetics
- ▶ Agriculture and Forestry Resources
- ▶ Air Quality
- ▶ Cultural Resources
- ▶ Energy
- ▶ Geology and Soils
- ▶ Greenhouse Gas Emissions
- ▶ Hazards and Hazardous Materials
- ▶ Hydrology and Water Quality
- ▶ Land Use and Planning
- ▶ Mineral Resources
- ▶ Noise
- ▶ Population and Housing
- ▶ Public Services
- ▶ Recreation
- ▶ Transportation
- ▶ Tribal Cultural Resources
- ▶ Utilities and Service Systems
- ▶ Wildfire

Chapter 3 finds there are potentially significant impacts to the following environmental issue area:

- ▶ Biological Resources

With mitigation measure MM-BIO-1, the potentially significant impact on biological resources would be reduced to a less-than-significant level.

1.4 PROJECT APPROVALS

The project would require the following approvals:

- ▶ Development Permit authorization from the Board of Port Commissioners
- ▶ Building Permit from the City of Redwood City
- ▶ An Administrative Permit from the Bay Area Conservation and Development Commission
- ▶ Authority to Construct / Permit to Operate from BAAQMD
- ▶ Notice of Intent for coverage under the General Permit for Storm Water Discharges Associated with Construction Activities / General Permit for Storm Water Discharges Associated with Industrial Activities from the State Water Resources Control Board (SWRCB)
- ▶ Notice of Intent for coverage under the General Waste Discharge Requirements for Aggregate and/or Concrete Facilities from the SWRCB

1.5 DOCUMENT ORGANIZATION

This IS/MND is organized as follows:

Proposed Mitigated Negative Declaration indicates that Port of Redwood City, as the Lead Agency, has determined that the proposed project would not result in a significant impact on the environment. The proposed MND is supported by Chapters 1 through 5, as described below.

Chapter 1, "Introduction" provides an introduction to the environmental review process. It describes the purpose and organization of this document and presents a summary of findings.

Chapter 2, "Project Description" describes the purpose of and need for the proposed project, identifies project objectives, and provides a detailed description of the project.

Chapter 3, "Environmental Checklist" includes the analysis of environmental issues identified in Appendix G of the State CEQA Guidelines (i.e., Environmental Checklist Form) and determines if project actions would result in no impact, a less-than-significant impact, a less-than-significant impact with mitigation incorporated, or a potentially significant impact. If any impacts were determined to be potentially significant, an EIR would be required.

Chapter 4, "References" lists the references used in preparation of this IS/MND.

Chapter 5, "List of Preparers" identifies report preparers.

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2 PROJECT DESCRIPTION

2.1 PROJECT OVERVIEW

Cemex Construction Materials Pacific, LLC (CEMEX) proposes to construct a ready-mix concrete batch plant and accessory structures (proposed project) on an approximately 4-acre portion of an existing aggregate and cement terminal facility located at 876 Seaport Boulevard (proposed project site). The proposed project would include a compact ready-mix concrete batch plant tower with a two-lane drive-through truck feed system that supports both wet and dry mixes. The batch plant would be fed from aggregate stockpiles using a front-end loader and conveyor system. Ancillary uses and accessory structures would include an employee office, maintenance shop building, wash rack with concrete-lined water and waste containment, parking areas, and two conex storage containers.

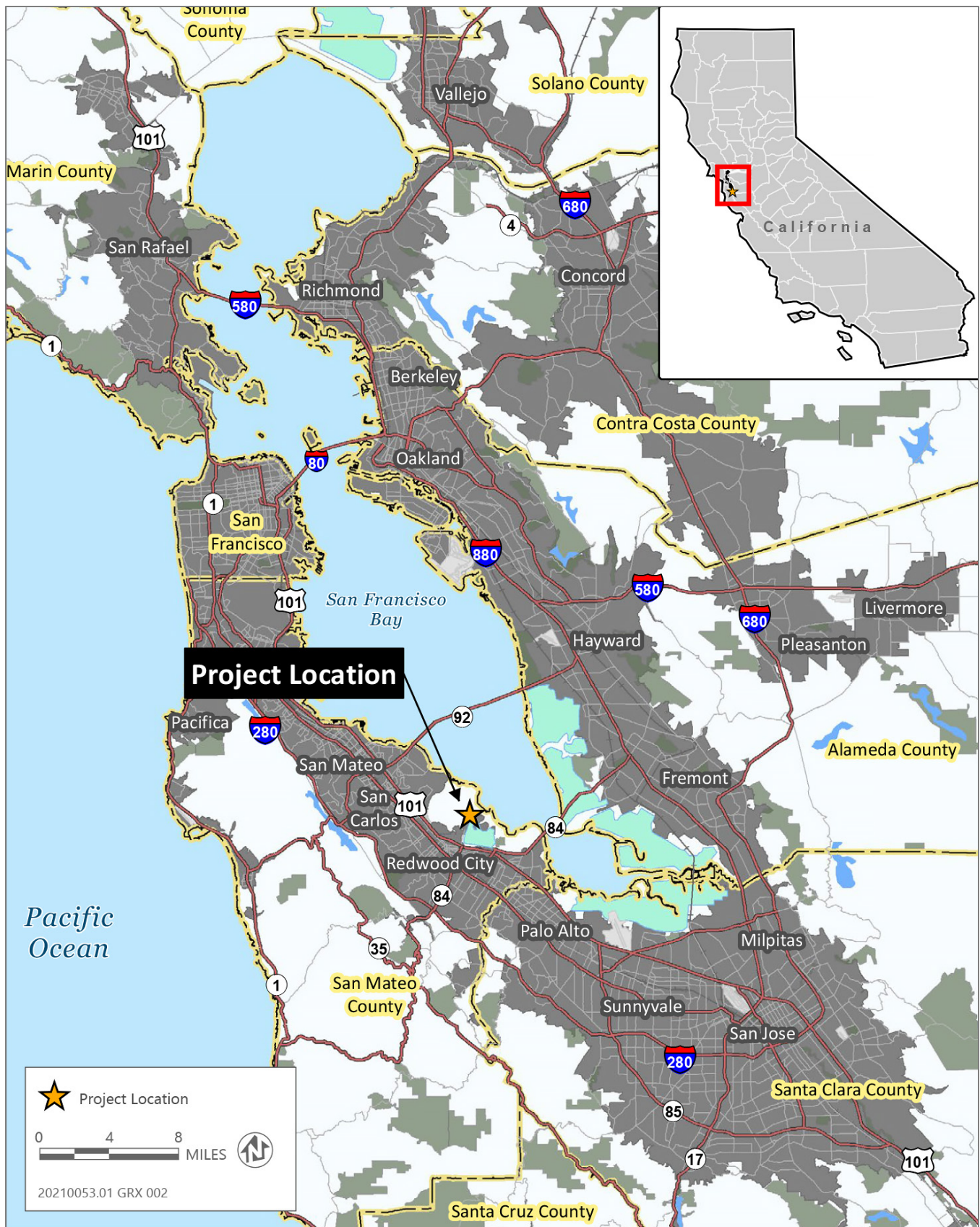
Once the proposed project is operational, CEMEX would decommission its existing ready-mix concrete facility located at 1026 Bransten Road in San Carlos. CEMEX operates two plants at the San Carlos facility, both of which would be replaced by the project. No other activities or physical changes are proposed at the San Carlos facility at this time; however, decommissioning the San Carlos facility would eliminate the need to transport raw materials, including aggregates and cement, from the Port to the San Carlos facility for concrete production due to the consolidation of activities at the project site.

2.2 PROJECT LOCATION AND SETTING

The project site is located at the Port of Redwood City (Port) within Redwood City limits. Redwood City (City) is bordered by the cities of San Mateo, San Carlos, Menlo Park, and Palo Alto. The regional map is shown in Figure 2-1 and a project location map is shown in Figure 2-2. The Port of Redwood City specializes in long-term leasing of waterside properties that include maritime industrial tenants involved in importing or exporting granular bulk product such as CEMEX. Existing uses at the site consist of aggregate and cement marine terminals, aggregate processing and stockpiling, aggregate and cement material load-out and sales, construction materials recycling, and associated heavy truck traffic. Existing ancillary support structures include conveyors, crushers, screens, storage silos, groundwater wells, rail lines, miscellaneous storage, truck scales, offices, and parking. An aerial view of the existing site conditions is provided in Figure 2-3. Photographs of the existing conditions on site are provided in Figures 2-4, 2-5, and 2-6.

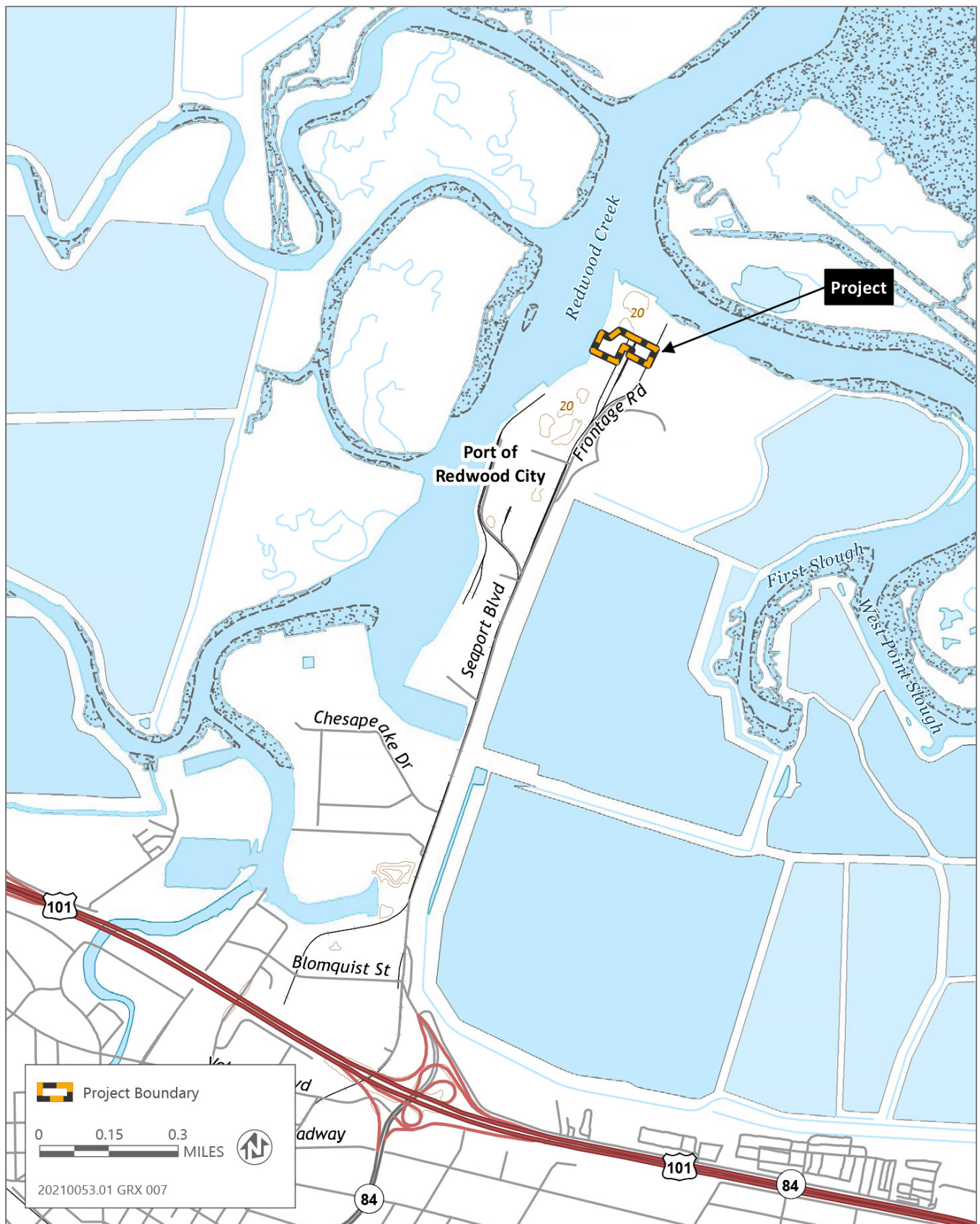
Development would occur on an approximately 4-acre portion of the existing CEMEX aggregate and cement terminal facility located on Assessor Parcel Number (APN): 054-300-480, which is owned by CEMEX. Figure 2-7 identifies the project site in relation to the APNs.

Land uses adjacent to, and nearby the project site include marine industrial businesses to the north and south-southwest and a business park along with surface parking lots to the east and associated sports fields to the south-southeast. The Redwood Creek channel is located to the west. The marine industrial businesses include CEMEX Aggregates immediately north and south of the CEMEX site, and further to the southwest is Sims Metal (scrap metal recycling), Pabco Gypsum, Central Concrete, Seaport Refining (refinement of petroleum-based fuels), and Clean Harbors (chemical wholesale/manufacturing/environmental and waste services). The business park to the east is the Pacific Shores Center across Seaport Boulevard. Surface automobile parking and an extensive landscaping buffer is situated between the project site and the nearest office buildings. Sports fields associated with the Pacific Shores Center are located approximately 1,000 feet from the project site. Cargill's Industrial Salt Plant is located southeast of the site, across Seaport Boulevard. Marina uses include West Point Harbor approximately 2,500 feet to the east, and Redwood Landing Marina and the Redwood City Municipal Marina approximately 3,900 feet and 4,600 feet to the south, respectively.



Source: Compass Land Group

Figure 2-1 Regional Location



Source: Compass Land Group

Figure 2-2 Project Location



Source: Compass Land Group

Figure 2-3 Aerial of Existing Site Conditions



Source: Compass Land Group

Photo 1: Photograph shows existing conditions of the Project area and cement silos, facing South.



Source: Compass Land Group

Photo 2: Photograph of the existing conditions of the Project area, facing West.

Figure 2-4 Existing Site Condition Photographs



Source: Compass Land Group

Photo 3: Photograph shows the existing conditions of the Project area and cement terminal facility, facing south-east.



Source: Compass Land Group

Photo 4: Photograph shows the existing conditions of the Project area to be developed into ready-mix truck parking, facing East.

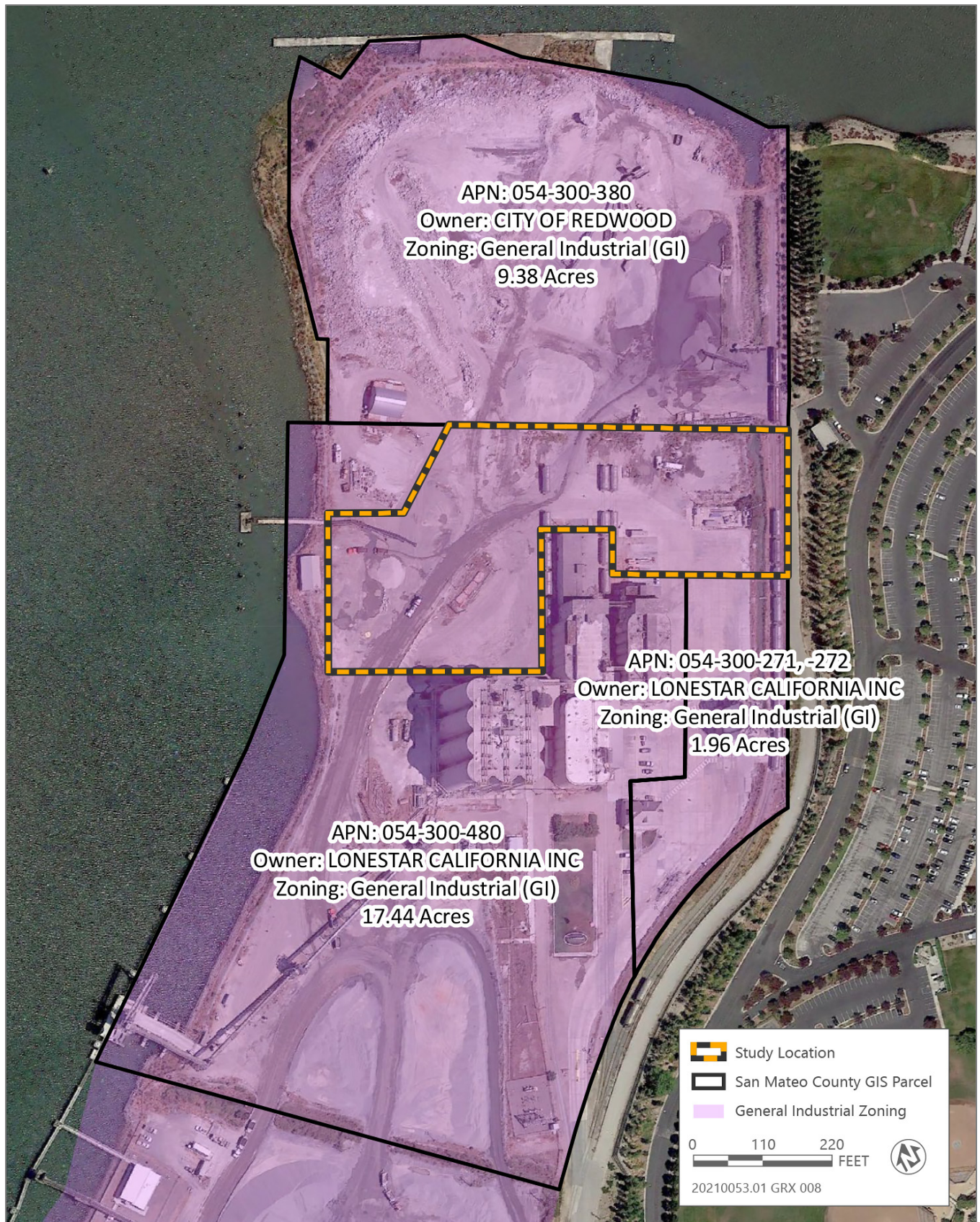
Figure 2-5 Existing Site Condition Photographs



Source: Compass Land Group

Photo 5: Photograph shows the view of the Project area from the adjacent business park, facing West across Frontage Road.

Figure 2-6 Existing Site Condition Photographs



Source: Compass Land Group

Figure 2-7 Project Site with Assessor Parcel Numbers

2.3 LAND USE DESIGNATION AND ZONING

The CEMEX-owned parcel is designated Industrial – Port Related, this land use category allows for industrial operations involved in the loading/unloading, storing, recycling, and transferring of large quantities of dry, liquid, and neo-bulk cargoes; green energy production; rail facilities; as well as certain other maritime-oriented activities, including passenger vessels, ship repair or construction, and related ocean vessel support services.

The project parcel is located within the General Industrial (GI) zoning district. The GI district allows for sound industrial development wherein manufacturing and other industries can locate and operate away from the restricting influences on non-industrial uses while maintaining an environment free from offensive or objectionable noise, dust, odor, and other nuisances.

2.4 PROJECT OBJECTIVES

The Port, in collaboration with CEMEX, identified the following objectives to guide development of the project:

- ▶ Install a ready-mix concrete batch plant with a production allowance of 250,000 cubic yards per year to meet the anticipated market demand for materials.
- ▶ Co-locate a new ready-mix concrete batch plant at CEMEX's existing aggregate and cement facilities at the Port of Redwood City to realize the operational efficiencies of a batch plant located at a source of raw materials and decommission the existing San Carlos ready-mix facility once the proposed Port location is operational.
- ▶ Minimize vehicle miles traveled and the associated environmental impacts including air quality, greenhouse gas emissions, and transportation, by reducing the need to transport raw materials to an off-site ready-mix concrete plant.

2.5 PROJECT ELEMENTS

2.5.1 Proposed Ready-Mix Concrete Batch Plant

Ready-mix concrete is a mixture of cement, fine aggregate (sand), and coarse aggregate (sorted gravels and/or crushed stone), which is then combined with water. A ready-mix concrete batch plant stores, conveys, measures, and loads these materials into concrete mixer trucks for transport to a job site. Admixtures such as fly ash¹ are sometimes added in limited quantities to make the concrete more economical, reduce permeability, and increase strength. The materials are gravity fed from elevated storage bins to a weigh hopper and into concrete mixer trucks. The concrete is then mixed within the concrete mixer truck while in transit to the job site, where the concrete is then poured and used in construction. Figure 2-8 illustrates the types of trucks that currently use the site and the concrete mixer trucks that would use the proposed ready-mix concrete batch plant. As shown, the concrete mixer trucks are smaller than the dry bulk trucks. Fewer dry bulk trucks would travel to and from the site as the San Carlos Facility would no longer be in operation. However, mixer trucks that previously travelled from the San Carlos Facility would now travel directly to and from the proposed Port site.

¹ Fly ash is a by-product from the combustion of pulverized coal and is widely used as an ingredient in hydraulic-cement concrete. Because it improves many desirable properties of concrete, it is introduced either as a separately batched material or as a component of blended cement. Fly ash reacts with the hydrating hydraulic cement to form a cementing medium.



Source: Compass Land Group

Photograph 1. Example of a Dry Bulk (Aggregates) Truck.



Source: Compass Land Group

Photograph 2. Example of a Dry Bulk (Cement) Truck.



Source: Compass Land Group

Photograph 3. Example of a Concrete Mixer Truck.

Figure 2-8 Heavy Trucks Related to Transport of Concrete, Cement, and Concrete Aggregates

Aggregate materials used for ready-mix concrete production would continue to be stored on the existing adjacent terminal lot (APN 054-300-380) and would be transferred to the 7,500-square-foot stockpile area as needed. A front-end loader would be used to load the aggregates into a ground-level hopper that feeds a 230-linear-foot conveyor belt, which would then transfer these materials to the elevated storage bins on the 900-square-foot plant structure for production, which would be approximately 100 feet tall. The cement and aggregates would be fed by gravity to weigh hoppers, which would measure and combine the proper amounts of each dry material to produce a dry mix, and, depending on the particular needs of the job, water can be added to the dry mix to produce a wet mix. The concrete mix would then be top-loaded into concrete mixer trucks, at which point the concrete mixer trucks would depart via the existing paved egress/ingress for the cement terminal that connects with Frontage Road. Figure 2-9 shows the project site plan. Figures 2-10 and 2-11 provide greater site plan details. Figure 2-12 shows a rendering of the proposed concrete batch plant.

PROPOSED ACCESSORY STRUCTURES

Accessory structures include a 1,900-square-foot wash rack to clean trucks and equipment and 2,450 square feet of concrete-lined weir ponds that would be designed to capture and contain water runoff from the wash rack and collect sediment and residual waste concrete that would be recycled.

Additional accessory structures include a 160-square-foot single-story (approximately 12 feet) office building adjacent to the batch plant that would support up to two office workers, a 2,500-square-foot single-story maintenance shop with two full time mechanics, installation of up to 2 Conex storage containers (8' x 40' each), and office parking, all of which would be adjacent to the existing CEMEX buildings. Finally, there would be a parking area for approximately 15 mixer trucks. All proposed accessory structures and uses are shown on Figures 2-10 and 2-11. In addition, new sources of light would be installed at the proposed office, maintenance shop, associated parking areas, and at the plant for safety and security. All lighting would be low mounted and cast downward to reduce light spill, ensuring all lighting would be consistent with Policy BE-1.9 and Program BE-15 of the Redwood City General Plan.

HOURS OF OPERATION

Typical hours of operation would be Monday through Saturday from 6:00 a.m. to 6:00 p.m. with occasional operations outside these hours to meet CEMEX customer needs. The ready-mix concrete batch plant is anticipated to be in operation for approximately 299 days per year.

CIRCULATION

Frontage Road, a two-lane road adjacent to Seaport Boulevard, would be used to access at the existing paved cement terminal facility entrance/exit driveway at 876 Seaport Boulevard. Truck traffic for the ready-mix concrete batch plant operations (plant loading, stockpile transfers, vehicle maintenance, etc.) would be serviced by existing on-site roadways. Designated employee, visitor, and concrete mixer truck parking areas would be provided as shown on Figure 2-9. All parking needs would be accommodated on-site and no on-street parking would be required. CEMEX anticipates transporting 250,000 cubic yards of material annually, which equates to 27,778 one way export concrete mixer truck trips and 27,778 returning concrete mixer truck trips for a total of 55,556 one way trips. On a daily basis, the project would generate an average of 93 one way export trips and 93 returning trips for a total of 186 one way trips per day.

2.5.2 Utilities

The project would connect to existing utilities, including water, storm drainage, wastewater, and solid waste already provided on site. The project would be served by existing sanitation facilities and portable sanitation facilities, as needed. Annual water demand for the project is estimated to be 6.2 million gallons per year for concrete production

(5.0 million gallons of water per year)² and for dust control (1.2 million gallons)³. Electrical requirements are estimated to be 125,000 kilowatt-hours per year. No new capacity upgrades would be required and utility work would be limited to onsite connections to utility infrastructure already located onsite.

2.5.3 Construction and Grading

Construction at the proposed project site would include demolition of existing equipment, remedial grading at a depth of 2-4 feet for compaction purposes, installing foundation piles for the concrete batch plant and the machine shop, and installing the concrete batch plant and accessory structures. Construction would last approximately 5 months.

2.5.4 Decommissioning of the San Carlos Batch Plant

CEMEX operates two plants at the San Carlos facility. The operations associated with both plants would be replaced by the project (Figure 2-13) to consolidate both import of cement and aggregates and the mixing of concrete in one location. As such, the proposed project would eliminate transport of raw materials to the San Carlos facility and would improve the efficiency of concrete production and distribution in the region.

2.5.5 Best Management Features

DUST CONTROL

The primary source of pollutants at a ready-mix plant are particulate emissions (dust). Sources of dust emissions would include the transfer of cement to the elevated storage bin and fugitive dust emissions from the transfer of sand and aggregate to stockpiles, transfer of sand and aggregate to the feed bin, conveyor transfer point, mixer loading, vehicle traffic, and wind erosion from sand and aggregate stockpiles.

Operations would be performed in strict adherence to the Bay Area Air Quality Management District (BAAQMD) dust control rules and regulations. The ready-mix concrete batch plant emissions would be controlled through use of a bag house, dust collector, enclosures, and water sprays. A water truck would be used to wet stockpiles and surfaces in order to minimize fugitive dust from vehicle traffic and wind. CEMEX would implement BAAQMD's "Basic Construction Mitigation Measures Recommended for ALL Proposed Projects", which includes measures to minimize dust. The details of these dust control measures would also be specified in an Authority to Construct permit to be obtained from the BAAQMD prior to the start of operations. In addition, the existing paved access road would help to reduce the potential for tracking dust onto Frontage Road initially and then onto Seaport Boulevard once Frontage Road merges with Seaport Boulevard.

SURFACE AND GROUNDWATER PROTECTION

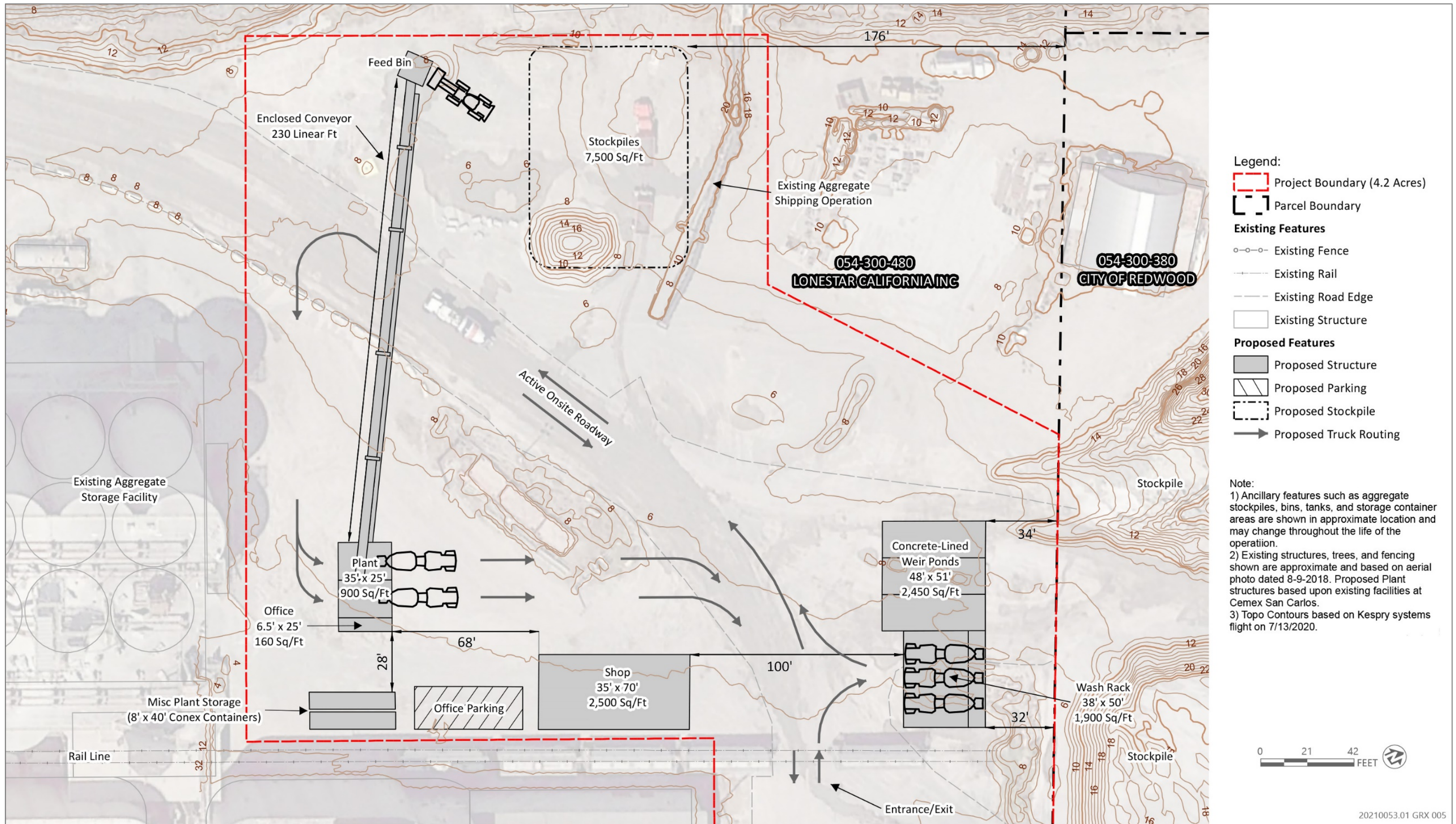
CEMEX would be required to comply with National Pollutant Discharge Elimination System Construction Stormwater and Industrial Stormwater General Permit requirements, including implementation of a storm water pollution prevention plan with best management practices to control erosion, sedimentation, and pollution during construction and operation of the plant. CEMEX would also submit a Notice of Intent for coverage under the General Waste Discharge Requirements for Aggregate and/or Concrete Facilities from the State Water Resources Control Board, as needed.

² Water demand for concrete production is based on approximately 20 gallons per cubic yard of concrete multiplied by the estimated annual production of 250,000 cubic yards.

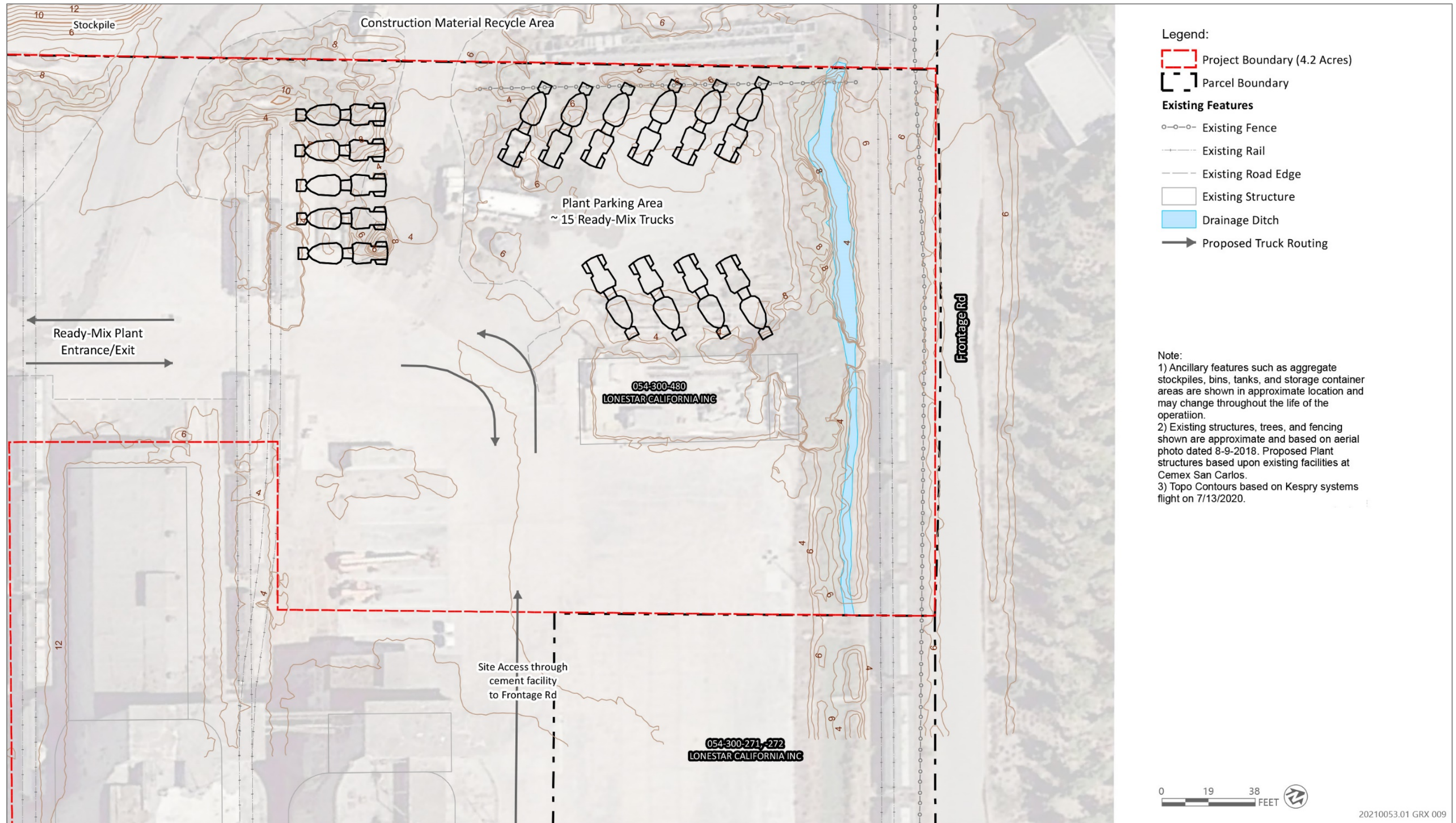
³ Water demand for dust control assumes one 4,000-gallon water truck load per day times 299 operating days.



Figure 2-9 Site Overview and Proposed Site Plan



Source: Compass Land Group



Source: Compass Land Group

Figure 2-11 Proposed Site Plan Detail (2 of 2)



Source: Compass Land Group

Figure 2-12 Proposed Concrete Batch Plant Rendering



Source: Compass Land Group

Figure 2-13 Locations of Proposed Project Site and Existing San Carlos Concrete Batch Plant Facility

2.6 PROJECT APPROVALS

The project would require the following approvals:

- ▶ Development Permit authorization from the Board of Port Commissioners
- ▶ Building Permit from the City of Redwood City
- ▶ An Administrative Permit from the Bay Area Conservation and Development Commission
- ▶ Authority to Construct / Permit to Operate from BAAQMD
- ▶ Notice of Intent for coverage under the General Permit for Storm Water Discharges Associated with Construction Activities / General Permit for Storm Water Discharges Associated with Industrial Activities from the State Water Resources Control Board (SWRCB)
- ▶ Notice of Intent for coverage under the General Waste Discharge Requirements for Aggregate and/or Concrete Facilities from the SWRCB

3 ENVIRONMENTAL CHECKLIST

PROJECT INFORMATION

1. Project Title: Ready-Mix Concrete Plant Project
2. Lead Agency Name and Address: Port of Redwood City
675 Seaport Boulevard
Redwood City, CA 94063
3. Contact Person and Phone Number: Trish Wagner, Business Development Manager, Port of Redwood City
(650) 306-4150
4. Project Location: 876 Seaport Boulevard
Redwood City, CA 94063
5. Project Sponsor's Name and Address: CEMEX Construction Materials Pacific, LLC
2365 Iron Point Road, Suite 120
Folsom, CA 95630
6. General Plan Designation: Development would occur on an approximately 4-acre portion of the existing CEMEX aggregate and cement terminal facility located on Assessor Parcel Number (APN): 054-300-480. APN 054-300-480 is designated Industrial – Port Related by the Redwood City General Plan.
7. Zoning: APN 054-300-480 is within the General Industrial (GI) zoning district.
8. Description of Project:
Cemex Construction Materials Pacific, LLC (CEMEX) proposes to construct a ready-mix concrete batch plant and accessory structures on an approximately 4-acre portion of an existing aggregate and cement terminal facility located at 876 Seaport Boulevard. The project would include a compact ready-mix concrete batch plant tower with a two-lane drive-through truck feed system that supports both wet and dry mixes. The plant would be fed from aggregate stockpiles using a front-end loader and conveyor system. Ancillary uses and accessory structures would include an employee office, maintenance shop building, wash rack with concrete-lined water containment, parking areas, and miscellaneous storage containers. In addition, the existing San Carlos ready-mix batch plant would be decommissioned once the proposed project is operational.
9. Surrounding Land Uses and Setting:
Refer to Section 2.2 in Chapter 2, "Project Description."
10. Other public agencies whose approval is required:
Refer to Section 2.6 in Chapter 2, "Project Description."
11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.? No California Native American tribes that are or have been traditionally and culturally affiliated with the project vicinity have requested notification from the Port of Redwood City. In addition, the Port of Redwood City sent out notification letters on August 18, 2021 to representatives from all California Native American tribes that are or have been traditionally and culturally affiliated with the project vicinity. No responses were received.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages. Where checked below, the topic with a potentially significant impact will be addressed in an environmental impact report.

- | | | |
|--|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forest Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input type="checkbox"/> Geology / Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards / Hazardous Materials |
| <input type="checkbox"/> Hydrology / Water Quality | <input type="checkbox"/> Land Use / Planning | <input type="checkbox"/> Mineral Resources |
| <input type="checkbox"/> Noise | <input type="checkbox"/> Population / Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation | <input type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities / Service Systems | <input type="checkbox"/> Wildfire | <input type="checkbox"/> Mandatory Findings of Significance |
| | <input type="checkbox"/> None | <input checked="" type="checkbox"/> None with Mitigation Incorporated |

DETERMINATION (To be completed by the Lead Agency)

On the basis of this initial evaluation:

- I find that the proposed project could not have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.
- I find that although the proposed project **COULD** have a significant effect on the environment, there **WILL NOT** be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.
- I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.
- I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier **EIR** or **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier **EIR** or **NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Signature

December 10, 2021

Date

Kristine A. Zortman

Printed Name

Executive Director

Title

Port of Redwood City

Agency

3.1 AESTHETICS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I. Aesthetics.				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.1.1 Environmental Setting

The project site is located at the Port within Redwood City limits. The project site is fully developed and serves as an existing CEMEX aggregate and cement terminal facility. Land uses adjacent to, and nearby the project site include marine industrial businesses to the north and south-southwest and a business park along with surface parking lots to the east and associated sports fields to the south-southeast. The Redwood Creek channel is located to the west. The marine industrial businesses include CEMEX Aggregates immediately north and south of the CEMEX site, and further to the southwest is Sims Metal (scrap metal recycling), Pabco Gypsum, Central Concrete, Seaport Refining (refinement of petroleum-based fuels), and Clean Harbors (chemical wholesale/ manufacturing/ environmental and waste services). The business park to the east is the Pacific Shores Center across Seaport Boulevard. Surface automobile parking and landscape buffer that ranges 30 to 75 feet in width is situated between the project site and the nearest office buildings. Sports fields associated with the Pacific Shores Center are located approximately 1,000 feet from the project site. Cargill’s Industrial Salt Plant is located southeast of the site, across Seaport Boulevard. Marina uses include West Point Harbor approximately 2,500 feet to the east, and Redwood Landing Marina and the Redwood City Municipal Marina approximately 3,900 feet and 4,500 feet to the south, respectively.

SCENIC VISTAS

The Redwood City General Plan (2010) does not identify any designated public scenic vista points on the project site or oriented toward the project site. Vistas of the project site are primarily available from locations within the elevated southern and western hillside neighborhoods. From these elevated areas, one can view the San Francisco Bay and its associated baylands, sloughs, and marshes (including the natural habitat and utility facilities on Bair Island), and the urbanized San Francisco Bay Peninsula. However, views of the San Francisco Bay and its associated Baylands are not readily visible from publicly accessible locations near the project site due to existing intervening development, landscaping, and port-related infrastructure.

SCENIC HIGHWAYS

There are no eligible or officially designated State Scenic Highways within the project area. The nearest State-designated Scenic Highway, Interstate 280, is located approximately 5 miles west of the site (Caltrans 2021). There are no scenic highway-related goals or policies in the Redwood City General Plan that apply to development on the project site.

VISUAL CHARACTER AND QUALITY/ APPLICABLE ZONING AND OTHER REGULATIONS GOVERNING SCENIC QUALITY

The visual character of the Port includes natural and developed features. Natural features include open shorelines, waterways, and some vegetated marshlands. Developed features include industrial buildings and utilitarian structures such as steel and cement structures, liquid tanks, and piled materials. Smaller industrial structures and one- and two-story buildings closer to U.S. 101 interchange also add to this visual environment.

The project site is dominated by approximately 12 large cement storage silos clustered together and a large cement storage facility east adjacent. Additionally, concrete aggregates are piled and stored onsite and on the adjacent sites. A landscape buffer is located between frontage road to the east and south of the project site and the adjacent Pacific Shores Business Park.

The Redwood City General Plan Policy BE-2.6 require commercial and industrial uses to screen service facilities from public view and Policy BE-19.8 directs the City to require new and renovated industrial properties and structures to exhibit quality design and continued to be maintained. Program BE-22 (Land Use/Neighborhood Transitions) indicates that development in Waterfront Neighborhoods should strive to minimize potential conflicts with the Port area's industrial uses through design guidelines.

The nearest City-designated Corridors, which are designated as such to create a "sense of place" and enhance the visual character and quality of these urban corridors, is Veterans Boulevard located approximately 1.5 mile to the east of the project site (City of Redwood City 2010), and Broadway and Woodside Rd, which are adjacent to Veterans Boulevard.

LIGHT AND GLARE

Light generated by the existing on-site and adjacent uses contributes to the ambient lighting levels in the surrounding area. On-site lighting that is currently visible from surrounding land uses includes a variety of outdoor lighting consistent with the types of Industrial – Port related uses. The existing on-site lighting is primarily for safety, security, and vehicular and pedestrian movement. Existing daytime glare occurs from the light reflecting off the windows of existing on-site and cars parked in the parking lot.

The Redwood City General Plan (2010) contains Policy BE-1.9, which calls for the consideration of new shade, shadow, light, and glare effects from proposed development projects and comprehensive plans. The General Plan also includes Program BE-15 (Title 24 Lighting Zone), which requires all new development and redevelopment within Redwood City to comply with Title 24 Lighting Zone (LZ-3) requirements by encouraging the use of low mounted, downward casting exterior lighting for all new development in the city to reduce light trespass onto adjacent properties. The LZ-3 zone is defined by moderately high levels of ambient illumination.

3.1.2 Discussion

a) Have a substantial adverse effect on a scenic vista?

No impact. The project site is located in an industrial area and serves as an existing CEMEX aggregate and cement facility. The cement facility is completely developed and surrounded by existing development. Accordingly, views of San Francisco Bay and its associated baylands are not visible from publicly accessible locations near the project site. Moreover, no designated scenic vistas are present on the project site or oriented toward the project site. Additionally, decommissioning of the San Carlos site is limited to stopping all production of ready-mix concrete and no other

changes for the San Carlos facility are proposed at this time. Therefore, the proposed project would not adversely affect a scenic vista, and no impact would occur.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No impact. There are no eligible or officially designated State Scenic Highways within the project area. In addition, the Redwood City General Plan (2010) does not identify any City-designated scenic roadway corridors near the project site. Therefore, the proposed project would not substantially damage scenic resources within a state scenic highway and no impact would occur.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less-than-significant impact. The project site is in an industrialized area, is fully developed, and serves as an existing CEMEX aggregate and cement facility. The project would construct a ready-mix concrete batch plant and accessory structures on an approximately 4-acre portion of an existing aggregate and cement terminal facility. As proposed, the project is consistent with the Industrial – Port Related General Plan land use designation and GI (General Industrial) zoning district which allow for industrial development on the project site of the type and nature proposed as well as what matches in the project area.

In addition, enforcement of General Plan policies and Redwood City Zoning Ordinance which provides standards that direct visual character and quality of development would avoid conflict with regulations governing scenic quality. For example, General Plan Policy BE-2.6 directs the City to require industrial uses to screen service facilities from public view, and Policy BE-19.8 directs the City to require new or renovates industrial properties and structures exhibit quality design and continued to be maintained.

As proposed, the project components would all be generally screened from view along Seaport Boulevard and Pacific Shores Business Park by intervening structures and landscaping. While the batch plant itself, at approximately 100 feet tall, would be slightly taller than the existing cement storage facility (but not the cement silos), the angle of view from the ground level of the adjacent Pacific Shores Business Park would not permit a readily accessible view of the proposed batch plant (see Figure 2-12). The proposed concrete mixer truck parking location would be visible from the adjacent Pacific Shores Business Park, but existing landscaping would buffer the views and the proposed cement parking areas would be consistent with the existing visual character of the Port industrial center (see Figure 2-6, Photo 6). Therefore, the project would not conflict with applicable zoning and other regulations governing scenic quality, and a less-than-significant impact would occur.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less-than-significant impact. The aggregate and cement facility contains on-site lighting primarily for building safety, security, and vehicular movement. Existing daytime glare occurs from the light reflecting off the windows of existing on-site structures and cars parked in the parking lot.

The proposed project would add new sources of light at the proposed office, maintenance shop, associated parking areas, and at the plant for safety and security. In addition, aircraft lighting may be installed at the top of the plant if required by the Federal Aviation Administration. However, these additional light sources would be located in an aggregate and cement facility that already includes outdoor lighting and would not represent a substantial change from existing conditions. All lighting would be low mounted and cast downward to reduce light spill, ensuring all lighting would be consistent with General Plan Policy BE-1.9 and Program BE-15. Moreover, the project would not create any new substantial sources of glare such as from highly reflective surfaces. Therefore, the project would not create new sources of substantial light and glare that would adversely affect day or nighttime views. The impact would be less than significant.

3.2 AGRICULTURE AND FORESTRY RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>II. Agriculture and Forestry Resources.</p> <p>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997, as updated) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.</p> <p>Would the project:</p>				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.2.1 Environmental Setting

The proposed project site is located in an urban, developed area characterized by Port industrial land uses. The project site is designated as Industrial – Port Related, which allows for industrial operations involved in the loading/unloading, storing, recycling, and transferring of large quantities of dry, liquid, and neo-bulk cargoes; green energy production; rail facilities; as well as certain other maritime-oriented activities, including passenger vessels, ship repair or construction, and related ocean vessel support services. The project site is zoned GI (General Industrial). The GI district allows for sound industrial development wherein manufacturing and other industries can locate and operate away from the restricting influences on non-industrial uses while maintaining an environment free from offensive or objectionable noise, dust, odor, and other nuisances.

According to the California Farmland Mapping and Monitoring Program's Important Farmland Finder, the proposed project site is classified as urban and built-up land (California Department of Conservation (CDC) 2016). No areas designated as Important Farmland exist within or adjacent to the project site. Furthermore, no parcels under Williamson Act Contracts exist within or adjacent to the proposed project site. No agricultural land uses, forested areas, or areas designated as Forestland or Timber Production Zones (TPZ) are located on or within the vicinity of project areas (Redwood City 2021).

3.2.2 Discussion

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No impact. As stated under the environmental setting, the proposed project site is classified as urban and built-up land (CDC 2016). The existing land use designation is "Industrial – Port Related" and zoning is "General Industrial". No areas designated as Important Farmland exist within or adjacent to the project site. Therefore, the proposed project would not convert Important Farmland to non-agricultural uses, and there would be no impact.

b) Conflict with existing zoning for agricultural use or a Williamson Act contract?

No impact. The proposed project site is in an urbanized setting with the Port of Redwood City and supports Port-related industrial activities. The existing land use designation is "Industrial – Port Related" and zoning is "General Industrial". No parcels within the project site are under Williamson Act contracts. Therefore, the proposed project would not conflict with existing agricultural use or Williamson Act contract lands and there would be no impact.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No impact. The proposed project site is in an urbanized setting with the Port of Redwood City and supports Port-related industrial activities. The existing land use designation is "Industrial – Port Related" and zoning is "General Industrial". No forested areas or areas designated as Forestland or Timber Production Zones (TPZ) are located on or in vicinity of the project site (Redwood City 2021). As such, the proposed project would not conflict with existing zoning or result in the rezoning of areas zoned for forest or timber resources, result in the loss of forest land, or convert forest land to other uses. There would be no impact in this regard.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No impact. Refer to question c) above.

e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

No impact. The proposed project site is in an urbanized setting with the Port of Redwood City and supports Port-related industrial activities. Refer to questions a), b), and c) above.

3.3 AIR QUALITY

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>III. Air Quality.</p> <p>Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied on to make the following determinations.</p> <p>Are significance criteria established by the applicable air district available to rely on for significance determinations? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Would the project:</p>				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Criteria air pollutant emissions estimates and calculations are available in the *Air Quality and Greenhouse Gas Emissions Study* (Air Quality Study) for this project, available in Appendix A.

3.3.1 Environmental Setting

CRITERIA AIR POLLUTANTS

The U.S. Environmental Protection Agency has established National Ambient Air Quality Standards (NAAQS) for six criteria air pollutants, which are known to be harmful to human health and the environment: carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter (which is categorized into particulate matter less than or equal to 10 microns in diameter [PM₁₀] and particulate matter less than or equal to 2.5 microns in diameter [PM_{2.5}]), and sulfur dioxide. The State of California has established the California ambient air quality standards (CAAQS) for these six pollutants, as well as for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. NAAQS and CAAQS were established to protect the public from adverse health impacts caused by exposure to air pollution. A brief description of the criteria air pollutants and their effects on health is provided in Table 3.3-1.

Table 3.3-1 Sources and Health Effects of Criteria Air Pollutants

Pollutant	Sources	Acute ¹ Health Effects	Chronic ² Health Effects
Ozone	secondary pollutant resulting from reaction of ROG and NO _x in presence of sunlight. ROG emissions result from incomplete combustion and evaporation of chemical solvents and fuels; NO _x results from the combustion of fuels	increased respiration and pulmonary resistance; cough, pain, shortness of breath, lung inflammation	permeability of respiratory epithelia, possibility of permanent lung impairment
Carbon monoxide (CO)	incomplete combustion of fuels; motor vehicle exhaust	headache, dizziness, fatigue, nausea, vomiting, death	permanent heart and brain damage
Nitrogen dioxide (NO ₂)	combustion devices; e.g., boilers, gas turbines, and mobile and stationary reciprocating internal combustion engines	coughing, difficulty breathing, vomiting, headache, eye irritation, chemical pneumonitis or pulmonary edema; breathing abnormalities, cough, cyanosis, chest pain, rapid heartbeat, death	chronic bronchitis, decreased lung function
Sulfur dioxide (SO ₂)	coal and oil combustion, steel mills, refineries, and pulp and paper mills	irritation of upper respiratory tract, increased asthma symptoms	insufficient evidence linking SO ₂ exposure to chronic health impacts
Respirable particulate matter (PM ₁₀), Fine particulate matter (PM _{2.5})	fugitive dust, soot, smoke, mobile and stationary sources, construction, fires and natural windblown dust, and formation in the atmosphere by condensation and/or transformation of SO ₂ and ROG	breathing and respiratory symptoms, aggravation of existing respiratory and cardiovascular diseases, premature death	alterations to the immune system, carcinogenesis
Lead	metal processing	reproductive/ developmental effects (fetuses and children)	numerous effects including neurological, endocrine, and cardiovascular effects

¹ "Acute" refers to effects of short-term exposures to criteria air pollutants, usually at fairly high concentrations.

² "Chronic" refers to effects of long-term exposures to criteria air pollutants, usually at lower, ambient concentrations.

Notes: NO_x = oxides of nitrogen; ROG = reactive organic gases.

Sources: EPA 2018

The project site is located in the San Francisco Bay Area Air Basin (SFBAAB). The SFBAAB also includes all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara Counties; the western portion of Solano County and the southern portion of Sonoma County. San Mateo County is currently designated as nonattainment for both the federal and state ozone standards, the federal and state PM_{2.5} standard, and the state PM₁₀ standard (CARB 2018, 2019a). The region is designated as in attainment or being unclassifiable for all other NAAQS and CAAQS (BAAQMD 2017a).

TOXIC AIR CONTAMINANTS

According to the *California Almanac of Emissions and Air Quality* (CARB 2013), the majority of the estimated health risks from toxic air contaminants (TACs) can be attributed to relatively few compounds, the most important being diesel particulate matter (diesel PM). Diesel PM differs from other TACs in that it is not a single substance, but rather a complex mixture of hundreds of substances. Although diesel PM is emitted by diesel-fueled internal combustion engines, the composition of the emissions varies depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emissions control system is being used. In addition to diesel PM, the TACs for which data are available that pose the greatest existing ambient risk in California are benzene, 1,3-butadiene, acetaldehyde, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, and perchloroethylene.

ODORS

Odors are generally regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache). Odor sources of concern include wastewater treatment plants, landfill and composting facilities, petroleum refineries, chemical manufacturing plants, painting/coating operations, and food processing facilities.

SENSITIVE RECEPTORS

Sensitive receptors (related to air quality emissions) are generally considered to include those land uses where exposure to pollutants could result in health-related risks to sensitive individuals, such as children or the elderly. Residential dwellings, medical facilities, and places where people recreate or congregate outdoors for extended periods of time such as parks or schools are of primary concern because of the potential for increased and prolonged exposure of individuals to pollutants. The nearest sensitive receptors to the project site are outdoor baseball fields, swimming pools, and park areas located between 650 to 1,200 feet south of the project site. Recreational vessel liveboards, considered residential uses for purposes of the impact analysis, are located in the Westpoint Harbor approximately 2,500 feet southeast of the project and at the Redwood City Municipal Marina approximately 4,500 feet from the project. The next closest sensitive receptors are residential land uses located 1.3 miles southwest of the project site at Blu Harbor and Bair Island and a hospital, the Kaiser Permanente Redwood City Medical Center, located two miles southwest of the project site.

AIR QUALITY PLANNING

Bay Area Air Quality Management District (BAAQMD) attains and maintains air quality conditions in the San Francisco Bay Area Air Basin (SFBAAB), including San Mateo County, through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues. The clean air strategy of BAAQMD includes the preparation of plans and programs for the attainment of the NAAQS and CAAQS, adoption and enforcement of rules and regulations, and issuance of permits for stationary sources. BAAQMD also inspects stationary sources, responds to citizen complaints, monitors ambient air quality and meteorological conditions, and implements other programs and regulations required by the federal Clean Air Act (CAA) and California Clean Air Act (CCAA).

The CCAA requires that all local air districts in the state endeavor to achieve and maintain the CAAQS in their region by the earliest practical date. The CCAA specifies that local air districts should focus attention on reducing the emissions from transportation and areawide emission sources, and provides districts with the authority to regulate indirect sources. To achieve the CAAQS, BAAQMD prepares and updates air quality plans on a regular basis. The air quality plans published by BAAQMD and other local air districts in the state are incorporated into California's State Implementation Plan (SIP) Strategy and meet CAA requirements.

Although ozone levels in the Bay Area have declined for several years, the SFBAAB is still classified as a non-attainment area for the state and federal ozone standards (BAAQMD 2017b). Under the CCAA, this classification requires that BAAQMD update its Clean Air Plan every three years to reflect progress in meeting the NAAQS and CAAQS and to incorporate new information regarding the feasibility of control measures and new emission inventory data. The Bay Area's record of progress in implementing previous measures must also be reviewed. BAAQMD prepared these plans in cooperation with the Metropolitan Transportation Commission and the Association of Bay Area Governments.

On April 19, 2017, BAAQMD adopted an updated Clean Air Plan, titled the *2017 Clean Air Plan: Spare the Air, Cool the Climate* (BAAQMD 2017b). Like the 2010 Clean Air Plan, the 2017 Clean Air Plan provides a regional strategy to protect public health and protect the climate. The 2017 Clean Air Plan updates the most recent Bay Area ozone plan, the 2010 Clean Air Plan, pursuant to air quality planning requirements defined in the California Health & Safety Code. To fulfill state ozone planning requirements, the 2017 control strategy includes all feasible measures to reduce

emissions of ozone precursors—reactive organic gases (ROG) and nitrogen oxides (NO_x)—and reduce transport of ozone and its precursors to neighboring air basins. In addition, the 2017 Clean Air Plan builds on the BAAQMD's efforts to reduce emissions of fine particulate matter and toxic air contaminants.

Thresholds of Significance

The CEQA Air Quality Guidelines published by BAAQMD in May 2017 includes guidance for determining thresholds of significance for air pollutants. These thresholds are based on the air basin's status in meeting the ambient air quality standards under CAAQS and NAAQS which were established to protect the public from adverse health impacts caused by exposure to air pollution, as mentioned previously. Use of this guidance by lead CEQA agencies is discretionary and is provided by BAAQMD "for information purposes only to assist local agencies" which "may inform environmental review for development projects in the Bay Area" (BAAQMD 2017c). While use of these thresholds are not required by regulation, they provide the most current evidence upon which to base significance conclusions related to air quality and are used herein as the basis for determining significant impacts.

The following thresholds of significance are used to determine if an air quality impact would be significant (BAAQMD 2017c). The project would result in a significant impact to air quality if it would:

- ▶ cause daily average construction-generated criteria air pollutant or precursor emissions to exceed 54 pounds per day (lb/day) of ROG, 54 lb/day of NO_x, 82 lb/day of PM₁₀ exhaust, or 54 lb/day of PM_{2.5} exhaust, or substantially contribute to emissions concentrations (e.g., PM₁₀, PM_{2.5}) that exceed the applicable NAAQS or CAAQS;
- ▶ cause daily long-term regional criteria air pollutant or precursor emissions to exceed 54 lb/day of ROG, 54 lb/day of NO_x, 82 lb/day of PM₁₀ exhaust, or 54 lb/day of PM_{2.5} exhaust; or substantially contribute to emissions concentrations (e.g. PM₁₀, PM_{2.5}) that exceed the applicable NAAQS or CAAQS.
- ▶ not implement BAAQMD's Basic Construction Mitigation Measures for dust emissions;
- ▶ result in, or contribute to, concentrations of CO that exceed 9.0 parts per million (ppm) over an 8-hour average or 20.0 ppm over a 1-hour average;
- ▶ generate TAC emissions that would expose sensitive receptors to an incremental increase in cancer risk that exceeds 10 in one million and/or a chronic or acute hazard index of 1; or
- ▶ create objectionable odors affecting a substantial number of people (i.e., one confirmed complaint per year averaged over 3 years).

The BAAQMD recommends that permitted stationary source projects that are not identified on the air district's "Permitted Stationary Sources Risk and Hazards GIS map" (risk map) be evaluated through an advanced screening process to determine whether the project would require additional site-specific health risk assessments or be considered to have a less-than-significant impact for health risks and hazards (BAAQMD 2020a). Although the San Carlos facility is an existing permitted stationary source and is identified in BAAQMD's risk map, the proposed project is larger and has not yet been evaluated by BAAQMD (BAAQMD 2021a). The advanced screening process involves evaluating the project through BAAQMD's Health Risk Calculator with Distance Multipliers (BAAQMD 2020b). This calculator estimates a screen-level cancer risk and a non-cancer health hazard index for a given distance from the project based on daily TAC emission rates from the project.

3.3.2 Discussion

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less-than-significant impact. The emission inventories used to develop a region's air quality attainment plans are based primarily on projected population growth and vehicle miles traveled (VMT) for the region, which are based, in part, on the planned growth identified in regional and community plans. Therefore, projects that would result in increases in population or employment growth beyond that projected in regional or community plans could result in increases in VMT above that planned in the attainment plan, further resulting in mobile source emissions that could conflict with a region's air quality planning efforts. Increases in VMT beyond that projected in area plans generally

would be considered to have a significant adverse incremental effect on the region's ability to attain or maintain state and federal ambient air quality standards.

The project would not result in a net increase in regional population and would not result in a significant increase in employment. The project would replace CEMEX's two existing concrete ready-mix plants in San Carlos with a new plant in the Port. The project would employ 19 workers, which is four more than the 15 workers currently employed at the San Carlos plants.

Therefore, implementation of the proposed project would not conflict with or obstruct implementation of any air quality planning efforts. As a result, this impact would be less than significant.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Less-than-significant impact. The proposed project would result in emissions of criteria air pollutants and precursors, including ROG, NO_x, PM₁₀, and PM_{2.5} associated with construction (short-term) and operation (long term). Emissions estimates and a description of the calculation methodology are detailed in the *Air Quality and Greenhouse Gas Emissions Study* (Air Quality Study) for this project, available in Appendix A. As detailed below, impacts from short-term construction emissions and long-term operational emissions would be less than significant.

Short-Term Construction Emissions

Table 3.3-2 summarizes the modeled construction-related emissions of criteria air pollutants and ozone precursors for the proposed project. The significance of construction-related air quality impacts was determined by comparing these modeling results with applicable significance thresholds.

Table 3.3-2 Maximum Daily Emissions of Criteria Air Pollutants and Precursors Associated with Construction

Construction Phase	Maximum Daily Emissions (lb/day)			
	ROG	NO _x	PM ₁₀ ¹	PM _{2.5} ¹
1. Remove existing equipment	2.2	24.3	1.0	1.0
2. Remedial grading for compaction	2.6	34.7	1.5	1.5
3. Install foundation piles	2.4	24.8	1.2	1.1
4. Install plant and ancillary features	2.8	30.2	1.3	1.3
5. Install shop building	1.6	16.1	0.7	0.7
Maximum Daily Construction Emissions	2.8	34.7	1.5	1.5
BAAQMD Threshold of Significance	54	54	82	54
Exceeds Thresholds?	No	No	No	No

Notes: lb/day = pounds per day; NO_x = oxides of nitrogen; PM₁₀ = respirable particulate matter; PM_{2.5} = fine particulate matter; ROG = reactive organic gases.

¹ PM₁₀ and PM_{2.5} categories show exhaust emissions sources only.

See Appendix A for detailed input parameters and modeling results.

Source: Modeling performed by Compass Land Group in 2021

As shown in Table 3.3-2, construction of the proposed project would result in maximum daily emissions of approximately 2.8 lb/day of ROG, 34.7 lb/day of NO_x, 1.5 lb/day of PM₁₀ exhaust and 1.5 lb/day of PM_{2.5} exhaust starting in 2021. These emissions estimates would be below BAAQMD-adopted thresholds. The project would also apply all feasible dust control measures recommended by BAAQMD to reduce fugitive dust generated during construction, such as watering disturbed surfaces twice a day and limiting vehicle speeds to 15 miles per hour on unpaved roads. Consequently, the project would not result in short-term construction-related emissions that violate any air quality standard or contribute substantially to an existing or projected air quality violation. Therefore, this impact is considered less than significant.

Long-Term Operational Emissions

Table 3.3-3 summarizes the modeled operational emissions of criteria air pollutants and ozone precursors for the proposed project. The significance of operations-related air quality impacts was determined by comparing these modeling results with applicable significance thresholds.

Table 3.3-3 Maximum Daily Emissions of Criteria Air Pollutants and Precursors Associated with Operations

Emissions Category	Maximum Daily Emissions (lb/day)			
	ROG	NO _x	PM ₁₀	PM _{2.5}
Proposed Project				
Ready Mix Concrete Plant Operations (Plant Emissions and Fugitive Dust Emissions)	0.0	0.0	86.5	19.3
Mobile Source Emissions ¹	2.9	74.1	1.0	0.9
Project Emissions Subtotal	2.9	74.1	87.5	20.2
<i>Project Emissions Subtotal (Exhaust only)</i> ²	2.9	74.1	1.0	0.9
Existing San Carlos Facility (Baseline)				
Ready Mix Concrete Plant Operations (Plant Emissions and Fugitive Dust Emissions)	0.0	0.0	54.7	12.1
Mobile Source Emissions ¹	3.9	85.0	1.5	1.4
Baseline Emissions Subtotal	3.9	85.0	56.2	13.5
<i>Baseline Emissions Subtotal (Exhaust only)</i> ²	3.9	85.0	1.5	1.4
Net Change in Operational Emissions	-1.0	-10.9	31.3	6.8
<i>Net Change in Operational Emissions (Exhaust only)</i>	-1.0	-10.9	-0.5	-0.5
BAAQMD Threshold of Significance ³	54	54	82	54
Exceeds Thresholds?	No	No	No	No

Notes: lb/day = pounds per day; NO_x = oxides of nitrogen; PM₁₀ = respirable particulate matter; PM_{2.5} = fine particulate matter; ROG = reactive organic gases; BAAQMD = Bay Area Air Quality Management District

¹ Includes only exhaust emissions from off-road equipment and on-road vehicles

² PM₁₀ and PM_{2.5} categories show exhaust emissions sources only.

³ BAAQMD thresholds for PM only apply to exhaust emissions and does not include fugitive dust.

See Appendix A for detailed input parameters and modeling results.

Source: Modeling performed by Compass Land Group in 2021

Based on the modeling conducted, operation of the proposed project would result in maximum daily emissions of approximately 2.9 lb/day of ROG, 74.1 lb/day of NO_x, 1.0 lb/day of PM₁₀ exhaust and 0.9 lb/day of PM_{2.5} exhaust starting in 2022. When accounting for the decommissioning of the San Carlos facility, which would be done following completion of project construction, the project would result in a net reduction in emissions of 1.0 lb/day of ROG, 10.9 lb/day of NO_x, 0.5 lb/day of PM₁₀ exhaust, and 0.5 lb/day of PM_{2.5} exhaust. Although the project would reduce the trip distances relative to the San Carlos facility by eliminating trips between the Port and San Carlos, the project would also process up to approximately three times more concrete, leading to a general net increase in fugitive PM and ROG emissions from on-site plant operations, especially when comparing across emissions from plant operations (e.g., dust from concrete processing). The proposed project would likely have the same air permit conditions as the San Carlos facility, which require the facility to abate emissions through such limits as not operating sources in such a way that visible particulate emissions exceed Ringelmann Number 1.0 (or equivalent opacity), limiting concrete production up to a specified maximum tons per hour (as determined by BAAQMD), and using water spray sufficiently and with chemical supplicant, if necessary to meet the Ringelmann limitation (BAAQMD 2021b). Even without the permit conditions, the net ROG, NO_x, and exhaust PM emissions would still be below BAAQMD thresholds, which were developed to protect public health through achieving the state and national ambient air quality standards. Consequently, the project would not result in long-term operational emissions that violate any air quality standard or contribute substantially to an existing or projected air quality violation. Therefore, this impact is considered less than significant.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less-than-significant impact. The nearest sensitive receptors to the project is an outdoor athletic facility 650 feet south of the project. Recreational vessel liveaboards, considered residential uses for purposes of the impact analysis, are located in the Westpoint Harbor approximately 2,500 feet southeast of the project and at the Redwood City Municipal Marina approximately 4,500 feet from the project. Residential uses are located northwest and southwest of the project, but are between 1.3-2.2 miles from the project site. Construction and operation of the project would result in short-term and long-term emissions that could affect nearby sensitive receptors. However, as discussed below, impacts from short-term construction and long-term operation would be less than significant.

Short-Term Construction

Construction-related activities would result in temporary, short-term project-generated emissions of diesel PM from the exhaust of off-road, heavy-duty diesel equipment for site preparation (e.g., grading); underground work; equipment installation; and other miscellaneous activities. Particulate exhaust emissions from diesel-fueled engines (i.e., diesel PM) was identified as a TAC by the California Air Resources Board (CARB) in 1998. The potential cancer risk from the inhalation of diesel PM, as discussed below, outweighs the potential for all other health impacts (CARB 2003), so diesel PM is the focus of this discussion. Based on the emission modeling conducted and presented in Appendix A and shown in Table 3.3-3, maximum daily emissions of PM_{2.5}, considered a surrogate for diesel PM, would not exceed 1.5 lb /day during construction.

Additionally, the dose to which receptors are exposed is the primary factor used to determine health risk (i.e., potential exposure to TAC emission levels that exceed applicable standards). Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for any exposed receptor. Thus, the risks estimated for an exposed individual are higher if a fixed exposure occurs over a longer period of time. Project construction is anticipated to last five months. Consequently, it is important to consider that the use of off-road heavy-duty diesel equipment would be limited to the five-month construction period. Also, studies show that diesel PM is highly dispersive (e.g., decrease of 70 percent at 500 feet from the source) (Zhu et al. 2002).

Residential receptors are generally of primary concern when discussing TAC exposure, as they would generally be exposed to project generated TACs for extended periods of time. Provided that the nearest residences are located well over 1,000 feet (i.e., BAAQMD screening distance for TAC sources), TAC exposure from construction activities would not be considered substantial at these receptors. Further, the nearby Sunset Park Athletic Complex would not be considered a sensitive receptor for TAC exposure as users of the park typically spend only a few hours at a time there. Thus, given the distance (i.e., 650 feet) from the project site and the minimal exposure time any one user at the park could potentially be exposed to TACs, TAC exposure at this land use would not be substantial.

Considering the highly dispersive properties of diesel PM, the relatively low mass of diesel PM emissions that would be generated during project construction, and the relatively short duration of construction activities; construction-related TAC emissions would not expose sensitive receptors to an incremental increase in cancer risk that exceeds 10 in one million or a hazard index greater than 1.0.

As a result, the project would not exceed BAAQMD thresholds for risks and hazards to receptors associated with new emissions sources. Additionally, the project would not exceed applicable thresholds with respect to short-term construction emissions, as discussed under b). Thus, the project would not expose sensitive receptors to substantial pollutant concentrations during construction. This impact would be less than significant.

Long-Term Operation

The project would be a permitted stationary source under BAAQMD's jurisdiction. Under existing conditions, the current San Carlos facility generates 9.2 tons of PM₁₀ per year and 6.2 tons of PM_{2.5} per year. Of these particulate matter, 0.04 lb per year are generated as TACs, which consists of 64 percent manganese and 23 percent nickel (CARB 2019b). As of 2019, the San Carlos facility does not exceed BAAQMD's prioritization threshold. Notably, these emissions exclude diesel PM emissions from diesel trucks.

The proposed project would process up to approximately three times as much concrete as the existing San Carlos plant (503,000 tons per year vs. 164,427 tons per year). Assuming that the TAC emissions generated from plant operations are proportional to the production capacity of the plant, the TAC emissions from the proposed project are estimated in Table 3.3-4 along with diesel PM estimates from Table 3.3-3. Based on these emissions estimates, Table 3.3-4 also estimates the cancer and chronic hazard risks associated with the project's TAC emissions and the distance to the nearest receptor using BAAQMD's Risk and Hazards Emissions Screening Calculator, Version 4.0 Beta.

Table 3.3-4 Toxic Air Contaminant Emissions from Project Operations

Pollutant	San Carlos ¹ (pounds per year)	Proposed Project ² (pounds per year)	Proposed Project Cancer Risk at 650 ft (200 m) ³ (Chances in a Million)	Proposed Project Chronic Hazard at 650 ft (200 m) ³ (Risk Hazard Index)
Arsenic	1.96E-03	5.98E-03	1.17	0.07
Beryllium	1.12E-04	3.44E-04	0.00	<0.01
Cadmium	1.12E-04	3.44E-04	0.01	<0.01
Cromium Hexavalent	7.34E-04	2.25E-03	1.37	<0.01
Lead	2.50E-03	7.64E-03	0.01	<0.01
Manganese	2.70E-02	8.27E-02	N/A	<0.01
Nickel	9.66E-03	2.96E-02	0.03	<0.01
Diesel Particulate Matter	N/A	5.33E-01	0.64	<0.01
Total	4.21E-02	6.62E-01	3.22	0.07
BAAQMD Health Risk Thresholds			10	1
Exceed Threshold?			No	No

Notes: ft = feet; m = meter; BAAQMD = Bay Area Air Quality Management District; TAC = toxic air contaminant; CARB = California Air Resources Board; PM = particulate matter

¹ From facility TAC reports from CARB for the Cemex Construction Materials Pacific facility at 1026 Bransten Road, San Carlos (CARB 2019b). Diesel PM emissions were excluded from these reports.

² Except for diesel PM emissions, TACs from the proposed project were scaled by concrete tonnage between the proposed project (503,000 tons per year) and the San Carlos facility (164,427 tons per year). Diesel PM emissions were based on estimated diesel exhaust emissions from Table 3.3-3.

³ As modeled in BAAQMD's Risk and Hazards Emissions Screening Calculator (Beta Version) based on the closest sensitive receptors at 650 ft from the project site. (BAAQMD 2020b)

See Appendix A for detailed input parameters and modeling results.

Source: Modeling performed by Ascent Environmental in 2021

As shown in Table 3.3-4, the BAAQMD's Risk and Hazards Emissions Screening Calculator estimates that the project would not exceed a cancer risk of 3.2 in a million or a chronic hazard index of 0.07 at the nearest sensitive receptor, located 650 feet from the project fence line. The screening calculator has more conservative assumptions (e.g., longer exposure duration, worst case meteorology) than if a more detailed health risk assessment were performed and, consequently, results from the screening calculator are conservatively high and actual risks may be lower (BAAQMD 2020a). Therefore, the project's operation would not expose sensitive receptors to an incremental increase in cancer risk that exceeds 10 in one million or a hazard index greater than 1.0.

As a result, the project would not exceed applicable thresholds for risks and hazards to receptors associated with new emissions sources. Thus, the project would not expose sensitive receptors to substantial pollutant concentrations during operation. This impact would be less than significant.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less-than-significant impact. The occurrence and severity of odor impacts depend on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the presence of sensitive receptors. Although offensive odors rarely cause physical harm, they may still be very unpleasant, leading to considerable distress and often generating citizen complaints to local governments and regulatory agencies.

Project construction would generate temporary odors from diesel exhaust emission associated with off-road and on-road equipment. These emissions would generally dissipate rapidly into the atmosphere as distance increases from the sources. BAAQMD has not adopted construction-related thresholds of significance for odors. BAAQMD's operational threshold of significance is five confirmed odor complaints per year averaged over three years.

Due to the existing San Carlos plant operations, operation of the project expansion would not place receptors substantially closer to existing sources of odors nor introduce new types of odors, but would relocate plant operations further from receptors. The existing San Carlos plant is located 445 feet from the nearest sensitive receptor, residences located northwest of the facility. The proposed project would be located more than 650 feet from the nearest sensitive receptor, an outdoor baseball field and park area. Additionally, according to the Air Quality Study, the existing San Carlos facility receive no odor complaints between January 2016 and January 2021 (Appendix A). Additionally, the project would not result in the installation or operation of land use types that would typically generate odors.

Implementation of the project would not involve the construction or operation of any major odor sources. Thus, the proposed project would not be anticipated to result in the exposure of sensitive receptors to objectionable odors. As a result, this impact would be less than significant.

3.4 BIOLOGICAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. Biological Resources.				
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.4.1 Environmental Setting

The setting and analysis within this section are based on the Biological Resource Analysis prepared for the project (Appendix B), and a reconnaissance survey of the project area on July 23, 2021 by Ascent biologist, Ted Thayer. The reconnaissance survey was conducted to identify and document sensitive resources (e.g., aquatic habitat, sensitive natural communities) and to assess the suitability of habitat in the project area vicinity for special-status plant and wildlife species. Vegetation communities were identified and incidental wildlife observations were recorded.

The approximately 4-acre project area is within CEMEX’s existing aggregate and cement marine terminals, where uses include aggregate processing and stockpiling, aggregate and cement material load-out and sales, construction materials recycling, and associated heavy truck traffic. Existing ancillary support structures include conveyors, crushers, storage silos, groundwater wells, rail lines, miscellaneous storage, offices, parking, and other associated

infrastructure. The project area is bounded on the west by Redwood Creek and to the north by Westpoint Slough. The shoreline surrounding the project area to the north and west is made up of riprap with non-native vegetation and isolated pockets of pickleweed. To the east of the project area is a business campus where the shoreline is formed by riprap and is sparsely vegetated. Elevations throughout the Study Area range from approximately three feet below mean sea level to approximately 10 feet above mean sea level.

The project area itself consists of mostly developed area where existing operations are conducted (4.49 acres). Small patches of ruderal vegetation (0.29 acre), dominated by non-native grasses (e.g., smilgrass [*Stipa miliacea*]) and broad-leaved plants (e.g., sweet fennel [*Foeniculum vulgare*]) and few native forbs. A small drainage ditch is located along the eastern portion of the project area bounded by ruderal vegetation and containing pickleweed (*Sarcocornia pacifica*) (0.09 acre) (Figure 3.4-1) (Appendix B).

SPECIAL-STATUS SPECIES

Special-status species include botanical species (plants, lichen, and fungi) and animals that are legally protected or otherwise considered sensitive by federal, state, or local resource agencies and conservation organizations. In this document, special-status species are defined as botanical species and animals in the following categories.

- ▶ Listed or proposed for listing as threatened or endangered under the federal Endangered Species Act (ESA).
- ▶ Designated as a candidate for listing as threatened or endangered under ESA.
- ▶ Listed, proposed for listing, or a candidate for listing as threatened or endangered under the California Endangered Species Act (CESA).
- ▶ Listed as fully protected under the California Fish and Game Code.
- ▶ Animals identified by California Department of Fish and Wildlife (CDFW) as species of special concern.
- ▶ Plants considered by CDFW to be “rare, threatened or endangered in California” (California Rare Plant Ranks of 1A, presumed extinct in California; 1B, considered rare or endangered in California and elsewhere; and 2, considered rare or endangered in California but more common elsewhere). The California Rare Plant Ranks correspond with and replace former California Native Plant Society listings. While these rankings do not afford the same type of legal protection as ESA or CESA, the uniqueness of these species requires special consideration under the CEQA.
- ▶ Considered a locally significant species, that is, a species that is not rare from a statewide perspective but is rare or uncommon in a local context such as within a county or region (CEQA Section 15125 [c]) or is so designated in local or regional plans, policies, or ordinances (State CEQA Guidelines, Appendix G).
- ▶ Otherwise meet the definition of rare or endangered under CEQA Sections 15380(b) and (d).

Special Status Animals

Of the 27 animal species in Table 3 of Appendix B, 22 meet the definition of special-status animal species and occur within the Redwood Point, San Leandro, Hayward, Newark, Mountain View, Palo Alto, Woodside, and Hunter’s Point U.S. Geological Survey (USGS) 7.5-minute quadrangles. Based on the habitat types present in the project area, existing disturbance, habitat connectivity, and other factors; there are 11 special-status animals that may occur in, or directly adjacent to, the project area.

Longfin Smelt

Longfin smelt (*Spirinchus thaleichthys*) is known to occur within the San Francisco Bay Estuary, and Redwood Creek and Westpoint Slough provide potentially suitable habitat for this species (Appendix B).



Source: Image produced and provided by Biological Resources Services LLC& mapping by Compass Land Group in 2020

Figure 3.4-1 Habitats within the Project Area

Special-Status Raptors

Four special-status raptors may occur in the project area, short-eared owl (*Asio flammeus*), northern harrier (*Circus hudsonius*), white-tailed kite (*Elanus leucurus*), and American peregrine falcon (*Falco peregrinus anatum*) (Appendix B). These special-status raptors may occasionally forage within the project area; however, foraging habitat is limited and human disturbance in the area is high.

Potential nesting habitat for American peregrine falcon is present on the existing cement storage facility adjacent to the project area; however, no other nesting habitat for other special-status raptors is present due to a lack of suitable habitat and ongoing disturbance from the existing use of the project area. It is unlikely that American peregrine falcons would nest on the existing cement storage facility due to the existing use of the facility; however, the species is known to nest in urban environments on buildings and other structures.

Other Special-Status Birds

Five other special-status bird species may occur in the project area. Alameda song sparrow (*Melospiza melodia pusillula*), California black rail (*Laterallus jamaicensis coturniculus*), California Ridgway's rail (*Rallus obsoletus obsoletus*), California least tern (*Sternula antillarum browni*), and western snowy plover (*Charadrius alexandrinus nivosus*) (Appendix B). The shoreline habitat adjacent to the project area, ruderal vegetation, and pickleweed within the ditch within the eastern portion of the project area (Figure 3.4-1) may provide limited foraging habitat for special-status species.

The ditch contains pickleweed mat habitat that would be suitable for Alameda song sparrow, California Ridgway's rail, and California Black Rail nesting; however, the habitat is limited to within the narrow ditch, and existing disturbance in the project area makes nesting within the ditch unlikely.

Pallid Bat

The project area does not contain suitable roosting habitat for pallid Bat (*Antrozous pallidus*); however, the existing buildings adjacent to the project area may contain suitable cracks, crevices, and other structures that could be used for roosting.

Special-Status Botanical Species

There are 18 special-status botanical species occurring within the Redwood Point, San Leandro, Hayward, Newark, Mountain View, Palo Alto, Woodside, and Hunter's Point USGS 7.5' quadrangles. Based on surveys of the project area and the habitat types present (i.e., developed, ruderal, and pickleweed mats), no special-status botanical species are likely to occur within the project area (Appendix B).

SENSITIVE NATURAL COMMUNITIES AND HABITATS

Sensitive natural communities and habitats include those that are of special concern to resource agencies (e.g., CDFW) or that are afforded specific consideration through CEQA or other regulations. Sensitive natural communities are plant communities that have limited distribution statewide or within a region and that may be vulnerable to the environmental impacts of projects. The pickleweed mat found within the drainage ditch on the eastern portion of the project area (shown on Figure 3.4-1) is a California Sensitive Natural Community (CDFW 2020). There are no other sensitive natural communities or habitats within the project area.

3.4.2 Discussion

- a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?

Common Nesting Raptors and Other Common Nesting Birds

Less-than-significant with mitigation incorporated. Common nesting raptors and other common nesting birds do not meet the definition of special-status wildlife, but are protected by the Migratory Bird Treaty Act, and Section 3503 and Section 3503.5 of the California Fish and Game Code. The buildings, trees, and other vegetation within and directly adjacent to the project area provide potential nesting habitat for common raptors and other common nesting birds, such as those previously observed within the project area (e.g., black phoebe [*Sayornis nigricans*] and white-crowned sparrow [*Zonotrichia leucophrys*]) (Appendix B). If construction occurs during the nesting season (approximately February 1 to August 31), removal of ruderal vegetation within the project area may destroy the nests of common nesting birds, and construction activities may also result in the disturbance of common raptor and other common bird nests on adjacent buildings and trees. The destruction of nests or the disturbance of nests would potentially result in the loss of eggs and young, which could be a substantial effect on the local populations of these species. The implementation of Mitigation Measure BIO-1 would avoid destruction and disturbance of common raptor and other common bird nests that may occur within or adjacent to the project area. Therefore, impacts to common nesting raptors and other common nesting birds from project implementation would be less-than-significant with mitigation incorporated.

Special Status Animals

Longfin Smelt

The project would not occur within Redwood Creek and Westpoint Slough; however, if contaminated runoff from the project area caused by project construction or operations reaches these waters it could have a potentially adverse effect on the species. The project would implement a storm water pollution prevention plan (SWPPP) and associated best management practices (BMPs) (refer to Section 2.5.5, "Best Management Features" and 3.10, "Hydrology and Water Quality" of this environmental checklist) that would minimize or prevent contaminated runoff reaching Redwood Creek and Westpoint Slough. With the implementation of the SWPPP and associated BMPs, the project would have a less-than-significant impact on longfin smelt.

Special-Status Raptors

As discussed under the environmental setting, short-eared owl, northern harrier, white-tailed kite, and American peregrine falcon may occasionally forage within the project area; however, foraging habitat is limited and human disturbance in the area is high. The proposed project would occur within the existing developed area and remove only ruderal vegetation. More suitable foraging habitat is relatively abundant in the vicinity of the project area when compared to the small area of ruderal vegetation that would be removed by the project; therefore, the project would not result in a substantial reduction in foraging habitat for special-status raptors.

Moreover, if American peregrine falcons are nesting within the existing cement storage facility at the time of construction of the proposed shop, storage, conveyor, and plant (refer to Figure 2-3), the additional noise and human presence resulting from construction could result in disturbance of the nest and loss of eggs or young. The loss of eggs or young American peregrine falcon would result in a substantial adverse effect on the local and regional population of the species, and Mitigation Measure BIO-1 would be required to avoid disturbance of American peregrine falcon nests. Impacts to American peregrine falcon from project implementation would be reduced to less-than-significant with mitigation incorporated.

Other Special-Status Birds

As discussed under the environmental setting, Alameda song sparrow, California black rail, California Ridgway's rail, California least tern, and western snowy plover (Appendix B) may occur at the project site due to limited foraging habitat, including at the shoreline habitat adjacent to the project area, within ruderal vegetation, and within pickleweed present at the ditch at the eastern portion of the project area (Figure 3.4-1). The project would not result in direct disturbance of the shoreline or ditch and suitable foraging habitat is relatively abundant in the vicinity of the project area when compared to the small area of ruderal vegetation that would be removed by the project. Therefore, the project would not result in the substantial removal of foraging habitat for these species. Suitable nesting habitat for these special-status bird species is not present within the project site. The ditch contains pickleweed mat habitat that would be suitable for Alameda song sparrow, California Ridgway's rail, and California Black Rail nesting; however, the habitat is limited to within the narrow ditch, and existing disturbance in the project area makes nesting within the ditch unlikely. The project would not result in removal of substantial foraging habitat, and is not likely to disturb nests of these special-status birds; therefore, the impacts of the project would be less than significant.

Pallid Bat

As indicated in the environmental setting, the existing buildings adjacent to the project area may contain suitable cracks, crevices, and other structures that could be used for roosting. These buildings and other structures are not proposed for removal as part of the project and any day roosts present within these buildings would therefore not be subject to destruction. Construction of the proposed shop, storage, conveyor, and plant would occur adjacent to existing buildings that could contain day roosts for pallid bats; however, the location of potential roosting sites within these buildings would buffer pallid bat roosts from noise resulting from construction and operations. In addition, the level of increased noise from construction and operations would not be substantially greater at the potential roost sites than the ongoing noise from existing uses. Therefore, the project is unlikely to result in abandonment of any roost sites present in adjacent structures. The project would not result in the destruction of pallid bat roosts and is unlikely to result in the abandonment of roosts in adjacent structures; therefore, the impact of the project on pallid bat would be less than significant.

Mitigation Measures

Mitigation Measure BIO-1: Preconstruction Nest Surveys and Non-disturbance Buffers

To avoid impacts to nesting raptors and other nesting birds the following mitigation will be implemented.

- ▶ Vegetation clearing and construction work will be scheduled after August 31 or before February 1 to avoid the nesting period for common raptors and other nesting birds if feasible. The exact start and end of the active nesting season will be defined by a qualified biologist.
- ▶ If vegetation clearing and construction work is required during the nesting season (February 1 to August 31), a qualified biologist will conduct a survey to identify nests of common non-raptor nesting birds within 50 feet or common raptor nests within 500 feet of the project area. The survey will be conducted no more than 14 calendar days before the beginning of vegetation clearing or construction. The exact start and end of the active nesting season will be defined by a qualified biologist.
- ▶ If non-raptor bird nests are located within 50 feet of the project area, no construction will occur within 50 feet of the nest during the nesting season or until the young have fledged, as determined by a qualified biologist. If raptor nests are located within 500 feet of the project area, no construction will occur within 500 feet of the nest during the nesting season or until the young have fledged, as determined by a qualified biologist. Buffer distances may be adjusted by the qualified biologist based on species, screening, and other considerations in consultation with CDFW.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?

Less-than-significant impact. The ditch in the eastern portion of the project area contains pickleweed mats (Figure 3.4-1), which are considered a California Sensitive Natural Community (CDFW 2020). This community is defined as Northern Coast Salt Marsh (Appendix B). No other sensitive natural communities or riparian habitat occurs within the project area. There are no proposed project activities that would occur within the ditch or would directly impact this sensitive community. Contaminated runoff from the project area caused by project construction or operations could have a potentially adverse effect on the sensitive natural community present within the ditch. However, the project would implement a SWPPP and associated water quality BMPs (refer to Section 2.5.5, "Best Management Features" and Section 3.10, "Hydrology and Water Quality") that would minimize or prevent contaminated runoff reaching the ditch. With the implementation of the SWPPP and associated BMPs, the project would have a less-than-significant impact on sensitive natural communities.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less-than-significant impact. A survey of hydrologic conditions in the project area (Appendix B), concluded that while other areas of ponding occurred within the project area, the only potential state or federally protected wetland is the ditch within the eastern portion of the study area. As discussed under question b), there are no proposed project activities that would occur within the ditch. Contaminated runoff from the project area caused by project construction or operations could result in discharge to the ditch. However, the project would implement a SWPPP and associated water quality BMPs (refer to Section 2.5.5, "Best Management Features" and Section 3.10, "Hydrology and Water Quality") that would minimize or prevent contaminated runoff reaching the ditch. With the implementation of the SWPPP and associated BMPs the project would have a less-than-significant impact on state or federally protected wetlands.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less-than-significant impact. The construction of the proposed shop, storage, conveyor, and plant would not substantially interfere with the movement of wildlife through the already developed portion of the project area. Also, the project would not result in disturbance of the drainage ditch on site that could be used as a local movement corridor through the project area. In addition, the habitats within the projects area do not support any known native wildlife nursery sites. Therefore, the impact of the project on the movement of wildlife or fish species, wildlife corridors, and wildlife nursery sites would be less than significant.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No impact. The City of Redwood City tree preservation ordinance (Ord. No. 1536, Section 1, 6-26-72) establishes the definition of heritage trees, requires the issuance of a permit prior to tree removal, and requires certain conditions be met for a tree permit to be issued. No tree removal is proposed to occur; therefore, the project would not conflict with the City of Redwood City tree preservation ordinance, and the implementation of the project would result in no impact.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No impact. The project is not located within or adjacent to a Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, the project would not conflict with any conservation plan, and there would be no impact.

3.5 CULTURAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
V. Cultural Resources.				
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially disturb human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.5.1 Environmental Setting

On August 2, 2021, a California Historical Resources Information System records search was conducted by the Northwest Information Center (NWIC) on the campus of Sonoma State University to determine whether prehistoric archaeological, historic-period archaeological, or built-environment historical resources have been previously recorded within the project site, the extent to which the project area has been previously surveyed, and the number and type of cultural resources within a 0.5-mile radius of the site (NWIC File No. 21-0052). The results indicated that two reports have been recorded within the project site and another three reports have been recorded within the 0.5-mile radius. There are no previously recorded prehistoric or historic-period archaeological resources within the project site or within the 0.5-mile radius and is supported by the fact that the project site was marshland until at least 1913. Because the artificial fill underlying the project site was recently deposited, it has a very low potential to contain intact buried archaeological deposits. The artificial fill extends to 10 feet below the surface (Far Western 2008:3-4).

The bay mud underlying the artificial fill was deposited during the Middle and Late Holocene (the Holocene period is defined as the 11,500 years before present) as a result of rising sea levels inundated this area. The level of the Bay has risen over the past 9,000 years, covering once dry bayside lands in meters of alluvial sediment and water. The implications for the archaeological record are that more ancient occupations could be buried under meters of sediment, while exploitation of the area within the last 1,000 years is more likely to have been limited to occasional visitation of the marshlands to gather resources, activities that are unlikely to have left substantial remains. The layer of bay mud extends up to 45 feet below the surface (Far Western 2008:3-4; Pacific Legacy 1999:7).

Underlying the bay mud in this area is a thick deposit of alluvium that extends to approximately 400-feet below surface where it encounters bedrock. Given that these deposits are Middle Holocene-age and older, they have a low potential for buried archaeological deposits. Deposits underlying the Pleistocene-age (approximately 2,580,000 to 11,700 years before present) surface predate documented human occupation of the region and have a very low potential for buried archaeological materials (Far Western 2008:3-4).

3.5.2 Discussion

a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

No impact. The project does not include the demolition of any built-environment structures over 50 years old that could be eligible for listing in the California Register of Historical Resources. Moreover, the records search revealed no built-environment historical resources within the project site or the one-half-mile search radius. Therefore, there would be no impact to historical resources.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

No impact. No previously recorded prehistoric or historic-period archaeological resources have been identified within the project site or within the 0.5-mile radius. As described previously, the artificial fill and the bay mud underlying the project site have very low potential to contain intact buried archaeological deposits with the bay mud underlying the artificial fill extending up to 45 feet below the surface. Construction would include grading at a depth of 2-4 feet for compaction purposes and installing foundation piles for the concrete batch plant and the machine shop. This ground disturbance would not extend past the bay mud and into the alluvium; however, the alluvium similarly has a low potential for archaeological resources. Because the project site consists of bay mud overlain by artificial fill, both of which have very low potential to contain intact archaeological resources, any potential of encountering significant archaeological resources would be exceedingly low. No impact is anticipated.

c) Substantially disturb human remains, including those interred outside of formal cemeteries?

No impact. There are no known cemeteries or burials on the project site or immediate area. Moreover, the portion of the project site that would be disturbed up to depths of 2-4 feet consist of artificial fill soils. The potential to encounter any human remains as part of the proposed construction activities is considered highly unlikely.

Moreover, California law recognizes the need to protect Native American human burials, skeletal remains, and items associated with Native American burials from vandalism and inadvertent destruction. The procedures for the treatment of Native American human remains are contained in California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097.

These statutes require that, if human remains are discovered, potentially damaging ground-disturbing activities in the area of the remains shall be halted immediately, and the County coroner shall be notified immediately. If the remains are determined by the coroner to be Native American, the Native American Heritage Commission (NAHC) shall be notified within 24 hours and the guidelines of the NAHC shall be adhered to in the treatment and disposition of the remains. Following the coroner's findings, the NAHC-designated Most Likely Descendant and the landowner shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments, if present, are not disturbed. The responsibilities for acting upon notification of a discovery of Native American human remains are identified in PRC Section 5097.94.

Compliance with California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097 would provide an opportunity to avoid or minimize the disturbance of human remains, and to appropriately treat any remains in the highly unlikely event any are discovered given the soils that would be disturbed would be limited to artificial fill soils. Therefore, no impact would occur.

3.6 ENERGY

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. Energy.				
Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.6.1 Environmental Setting

The following sources of energy are utilized in San Mateo County and may be utilized by the project.

- ▶ Electricity and renewables: In 2002, Senate Bill 1078 established a renewables portfolio standard (RPS) program. The program is jointly implemented by the California Public Utilities Commission and the California Energy Commission and requires all load-serving entities to procure 60 percent of their total electricity retail sales from renewable energy sources by 2030. Most retail sellers met or exceeded their 29-percent interim RPS target in 2018, including all large investor-owned utilities, which provide electricity to 72 percent of all utility customers (CPUC 2019, EIA 2019).
- ▶ Natural gas: While the majority of natural gas consumers in California are residential and small commercial users, these users consume only about 35 percent of natural gas in the state. Larger volume gas consumers, such as utilities for electricity generation and industrial consumers, although fewer in number, consume the remaining 65 percent of natural gas used in the state (CPUC 2020).
- ▶ Petroleum: Petroleum products (gasoline, diesel, jet fuel) are consumed almost exclusively by the transportation sector, which is responsible for almost 90 percent of the petroleum consumed in the state (EIA 2020). In 2015, a total of 15.1 billion gallons of gasoline were sold in California (CEC 2020). To meet CARB regulations, all gasoline and diesel fuel sold in California for motor vehicles is refined to be a specific blend of motor gasoline called California Reformulated Gasoline (EIA 2020).
- ▶ Alternative fuels: Conventional gasoline and diesel may be replaced (depending on the capability of the vehicle) with many alternative transportation fuels (e.g., renewable diesel, hydrogen, electricity). Use of alternative fuels is encouraged through various statewide regulations and plans (e.g., Low Carbon Fuel Standard, Assembly Bill 32 Scoping Plan).

Peninsula Clean Energy (PCE), a Community Choice Aggregation program, began serving San Mateo County in 2016 and offers customers the choice of 50 percent or 100 percent clean electricity delivered through Pacific Gas and Electric (PG&E) utilities. PCE has a strategic goal of achieving 100 percent greenhouse-gas free electricity by 2021 for all customers, which exceeds the requirements under the RPS program (PCE 2020a). As of 2019, PCE obtains electricity from a variety of sources, including hydroelectric, wind, solar, nuclear, and a mix of other renewable resources. In 2019, PCE achieved a renewable energy procurement rate of 47.8 percent, excluding large hydroelectric and unspecified sources of power (PCE 2020b).

3.6.2 Discussion

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less than significant impact. Implementation of the project would result in the consumption of energy resources during construction and operation. Energy would be consumed during project construction to operate and maintain construction equipment and transport construction materials. It also would be consumed for worker commutes and material and equipment haul trips. Levels of construction-related fuel consumption were calculated using equipment assumptions consistent with CalEEMod Version 2016.3.2 (CAPCOA 2016). See Appendix C for detailed calculations. An estimated 1,156 gallons of gasoline and 24,975 gallons of diesel would be consumed during project construction, accounting for both on-site equipment use and off-site vehicle travel for worker commutes and haul trips. This one-time energy expenditure required to construct the project would be nonrecoverable. However, energy needs for project construction would be temporary and would not require additional capacity or increase peak or base period demands for electricity or other forms of energy.

Project operations would increase electricity, diesel, and gasoline consumption in the region relative to existing conditions from the operation of the concrete batch plant, on-site office, maintenance shop, off-road equipment, haul truck trips, and worker commute trips. The project would not use natural gas as a fuel. Only building operations, such as the proposed office building, would be subject to Title 24 Building Energy Efficiency Standards. These standards do not apply to non-building facilities (e.g., concrete batch plants, roadways). Table 3.6-1 summarizes the estimated energy consumption associated with project operation for the first full year (2022) of operations using results from the Air Quality Study and diesel and gasoline fuel consumption emission factors from the Climate Registry (The Climate Registry 2021). See Appendix C for detailed calculations.

Table 3.6-1 Operational Energy Consumption During the First Year of Operation (2022)

Energy Type	Energy Consumption	Units	Energy Usage per Ton of Concrete
Proposed Project			
Electricity	125,000	kWh/year	0.25 kWh/ton/year
Diesel	92,048	gal/year	0.18 gal/ton/year
Gasoline	2,278	gal/year	<0.01 gal/ton/year
Existing San Carlos Facility (Baseline)			
Electricity	40,862	kWh/year	0.25 kWh/ton/year
Diesel	67,856	gal/year	0.41 gal/ton/year
Gasoline	2,038	gal/year	0.01 gal/ton/year
Net Energy Use			
Electricity	84,138	kWh/year	0.00 kWh/ton/year
Diesel	24,191	gal/year	-0.23 gal/ton/year
Gasoline	240	gal/year	-0.01 gal/ton/year

Notes: kWh/year = kilowatt-hours per year; gal/year = gallons per year

Source: Modeled by Ascent Environmental in 2021 and Compass Land Group in 2021

The project does not propose any excessive or unnecessary energy consumption beyond what is typical for this type of development. Operation of the project would be typical of this type of land use, requiring electricity for lighting and concrete batch plant operations. Title 24 Building Energy Efficiency Standards would be integrated into a small component of the project to reduce the project's energy demands and increase energy efficiency. The project would increase gasoline and diesel fuel consumption relative to the existing conditions by 12 and 36 percent, respectively, and use up to approximately three times as much electricity use as existing conditions, consistent with the increase

production capacity of the proposed plant. However, the proposed project's gasoline and diesel consumption would be subject to State and federal regulations regarding fuel efficiency standards for on-road vehicles and off-road equipment. Additionally, as shown in Table 3.6-1, the project would use the same amount of electricity per ton of concrete processed as the existing San Carlos facility, would use less gasoline and diesel per ton of concrete processed, and would be purchasing electricity from PCE's ECOplus program, which sources 90 percent of its electricity from GHG-free sources (e.g., renewables, large hydroelectric, nuclear) (PCE 2020b). The application of these regulations would reduce wasteful, inefficient, and unnecessary use of energy for buildings and transportation. This impact would be less than significant.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency

Less-than-significant impact. As discussed above, the project would comply with all State and local requirements and policies related to the consumption of energy, including but not limited to, Title 24 Building Energy Efficiency Standards. In addition, PCE, which provides energy service to the project site, currently provides 50 percent renewable, and 90 percent GHG-free, electricity to San Mateo County. CEMEX currently purchases electricity from PCE for its San Carlos facility and will continue to do so for the proposed project. PCE exceeds California's RPS statewide requirements to increase procurement from eligible renewable energy resource to 33 percent of total procurement by 2020, 50 percent by 2026 and to 60 percent of total procurement by 2030. Therefore, the proposed project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. This impact would be less than significant.

3.7 GEOLOGY AND SOILS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. Geology and Soils.				
Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.7.1 Environmental Setting

The project site is within the Coast Ranges Geomorphic Province, more specifically a wide trough that begins south of the City of Hollister and run north past the City of Petaluma, encompassing all of San Francisco Bay. Alluvial deposits derived from the surrounding hills and farther east in the Sierra Nevada have been accumulating in the trough for the past 5 to 8 million years, covering bedrock in the area. The youngest alluvial deposits consist of soft, heavy clays known as Bay mud that were deposited in the shallow waters of San Francisco Bay over the last 10,000 years (Redwood City 2010:4.6-1).

The topography of the site is generally flat with little to no variation in elevation (6-10 feet above mean sea level) across the entirety of the project site.

SOILS

Based on USGS information, soils mapped in the project area are primarily artificial fill, which consists of loose to very well consolidated gravel, sand, silt, clay, rock fragments, organic matter, and man-made debris (USGS 1998). This was confirmed during borings conducted at the project site in 2012, which identified an initial 8- to 12-foot layer of soft to stiff clay and silt that was interbedded with sand and gravel. Beneath the artificial fill, a layer of Bay Mud that ranges in thickness from 24 to 35 feet onshore and is considered compressible under new loads (i.e., new fill, building, stockpiles, etc.). This is followed by a layer of fine-grained alluvium, which consists of silty/clayey sand and gravel, interbedded with stiff to hard silt and clay up to a depth of 100 feet (Treadwell & Rollo 2012; Geocon 2020, Appendix D).

Groundwater at the site coincides with the water level in the shipping channel and the greater San Francisco Bay and likely fluctuates due to tidal variations and season rainfall (Treadwell & Rollo 2012; Geocon 2020, Appendix D).

SEISMICITY

The project site is located within a seismically active region. The major active faults in the area are the San Andreas, San Gregorio, Hayward, and Calaveras fault, none of which are located within the boundaries of or within 5 miles of the project site. The nearest active fault to the project site, the Monte Vista-Shannon fault, is located approximately 6 miles to the southwest (Treadwell & Rollo 2012). The project site is also not located within an Alquist-Priolo Earthquake Fault Zone (per the requirements of the Alquist-Priolo Act), which identifies potential areas of risk of surface fault rupture (Conservation 2019).

While the Alquist-Priolo Act addresses surface fault rupture, the Seismic Hazards Mapping Act addresses other earthquake-related hazards, including ground shaking, liquefaction, seismically induced landslides and amplified ground shaking. Of these potential seismic hazard areas, the project site is located within a liquefaction zone per the California Department of Conservation (Department of Conservation 2019). Liquefaction is a phenomenon that occurs when soil undergoes transformation from a solid state to a liquefied condition because of increased pore-water pressure. This typically occurs where susceptible soils (particularly the medium sand to silt range) are located over a high groundwater table, and such conditions are present at the project site (Treadwell & Rollo 2012).

Per the City's General Plan mapping, the project site is located within a lower elevation "flatland" with no landslide potential (Redwood City 2010).

3.7.2 Discussion

- a) **Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:**
- i) **Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)**

No impact. As noted above, the project site is not located within a designated Alquist-Priolo Earthquake Fault Zone. There is no need to consider setbacks or investigations of the faults with respect to surface fault ground rupture hazard. Compliance with the California Building Code (CBC) requirements would minimize any potential impacts related to fault rupture. Thus, implementation of the proposed project would not expose people or structures to potential substantial adverse effects related to the rupture of a known earthquake fault. No impact would occur, and no mitigation is required.

ii) Strong seismic ground shaking?

No Impact. The project site in a seismically active region and is subject to ground shaking from an earthquake along major active regional faults; this is common to virtually all development in Redwood City and the port. Development of the proposed project (including compaction of soils and site improvements) would be subject to review and approval by the City and would need to comply with all applicable seismic standards adopted by the City, including the CBC. The California Building Code (Title 14, California Code of Regulations, Part 2) contains seismic safety provisions with the aim of preventing building collapse during a design earthquake, so that occupants would be able to evacuate after the earthquake. Although structures may be damaged during earthquakes, adherence to seismic design requirements will minimize damage to property within the structure because the structure is designed not to collapse, thereby minimizing injury and loss of life. The CBC is intended to provide minimum requirements to prevent major structural failure and loss of life. Moreover, the project would not propose any features that would have the potential to exacerbate strong seismic ground shaking in the area. Therefore, no impact would occur.

iii) Seismic-related ground failure, including liquefaction?

Less-than-significant impact. As noted above, the project site located within a State-designated liquefaction zone. Previous geologic evaluations of the immediate area determined that some liquefaction potential exists at the project site but depends on the thickness of the liquefiable soil layer in a given location (Treadwell & Rollo 2012). Liquefaction would most likely manifest itself as local ground subsidence and settlement. Previous site investigations found that ground surface settlement on the order of 0.5 to 4.5 inches may occur. As a result, liquefaction-induced settlement could cause damage and potentially catastrophic failure of structures supported on foundations located above and in the liquefiable layers. However, the design and construction of proposed on-site structures would comply with CBC requirements to address the potential for differential movement due to liquefaction-induced settlement and/or related effects such as dynamic settlement and lateral spreading. More specifically, Chapter 18, Soils and Foundations, of the CBC requires, a record of the soil profile, evaluation of active faults in the area, and recommendations for foundation type and design criteria that address issues as applicable such as (but not limited to) bearing capacity of soils, provision to address expansive soils and liquefaction, settlement and varying soil strength. Therefore, through compliance with CBC requirements and the City's standard grading and building review procedures, impacts would be less-than-significant, and no mitigation is required.

iv) Landslides?

No impact. As noted above, the project site is predominantly flat, and no significant slopes are located nearby. Additionally, the project site and surrounding areas are not located in an area that is susceptible to landslide hazards (Conservation 2019). Based on review of the aforementioned information and the relatively level topography of the project area, the likelihood for landslides at the project site is low. Therefore, no impact associated with landslides would occur. No mitigation is required.

b) Result in substantial soil erosion or the loss of topsoil?

Less-than-significant impact. Construction activities at the site would involve on-site grading, which would disturb on-site soils. However, all construction activities associated with the project would be required to implement BMPs, as detailed in a SWPPP prepared as part of compliance the Construction General Permit from the National Pollution Discharge Elimination System (NPDES) program. Although these measures are intended to prevent sedimentation from entering runoff from the site, they generally prevent soil erosion and loss of topsoil occurring at a construction site and requires soil stabilization and erosion control measures to be implemented during construction. In addition, operation of the proposed facility would include additional BMPs pursuant to NPDES requirements. The project site and existing Cemex facility located at the property are already subject to the requirements of a SWPPP. The current SWPPP, which became effective in July 2020, includes several runoff- and erosion-related BMPs as part of Section 5 (Best Management Practices) (CEMEX Construction Materials Pacific, LLC 2020). The project would also be required to comply with General Waste Discharge Requirements (WDRs) for Aggregate and/or Concrete Facilities, as developed by the State Water Resources Control Board (SWRCB), including surface water collection and treatment considerations. Thus, with adherence to the required BMPs and WDRs, potential erosion-related impacts during construction and operation would less than significant, and no mitigation is required.

- c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?**

Less-than-significant impact. As noted above under question a)iii), the project site is located within a liquefaction zone. However, as part of the project, on-site soils would be compacted in a manner consistent with CBC requirements and City's standard grading and building review procedures such that the likelihood of damage to on-site structures would be low. Therefore, the potential for the proposed project to exacerbate a hazardous condition associated with unstable soils would be low, and impacts would be less than significant. No mitigation is required.

- d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial direct or indirect risks to life or property?**

Less-than-significant impact. Expansive soils increase in volume when their moisture content becomes elevated. Structures built on expansive soils could experience foundation cracking as a result of seasonal expanding and contracting of soils over time. However, building damage due to volume changes associated with expansive soils can be reduced through proper foundation design and compliance with CBC requirements, which are implemented through the City's standard grading and building review procedures. As part of this compliance, the project would be required to complete a final geotechnical review, in addition to the preliminary geotechnical review completed by Geocon (Appendix D) and referenced above, once grading and foundation plans have been completed. Any recommendations in the geotechnical investigation that includes site-specific recommendations for potentially expansive soils would be required to be implemented as part of CBC compliance and as part of the City's standard grading and building review procedures. Due to conformance with these recommendations, potential risks associated with the location of the project on expansive soils would be minimized. Therefore, impacts would be less than significant, and no mitigation is required.

- e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?**

No impact. The project would not involve the installation or modification of septic tanks or alternative wastewater disposal systems. With respect to the on-site weir ponds, these are not considered alternative wastewater disposal systems for the purposes of this analysis, and the soils-related impacts associated with their construction and operation are addressed above. Therefore, no impact would occur, and no mitigation is required.

- f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

No impact. Based on preliminary engineering, construction at the site would require limited grading of the site (up to a depth of 4 feet below ground surface) in order to provide adequate compaction of on-site soils to accommodate the proposed equipment/structures. As a result, on-site grading activities would not be expected to extend beneath the on-site layer of artificial fill, which does not have the potential to contain paleontological resources. As a result, there is no potential for encountering scientifically significant paleontological resources. No impact would occur.

3.8 GREENHOUSE GAS EMISSIONS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. Greenhouse Gas Emissions.				
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Criteria air pollutant and greenhouse gas emissions estimates and calculations are available in the *Air Quality and Greenhouse Gas Emissions Study* (Air Quality Study) for this project, available in Appendix A.

3.8.1 Environmental Setting

Greenhouse gases (GHGs) are gases in the earth’s atmosphere that trap heat through a phenomenon called the greenhouse effect. Prominent GHGs that contribute to the greenhouse effect are carbon dioxide (CO₂), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. The greenhouse effect occurs when solar radiation enters the earth’s atmosphere and infrared radiation is absorbed by GHGs rather than being reflected back into space. This trapping of infrared radiation results in the warming of the atmosphere and is responsible for maintaining a habitable climate on earth. However, GHG emissions from human activities have greatly increased GHG concentrations in the atmosphere and caused levels of warming far above natural levels, resulting in global climate change. It is extremely likely that more than half of the observed increase in average global temperature from 1951 to 2010 was caused by anthropogenic (i.e., human-caused) increases in GHG concentrations, along with other anthropogenic forcing (IPCC 2014:5). GHG emissions contributing to global climate change are attributable, in large part, to human activities associated with on-road and off-road transportation, industrial/manufacturing activities, electricity generation and consumption, residential and commercial on-site fuel use, and agriculture and forestry.

Climate change is a global issue because GHGs are global pollutants, and even local GHG emissions contribute to global impacts. Many GHGs have long atmospheric lifetimes, from 1 to several thousand years, and persist in the atmosphere for long enough durations to be dispersed around the globe. The quantity of GHGs in the atmosphere that ultimately result in climate change is not precisely known but is enormous; no single project alone would measurably contribute to an incremental change in the global average temperature, or to global, local, or microclimates. From the standpoint of the CEQA, GHG impacts relative to global climate change are inherently cumulative.

STATE REGULATIONS

Statewide GHG Emission Targets and the Climate Change Scoping Plan

Reducing GHG emissions in California has been the focus of the state government for approximately two decades. GHG emission targets established by the state legislature include reducing statewide GHG emissions to 1990 levels by 2020 (Assembly Bill [AB] 32 of 2006) and reducing them to 40 percent below 1990 levels by 2030 (SB 32 of 2016). The Executive Order (EO) S-3-05 calls for statewide GHG emissions to be reduced to 80 percent below 1990 levels by 2050. EO B-55-18 calls for California to achieve carbon neutrality by 2045 and achieve and maintain net negative GHG emissions thereafter. These targets align with the scientifically established levels needed globally to limit the rise

in global temperature to no more than 2 degrees Celsius, the warming threshold at which major climate disruptions, such as super droughts and rising sea levels, are projected; these targets also pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius (UN 2015:3).

The 2017 Climate Change Scoping Plan (2017 Scoping Plan), prepared by the CARB, outlines the main strategies California will implement to achieve the legislated GHG emission target for 2030 and “substantially advance toward our 2050 climate goals” (CARB 2017:1, 3, 5, 20, 25–26). It identifies the reductions needed by each GHG emission sector (e.g., transportation, industry, electricity generation, agriculture, commercial and residential, pollutants with high global warming potential, and recycling and waste). The state has also passed more detailed legislation addressing GHG emissions associated with industrial sources, transportation, electricity generation, and energy consumption.

LOCAL REGULATIONS

Bay Area Air Quality Management District

BAAQMD is the primary agency responsible for addressing air quality concerns in the San Francisco Bay Area, including San Mateo County. BAAQMD also recommends methods for analyzing project related GHGs in CEQA analyses and recommends multiple GHG reduction measures for land use development projects. BAAQMD developed thresholds of significance to provide a uniform scale to determine the CEQA significance of GHG emissions associated with land use and stationary source projects that align with the statewide GHG target mandated by AB 32 (BAAQMD 2017). BAAQMD’s goals in developing GHG thresholds include ease of implementation; use of standard analysis tools; and emissions mitigation consistent with AB 32. However, BAAQMD has not adopted thresholds of significance or guidance for determining whether a project’s GHG emissions would be consistent with the statewide GHG target established by SB 32 (i.e., 40 percent below 1990 levels by 2030).

Redwood City Climate Action Plan

The City updated its Climate Action Plan in November 2020. The Redwood City Climate Action Plan (CAP), last updated in 2020, contains a series of strategies designed to reduce greenhouse gases to 50 percent below 2005 levels by 2030 and an ultimate carbon neutrality goal by 2045. Between 2005 and 2017, the City saw a 42 percent reduction in GHG emissions from the commercial and industrial sector, contributing to an overall decline of 23 percent in city-wide emissions from 2005. In 2017, the commercial and industrial accounted for the second largest share of the city’s emissions (27 percent), the first being transportation (56 percent). The CAP has not undergone environmental review under CEQA and is, therefore, not a CEQA-qualified GHG reduction strategy. (City of Redwood City 2020).

THRESHOLDS OF SIGNIFICANCE

The Bay Area Air Quality Management District (BAAQMD) is the primary agency responsible for addressing air quality concerns in the Bay Area, including greenhouse gases. The CEQA Air Quality Guidelines published by BAAQMD in May 2017 includes guidance for determining thresholds of significance for GHGs. Use of this guidance by lead CEQA agencies is discretionary and is provided by BAAQMD “for information purposes only to assist local agencies” which “may inform environmental review for development projects in the Bay Area” (BAAQMD 2017). While use of these thresholds are not required by regulation, they provide the most current evidence upon which to base significance conclusions related to air quality and are used herein as the basis for determining significant impacts.

The following thresholds of significance are used to determine if a greenhouse gas impact would be significant at the project level (BAAQMD 2017:2-4). The project would result in a significant impact to greenhouse gas emissions if it would:

- ▶ as a land use development project, comply with a qualified GHG reduction Strategy, emit less than 1,100 metric tons of carbon dioxide equivalent (MTCO₂e) per year; or emit less than 4.6 MTCO₂e per service population (residents + employees) per year; or
- ▶ as a stationary-source project, emit less than 10,000 MTCO₂e.

For the purposes of threshold setting, stationary-source projects, according to BAAQMD, include “land uses that would accommodate processes and equipment that emit GHG emissions and would require an Air District permit to operate.” (BAAQMD 2017:2-4)

Although the proposed project is a permitted source, it would not involve the combustion of fuels on site or the direct generation of GHG emissions from the concrete plant itself. The project would only generate fugitive PM emissions from large-scale material handling of concrete. Other GHG emissions would be generated from vehicle trips and indirectly from electricity usage. As such, the project would be subject to BAAQMD’s threshold for land-use development projects.

BAAQMD’s developed its bright-line threshold of 1,100 MTCO_{2e}/year regarding operational GHG emissions with the intention of attributing an appropriate share of GHG emission reductions necessary to reach AB 32 goals for proposed land use development projects under CEQA. However, AB 32’s GHG reduction target date of 2020 has passed and GHG emissions reduction are now to be analyzed in meeting updated targets provided by SB 32. At the time of preparing this analysis, BAAQMD has not updated its bright-line threshold to be consistent with SB 32 reduction targets. Thus, a project-specific threshold has been developed by applying SB 32’s reduction target of 40 percent below 1990 GHG emissions level to the 1,100 MTCO_{2e}/year bright-line threshold, which brings the threshold of significance for operational GHG emissions to 660 MTCO_{2e}/year. This threshold is presented to demonstrate consistency with SB 32. However, this linear reduction approach oversimplifies the threshold development process. It is not the intent of this document to propose the adoption of this threshold as a mass emissions limit or CEQA GHG threshold for general use, but rather to provide this additional information to put the project-generated GHG emissions in the appropriate statewide context so that the magnitude of the project-related emissions is understood and its relative significance may be determined. BAAQMD has not developed any thresholds to assess construction GHG emissions.

3.8.2 Discussion

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less-than-significant impact. The project would generate GHGs during construction from the use of heavy-duty off-road construction equipment and vehicle use for worker commutes. Emissions related to project operation would primarily occur from employee commutes and transportation of concrete to and from the project site. The project’s construction GHG emissions were estimated using CalEEMod Version 2016.3.2 (CAPCOA 2016). The project’s operational emissions were based on PCE electricity emissions factors, estimated annual electricity usage, and estimated worker and haul truck vehicle trips. Refer to Appendix A for details. Based on the modeling, construction activity would result in total emissions of 249 MTCO_{2e} over a period of approximately five months. Project operations would result in net increase of 277 MTCO_{2e} per year. Therefore, neither construction- nor operational-related GHG emissions would exceed the adjusted BAAQMD bright line threshold of 660 MTCO_{2e} per year. This impact would be less than significant.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less-than-significant impact. Plans, policies, and regulations adopted for the purpose of reducing GHG emissions are developed with the purpose of reducing cumulative emissions related, primarily, to long-term operational emissions. The Redwood City CAP is consistent with and complementary to Statewide legislation and regulatory mandates, and establishes local strategies, measures, and actions to reduce GHG emissions in the City. Relevant GHG reduction measures proposed in the CAP and a consistency analysis are summarized in Table 3.8-1.

Table 3.8-1 Consistency with Redwood City Climate Action Plan Greenhouse Gas Reduction Strategies

Measure	Description	Consistency Analysis
EC-1 Community Choice Aggregation: Community	Continue to provide renewable electricity and promote "opting up" to PCE's ECO100 (100% renewable) service.	Consistent. The Project would continue to purchase electricity from Peninsula Clean Energy, opting into PCE's ECOplus service.
EC-5 Commercial Energy Efficiency Programs	Promote participation in commercial energy efficiency programs and demand response programs offered by SMC Energy Watch and PG&E. Encourage commercial energy audits.	Consistent. The Project does not propose to adopt on-site policies or actions that would conflict with the implementation of this program.
EC-8 Commercial Energy Conservation Program	Establish a voluntary commercial energy conservation program, encouraging minimum energy efficiency and water efficiency standards at the time of building sale. Transition to mandatory comprehensive energy assessments and reporting by registered energy assessors.	Consistent. The Project does not propose to adopt on-site policies or actions that would conflict with the implementation of this program.
EC-10: Green Building Policy: All Electric	Update building code to require proposed new buildings to be all-electric, as specified (Adopted September 21, 2020).	Consistent. The Project would be powered only by electricity.
A-1: Green Business Program	Promote San Mateo County Green Business program and set goals for participation.	Consistent. The Project does not propose to adopt on-site policies or actions that would conflict with the implementation of this program.
TL-4: Parking Policies Promoting Public Transit, Biking, and Walking	Continue parking policies such as metered parking, reduced parking requirements for new development, and "unbundling" sales/leases of parking space to increase public transit use, biking, and walking.	Consistent. The Project is located in an industrial area and would employ 19 workers on-site. The Project would comply with all City parking policies, as applicable.
TL-9 Expand EV Charging Infrastructure	Leverage partnerships and incentives to expand EV charging infrastructure in public properties, multi-unit dwellings and workplaces.	Consistent. The Project would offer at least one "EV capable" parking space as required under the 2019 California Green Building Standards Code (Title 24, Part 11).
TL-10: Green Building Policy EV Charging	Update building code during code adoption cycle to increase the mandated percentage of parking spaces accommodating EV charging equipment and of parking spaces devoted to clean air vehicles.	Consistent. The Project would comply with all applicable building codes.
WC.1: Increase Waste Diversion Rate	Achieve 90% waste diversion rate through promotion of traditional and new recycling and organics recycling programs, local enforcement of requirements, and sustainable vendors policy for public events.	Consistent. The Project does not propose to adopt on-site policies or actions that would conflict with the implementation of this program.

Notes: PCE = Peninsula Clean Energy; PG&E = Pacific Gas and Electric; EV = electric vehicle SMC = kWh/year = kilowatt-hours per year; gal/year = gallons per year

Source: Redwood City 2020

As shown in Table 3.8-1, the Project would not conflict with any of the applicable GHG reduction measures included in Redwood City's CAP. Therefore, the project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing emissions of GHGs. This impact would be less than significant.

3.9 HAZARDS AND HAZARDOUS MATERIALS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. Hazards and Hazardous Materials.				
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.9.1 Environmental Setting

There are no documented sites of contamination within the project site. The State of California maintains two separate databases of known contamination sites (past and present). More specifically, SWRCB’s GeoTracker website provides data relating to leaking underground storage tanks (and other types of soil and groundwater contamination, along with associated cleanup activities. In the vicinity of the project site, GeoTracker identified four sites (three former/closed and one current) of potential contamination within one mile of the project site but nothing within the project site or the greater Cemex property (SWRCB 2021).

The California Department of Toxic Substances Control's (DTSC) Envirostor Web site provides data related to hazardous materials spills and clean ups identified four sites, including those that are permitted, require further action, or are closed, within one mile of the project site (DTSC 2021). Both GeoTracker and Envirostor information for sites within one mile of the project site are summarized in Table 3.9-1.

Table 3.9-1 Documented Sites of Contamination within 1 mile of the Project Site

Site	Address	Site Type	Contaminants of Concern	Cause of Contamination	Cleanup Status
Sims Metal Management	699 Seaport Boulevard	Voluntary Cleanup (DTSC)	None specified.	Discharge of contaminants to soil.	Active - investigation and remediation
Clean Harbors Environmental Services, Inc.	695 Seaport Boulevard	Operating Permit (DTSC)	None specified.	None.	Site record pertains to operating permit for secondary containment structure.
Gibson Redwood City (also listed as Redwood City Services Facility and Port of Redwood City)	475 Seaport Boulevard	Cleanup Site (DTSC)	Benzene, petroleum hydrocarbons (TPH)	Release of petroleum waste	Closed
Pressure Vessel Services, Inc.	501 Seaport Boulevard	Tiered Permit (DTSC)	Perchloroethylene (PCE)	None specified	Site record pertains to tiered permit; Inactive – Needs Evaluation
Pacific Shores Development	1000 Seaport Boulevard	Cleanup Site (SWRCB)	Waste oil, motor, hydraulic, lubricating	Leaking Underground Storage Tank (LUST)	Closed
Arco Bulk Plant #69209	775 Seaport Boulevard	Cleanup Site (SWRCB)	Diesel, Gasoline, Heating Oil, Fuel Oil	Leaking Aboveground Storage Tanks (ASTs)	Remediation
Lockheed Moat Area	888 Seaport Building Boulevard	Cleanup Site (SWRCB)	Gasoline	LUST	Closed
Marina Pump Station	473 Seaport Boulevard	Cleanup Site (SWRCB)	Diesel	LUST	Closed

Notes: AST = aboveground storage tank; DTSC = Department of Toxic Substances Control; LUST = leaking underground storage tank; PCE = perchloroethylene; SWRCB = State Water Resources Control Board; TPH = petroleum hydrocarbons

Source: SWRCB 2021; DTSC 2021.

There are no public schools or daycare facilities located near the project site. The nearest school to the project site is Summit Charter High School, which is located approximately 2 miles south of the project site at 890 Broadway (south of US 101). The project site is not located proximate (i.e., within 2 miles) of a private airstrip or airport, nor is it located within an airport land use plan.

With respect to wildland fire hazards, the project site is not located within a very high fire hazard zone per the California Department of Forestry and Fire Protection (CAL FIRE) (CAL FIRE 2008).

3.9.2 Discussion

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less-than-significant impact. Construction activities associated with the project would involve the use of limited quantities of hazardous materials such as petroleum, hydrocarbons, and their derivatives (e.g., gasoline, diesel, oils, and lubricants) to operate the construction equipment. Construction activities would be minimal and short-term and would involve the limited transport, storage, use, and disposal of hazardous materials. These materials would be used with construction equipment and stored in vessels engineered for safe storage.

Several hazardous materials are currently used and would continue to be stored and used within the project site and greater property, including petroleum-based oils, lubricants, and solvents. Additional petroleum-based fuels and oils are used to operate on-site trucks, vehicles and certain plant equipment and for routine maintenance. A limited quantity of lubricants and solvents used for maintenance and repair of equipment may be stored in service vehicles or in a dedicated storage area. Currently permitted on-site operations already use and store such materials, and it is unlikely that the expansion of on-site operations to include a ready-mix concrete plant would necessitate any greater use or storage requirements for these materials than is currently present.

The California Highway Patrol and Caltrans are responsible for enforcing regulations related to the transportation of hazardous materials on local roadways, and the use of these materials is regulated by DTSC, as outlined in CCR Title 22. The project applicant would be required to comply with the California Environmental Protection Agency's (Cal EPA) Unified Program, which protects Californians from hazardous waste and hazardous materials by ensuring consistency throughout the state regarding the implementation of administrative requirements, permits, inspections, and enforcement at the local regulatory level. Regulated activities would be managed by the San Mateo County Environmental Health Services Department, which is the designated Certified Unified Program Agency, and in accordance with the regulations included in the Unified Program that address protection of public health (e.g., hazardous materials release response plans and inventories, California Uniform Fire Code hazardous material management plans and inventories). Such compliance would reduce the potential for accidental release of hazardous materials during project construction and operation.

The project would be required to comply with existing laws and regulations regarding the transportation, use, and disposal of hazardous materials. These regulations are specifically designed to protect the public health and the environment and must be adhered to during project construction and operation. Compliance with applicable regulations would ensure that this impact would be less than significant, and no mitigation would be required.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?

Less-than-significant impact. As discussed above, there are no existing hazardous conditions within the project site or greater property. Project construction and operation, however, would involve the use of hazardous materials, which could be accidentally upset or released into the environment. Potential hazardous materials that could be used include petroleum-based fuels and oils, as well as other construction-related materials (including during project operation). As discussed in question a) above, compliance with applicable laws and regulations regarding the transport, use, and disposal of hazardous materials would ensure that the project would result in a less-than-significant impact related to upset or accidental release of hazardous materials, and no mitigation would be required.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No impact. As noted above, no schools are located within one-quarter mile of the project site. As a result, potential operations at the project site would not emit hazardous emissions that could affect a school. While the project would result in additional air emissions, including toxic air contaminants, these emissions (primarily associated with truck trips along local roadways and US 101) would not result in a substantial risks to individuals, including students at schools, in the area. Refer to Section 3.3.2 of the "Air Quality" discussion above for further clarification. No impact would occur.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No impact. The project site is not listed on the Hazardous Waste and Substances Site List that is maintained by DTSC, pursuant to Government Code Section 65962.5. No impact would occur, and no mitigation is required.

- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?**

No impact. The project site is not located within an airport land use plan or within two miles of a public airport or public use airport. As a result, no hazards related to the safety of airport operations or changes in airport-related noise are anticipated as a result of the project. No impact would occur, and no mitigation is required.

- f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

Less-than-significant impact. The California Fire Code (CFC) includes provisions and standards for emergency planning and preparedness, fire service features, fire protection systems, hazardous materials, fire flow requirements, fire hydrant locations and distribution, and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildlife hazard areas. The Redwood City Fire Department provides fire protection services for the City and, as such, implements and enforces the CFC within city limits. In accordance with CFC and CBC requirements, sufficient space would be provided within the project site for emergency personnel and equipment access and emergency evacuation. All project elements would be sited with sufficient clearance from existing and proposed structures so as not to interfere with emergency access to and evacuation from the greater property. In addition, no modifications to existing local roadways or ingress/egress points to the project site are proposed. As a result, the project would not impair implementation of or physically interfere with an adopted emergency response plan or evacuation plan because no permanent public street or lane closures are proposed. Impacts would be less than significant, and no mitigation is required.

- g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?**

No impact. As noted above, the project site is not located within a very high fire hazard zone, as determined by CAL FIRE and Redwood City. Further, the site is largely devoid of vegetation due to current on-site operations with the exception of small areas of ruderal and riparian habitat (see Section 3.5, "Biological Resources"). Therefore, the risk of increased risk associated with wildland fires as a result of the project is considered minimal. No impact would occur, and no mitigation is necessary.

3.10 HYDROLOGY AND WATER QUALITY

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
X. Hydrology and Water Quality.				
Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) Result in substantial on- or offsite erosion or siltation;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.10.1 Environmental Setting

The climate of the proposed project site is typical of the San Francisco Bay Area and is characterized by mild, dry summers and cool, moist winters. Using monthly data from 1906 to 2016, the average high temperature in Redwood City is 71 degrees Fahrenheit and average low temperature is 47.1 degrees Fahrenheit (WRCC 2021). The average total annual precipitation is 19.16 inches (WRCC 2021).

Prior to development, the project site was a tidally-influenced coastal saltmarsh within the San Francisco Bay estuary. Redwood Creek forms the western boundary of the project site and drains fresh water north to the San Francisco Bay where fresh water and saltwater mix (Figure 3.10-1). The Westpoint Slough converges with Redwood Creek near the northern boundary of the proposed project site. Both of these channels are navigable by watercraft. The area is generally flat with the exception of man-made structures including levees, berms, and drainage ditches. The drainage ditch on the east side of the project site discharges into the Westpoint Slough. It contains brackish water and is potentially subject to regulation by the U.S. Army Corps of Engineers (Biological Resources Services 2020, Appendix E).



Source: Data downloaded from San Diego Association of Governments in 2019

Figure 3.10-1 Hydrology

The project is proposed on previously disturbed lands that have been used for port activities. The project site includes existing stormwater structural controls that are used to divert, infiltrate, reuse, and otherwise manage stormwater runoff to eliminate or minimize the potential to discharge pollutants from the facility property (CEMEX Environmental 2020).

Redwood City is located in the San Mateo Plain groundwater subbasin of the Santa Clara Valley Groundwater Basin. Groundwater is not used as a source of municipal water supply in the Redwood City area and has limited withdrawals which have resulted in groundwater levels that have remained relatively stable over the past 40 years (Crankshaw 2017). Geotechnical reports performed adjacent to the proposed project site estimate groundwater depth at approximately seven to 10 feet below ground surface (Appendix D). It is anticipated that the elevation of groundwater at the site fluctuates based on tidal variation and precipitation (Appendix D).

Lands near the Port of Redwood City are located within the 100-year floodplain (FEMA 2019). CEMEX has established and implemented a Tidal Flow Plan that sets forth the control measures to prevent and eliminate tidal flows onto the CEMEX property and describes structural improvements to avoid inundation during high tides (CEMEX Environmental 2020). Sea level rise due to global warming also has the potential to affect the project site by the middle of the century and possibly sooner (SFBCDC 2011). The area that would be vulnerable to inundation due to sea level rise is the area identified today as the 100-year floodplain which includes the project site (SFBCDC 2011).

3.10.2 Discussion

a) **Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?**

Less-than-significant impact. The project site and surrounding area currently support similar industrial uses to the proposed project. Existing uses at the site consist of aggregate and cement terminals, aggregate processing and stockpiling, aggregate and cement material load-out and sales, construction materials recycling, and associated heavy truck traffic. Similar to current conditions, the project would include the use of hazardous materials such as fly ash and other materials associated with concrete production that have the potential to degrade water quality through the introduction of alkalinity, hexavalent chromium, salinity, and suspended solids. Additionally, oil and other petroleum products would be used on site. Accidental spills or disposal of potentially harmful materials during construction or operation of the project have the potential to degrade surface and groundwater.

CEMEX would be required submit Notices of Intent for coverage under the NPDES General Permit for Storm Water Discharges Associated with Construction Activities and the General Permit for Storm Water Discharges Associated with Industrial Activities from SWRCB. Both NPDES permits require a SWPPP that documents the required BMPs to minimize potential to violate water quality standards and waste discharge requirements. These BMPs include good housekeeping (prevention of material tracking, minimize dust, cover industrial materials that can be mobilized by storm water); preventative maintenance (maintenance, leak inspection, prompt repair); spill and leak prevention and response (establish procedures to minimize spills and leaks); material handling and waste management (contain and cover materials and waste); erosion and sediment controls (wind erosion controls, stabilize erodible areas prior to storms); employee training; and advanced BMPs necessary to meet the effluent limitations.

Additionally, the SWRCB is developing a WDR for Aggregate and/or Concrete Facilities, with which the project would need to comply (when applicable). The WDR requires a technical report that describes wastewater generation, treatment, storage, and disposal at the facility. It also requires best practicable treatment or controls to minimize degradation of surface and groundwater quality. The State Water Board's Antidegradation Policy requires that disposal of waste into waters of the state be regulated to achieve the highest water quality consistent with the maximum benefit to the people of the state.

In order to be permitted, the project would also be required to adhere to Redwood City Municipal Code Chapter 27A Stormwater Management and Discharge Control Program which enforces proper management of pollutants in stormwater. The ordinance requires permanent stormwater pollution prevention measures, including source control, site design, and stormwater treatment measures. It also requires monitoring and reporting, and the subject of inspections by the City/Port.

Because the project would be required to comply with the NPDES permits, General WDR for Aggregate and Concrete Facilities, and the Redwood City Municipal Code, which all protect surface and ground water quality, the impact of the project on surface and groundwater quality would be less than significant.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less-than-significant impact. The project site is located above San Mateo Plain groundwater subbasin of the Santa Clara Valley Groundwater Basin where groundwater levels have remained relatively stable over the past 40 years (Crankshaw 2017). Existing conditions at the project site are disturbed and consist of mostly compacted dirt and impervious areas surrounding an existing aggregate and cement facility. Construction of the project would not alter the quantity of stormwater that is infiltrated on site from current conditions and therefore would not alter existing groundwater recharge conditions. Once operational, the project would require the use of water in order to produce concrete and control dust. Groundwater is not used as a source of municipal water supply in Redwood City. The water required for the project would be provided by the City of Redwood City, and would come from Hetch Hetchy regional water system, as well as recycled water from CEMEX's onsite weir pond, and therefore would not deplete groundwater supplies such that it would impede management of the basin. Therefore, the project would have a less-than-significant impact on groundwater supplies and groundwater recharge.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) Result in substantial on- or offsite erosion or siltation;

Less-than-significant impact. The project would comply with the requirements of the NPDES permits during construction and operation as described in impact discussion "a". These permits require the implementation of sediment and erosion control BMPs such that substantial on- or offsite erosion or siltation would not occur. BMPs that would be implemented would be described in the SWPPPs and would include scheduling construction outside of rainy periods, soil stabilization, wind erosion control, prevention of run-on and run-off, silt fences and fiber rolls, sediment traps, stabilized construction entrances/exits, inlet protection, street sweeping, stockpile management, spill prevention and control, waste management, and other BMPs as needed. The stormwater drainage system associated with the project would be designed to retain all stormwater on-site. This impact would be less than significant.

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

Less-than-significant impact. The project would develop plant and building foundations that would introduce a limited amount of new impervious surfaces from existing conditions. Therefore, the rate or amount of surface runoff from stormwater would not increase substantially due to construction or implementation of the project. Storm drain infrastructure would be included in the design of the project and would retain stormwater on-site. The project is adjacent to navigable channels which have the potential to flood the project site in the event of wet conditions or sea level rise. The project would not increase the potential of this area to flood due to wet conditions or sea level rise. The Tidal Flow Plan sets forth the control measures to prevent and eliminate tidal flows onto the CEMEX property and describes structural improvements such as tidal flow gates and earthen berms to avoid flooding during high tides. Because the rate and amount of surface runoff would not be substantially increased by the project and the tidal flow control measures, the project would not result in an increased risk of flooding on or offsite. The impact would be less than significant.

iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

Less-than-significant impact. The storm drain system would be designed to retain all stormwater flows on-site (see c.iv. below). Therefore, the project would not create or contribute runoff water which would exceed the capacity of

existing or planned City of Redwood City stormwater drainage systems or provide substantial sources of polluted runoff. The impact would be less than significant.

iv) Impede or redirect flood flows?

Less-than-significant impact. The project site is mapped as Zone AE and in the 100-year floodplain which is considered high risk for flooding (FEMA 2019). The project consists of construction of a Ready-Mix Concrete Batch Plant, wash rack, concrete-lined weir pond to capture runoff from the wash rack and collect waste, office building, maintenance shop, 2 storage containers, and parking area. The project does not propose changes from current conditions that would impede or redirect flood flows. Tidal water has the potential to flow onto the project site along the drainage ditch on the eastern perimeter of the facility (Figure 3.10-1). Tidal flow gates were installed by the Port of Redwood City at the end of the ditch where discharge occurs which prevents tidal water from backfilling the ditch. As a secondary control, CEMEX installed 4- to 5-foot-tall stabilized earthen berms along the entire perimeter of the drainage ditches to prevent excess water in the drainage ditches from flowing onto CEMEX property and to prevent stormwater runoff from the facility from entering the drainage ditch. These measures prevent tidal flooding of the project site. Sea level rise due to global warming also has the potential to affect the project site by the middle of the century and possibly sooner (SFBCDC 2011). The project would not increase or decrease the risk of sea level rise and would not cause adjacent projects to be inundated. Because the project would not increase or decrease the potential for flooding, would not impede or redirect flood flows, includes tidal flood flow protection measures, and would not exacerbate the impacts of sea level rise, this impact is less than significant.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Less-than-significant impact. Due to the project's location away from the open ocean, the risk of tsunami is low. A seiche wave is a standing wave that occurs in an enclosed or partially enclosed body of water like the San Francisco Bay due to earthquake, landslide, or change in atmospheric pressure. The project is located at the Port of Redwood City along waterways that lead to the San Francisco Bay, and therefore, there is a potential for a seiche wave to occur. Additionally, due to the project being located in the 100-year flood plain adjacent to Redwood Creek, there is also the potential for flood hazard. Due to project site being located along the recessed waterways that distance the project site from the San Francisco Bay shoreline as well as the buffer of islands, seiche energy would be decreased upon reaching the project site. Additionally, structures associated with the concrete batch plant would be subject to the requirements of the California Building Code which address seismic hazards and would help to reduce risk of release of pollutants due to project inundation from seiche or flood. Because the project is in a location where seiche energy would be decreased and structures would comply with the California Building Code, release of pollutants due to flood or seiche would be less than significant.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less-than-significant impact. The Water Quality Control Plan for the San Francisco Bay Basin includes the project site. The Plan is in place in order to protect and maintain thriving aquatic ecosystems. San Mateo County has a Groundwater Protection Program but there is currently no entity actively managing the groundwater basin (SMC 2021). The San Mateo Plain sub-basin ground water basin is designated as very low priority and is not required to comply with the Sustainable Groundwater Management Act. The project would comply with the NPDES permits described in impact discussion "a", the General WDR for Aggregate and Concrete Facilities (when applicable), and the Redwood City Municipal Code which all protect surface and ground water quality. Therefore, the project would not conflict with or obstruct the implementation of the San Francisco Bay Water Quality Control Plan or the San Mateo Groundwater Protection Program. The impact is less than significant.

3.11 LAND USE AND PLANNING

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. Land Use and Planning.				
Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.11.1 Environmental Setting

The project site is located at the Port within Redwood City limits. The project site is fully developed and serves as an existing CEMEX aggregate processing and cement terminal facility where aggregates and cement are generally transported via truck to customers as well as the San Carlos Facility to make concrete. Land uses adjacent to, and nearby the project site include marine industrial businesses to the north and south-southwest, a business park and surface parking lots to the east with associated sports fields to the south-southeast.

The project site is designated Industrial – Port Related, this land use category allows for industrial operations involved in the loading/unloading, storing, recycling, and transferring of large quantities of dry, liquid, and neo-bulk cargoes; green energy production; rail facilities; as well as certain other maritime-oriented activities, including passenger vessels, ship repair or construction, and related ocean vessel support services. The site is located within the GI (General Industrial) zoning district. The GI district allows for sound industrial development wherein manufacturing and other industries can locate and operate away from the restricting influences on non-industrial uses while maintaining an environment free from offensive or objectionable noise, dust, odor, and other nuisances.

As stated in the Redwood City General Plan: "...the Port of Redwood City is the only deepwater port in South San Francisco Bay. Heavy industrial uses, including gravel and cement processing/distribution, asphalt and concrete manufacturing, metal recycling, and chemical distribution are located along Seaport Boulevard and Blomquist Street near the Port. Utilizing 70 acres for maritime and industrial purposes, the Port specializes in long-term leasing of waterside properties to heavy maritime industries involved in importing or exporting granular bulk products. The Port's infrastructure includes deepwater wharves that handle cargo operations conducted by Port tenants. A freight rail system supports movement of goods to and from the Port. The Port is one of the City's great assets. Policies emphasize the value provided by the Port and focus on retention; providing for efficient use of land to support the Port, Port-related, and Port-dependent industries and minimizing potential land use conflicts as appropriate."

Goal BE-21 of the General Plan states that the viability of the Port of Redwood City as a center for goods and people movement and large-scale industrial activity should be maintained. Policy BE-21.1, which falls under Goal BE-21, calls for the allowance of growth and intensification of industrial uses in the Port Industrial Center, while Policy BE-21.2 was create to ensure efficient and productive use of Port lands.

3.11.2 Discussion

a) Physically divide an established community?

No Impact. The proposed project would not result in development that would physically divide a community. Typically, division of an established community could result from the construction of a physical feature, such as a wall,

interstate highway, airport, roadway, or railroad tracks, or the removal of a means of access, such as a local road or bridge that could impair mobility or constrain travel within an existing community, or between a community and outlying areas.

The proposed project would construct a ready-mix concrete plant and accessory structures within an existing aggregate and cement facility consistent with the Industrial – Port Related land use designation and GI zoning district. Moreover, all construction would occur on the existing Cemex site where cement storage, aggregate stockpiling, and transportation activities already occur. The project would not introduce any features that would be considered to divide an established community. No impact would occur.

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?

No impact. Consistent with the Industrial – Port Related land use designation and GI zoning district, the proposed project would construct a ready-mix concrete plant and accessory structures within an existing aggregate and cement facility. The proposed use is allowed in the Industrial – Port Related land use designation and the GI zoning district. In addition, the proposed project is consistent with Goal BE-21 as it consolidates operations between the Port site and the San Carlos Facility, allowing for the decommissioning of the San Carlos Facility and improving Cemex's operational efficiencies. This in turn, is also consistent and implements Policy BE-21.1 and BE-21.2. Therefore, the proposed project would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigation an environmental effect. No impact would occur.

3.12 MINERAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. Mineral Resources.				
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.12.1 Environmental Setting

The proposed project site is located within an urban, developed area with commercial and industrial land uses. The project site serves as an active operation for the stockpiling, processing, sales, and transportation of aggregate and cement materials and no onsite mineral extraction is present. Record of aggregate resources are known to occur within the San Francisco Bay Area region (CDOC 2015), although no resource extraction occurs in the immediate project vicinity. Salt evaporation ponds are located south and east of the project site. The nearest identified resource extraction site occurs 7 miles north of the project site, within the San Francisco Bay. This operation is active and consists of dredging for marine oyster shells. Another active rock and aggregate mining facility, the Pilarcitos Quarry, is located 10 miles east of the project site (CDOC 2021).

3.12.2 Discussion

- a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?**

No impact. The proposed project would construct a ready-mix concrete batch plant and supporting structures within a 4-acre portion of an existing aggregate processing and cement terminal facility. No mineral extraction currently occurs or is proposed within the project site. The project does not propose any activities onsite that would be in conflict with the existing land use designation and zoning. As such, the project would not result in the loss of a known mineral resource and no impact would occur.

- b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?**

No impact. The proposed project site is not located within any area designated for resource recovery by the County of San Mateo General Plan or the City of Redwood General Plan. No mineral resource extraction or recovery exists at the project site. Therefore, the proposed project would have no impact associated with the loss of availability of a locally important mineral resource recovery site.

3.13 NOISE

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII.Noise.				
Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

This noise section is based primarily on information contained within the Environmental Noise & Vibration Assessment prepared for the project by Bollard Acoustical Consultants (BAC 2021) and included in Appendix F of this document.

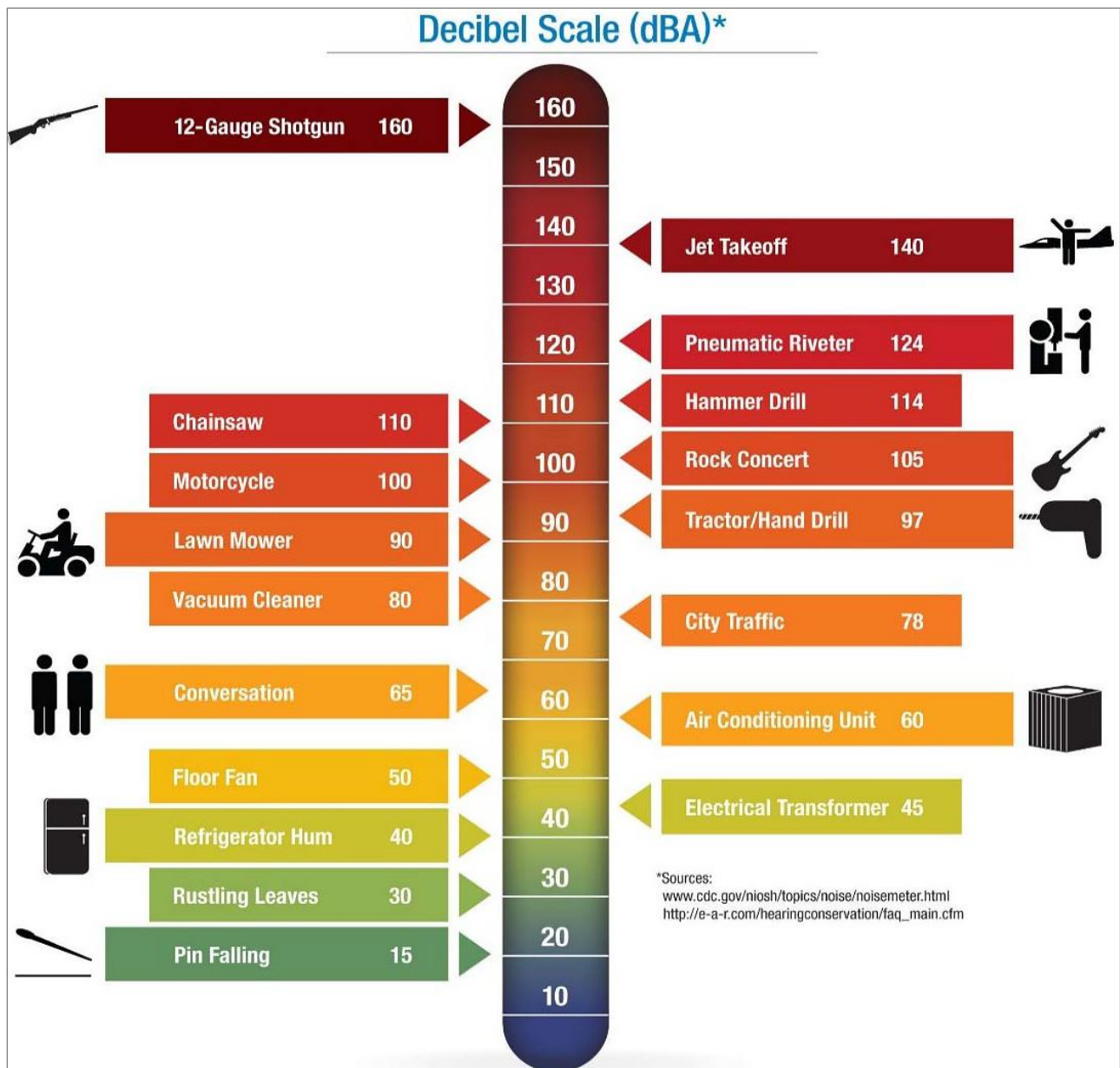
3.13.1 Environmental Setting

ACOUSTIC FUNDAMENTALS

Noise and Sound

Noise is often described as unwanted sound. Sound is defined as any pressure variation in air that human hearing can detect. If the pressure variations occur frequently enough (i.e., at least 20 times per second) they can be identified as sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second or Hertz (Hz).

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale utilizes the hearing threshold (20 micropascals of pressure) as a point of reference, defined as 0 dB. Other sound pressures are then compared to the reference pressure, and the logarithm is taken to keep the numbers within a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB. Another useful aspect of the decibel scale is that changes in decibel levels correspond closely to human perception of relative loudness. Figure 3.13-1 shows typical A-weighted noise levels for various noise sources.



Source: BAC 2021

Figure 3.13-1 Typical Noise Levels

The perceived loudness of sound is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by weighting the frequency response of a sound level meter by means of the standardized A-weighting network. There is a strong correlation between A-weighted sound levels (expressed as dBA) and community response to noise. Common noise descriptors used in this analysis are defined below.

- ▶ Maximum Sound Level (L_{max}): L_{max} is the highest instantaneous sound level measured during a specified period (Caltrans 2013:2-48; FTA 2018:207-208).
- ▶ Day-Night Level (L_{dn}): L_{dn} is the energy average of A-weighted sound levels occurring over a 24-hour period, with a 10-dB “penalty” applied to sound levels occurring during nighttime hours between 10 p.m. and 7 a.m. (Caltrans 2013:2; FTA 2018).

- ▶ Community Noise Equivalent Level (CNEL): CNEL is the energy average of the A-weighted sound levels occurring over a 24-hour period, with a 10-dB penalty applied to sound levels occurring during the nighttime hours between 10 p.m. and 7 a.m. and a 5-dB penalty applied to the sound levels occurring during evening hours between 7 p.m. and 10 p.m. (Caltrans 2013).

Noise Attenuation with Distance

Sound generated by stationary “point” sources of noise, attenuates (decreases) at a rate of approximately 6 dBA per doubling of distance from the source, not accounting for environmental conditions (i.e., atmospheric conditions, noise barriers, ground type, vegetation, topography, etc.). Surface traffic (a “moving point” source), would typically attenuate at a lower rate, approximately 4.5 dBA per doubling distance from the source (also dependent upon environmental conditions).

Noise from on-site operations at the project site are treated as point sources whereas ready-mix trucks on Seaport Road are treated as moving point sources. As a result, attenuation of on-site and off-site noise sources would be 6 and 4.5 dBA per doubling of distance, respectively. Atmospheric absorption of sound varies depending on temperature and relative humidity, as well as the frequency content of the noise source. In general, “average day” atmospheric conditions result in attenuation at a rate of approximately 1.5 dB per thousand feet of distance in the 1,000 hertz frequency band (Appendix F).

Effects of Noise on People

The effects of noise on people can be divided into three categories:

- ▶ Subjective effects of annoyance, nuisance, dissatisfaction.
- ▶ Interference with activities such as speech, sleep, and learning; and
- ▶ Physiological effects such as hearing loss or sudden startling.

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the third category. There is no completely satisfactory way to measure the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists, and different tolerances to noise tend to develop based on an individual’s past experiences with noise.

An important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment (or ambient noise) to which one has adapted. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it. With regard to increases in A-weighted noise level, the following relationships occur (Caltrans 2013):

- ▶ It is widely accepted that the average healthy ear can barely perceive noise level changes of 3 dBA for similar noise sources;
- ▶ A change in level of 5 dBA is a readily perceptible increase in noise level; and
- ▶ A 10-dBA change is recognized as twice as loud as the original source.

These relationships occur in part because of the logarithmic nature of sound and the decibel system. Noise levels are measured on a logarithmic scale, instead of a linear scale. On a logarithmic scale, the sum of two noise sources of equal loudness is 3 dBA greater than the noise generated by only one of the noise sources (e.g., a noise source of 60 dBA plus another noise source of 60 dBA generate a composite noise level of 63 dBA).

Vibration

Vibration is like noise in that it involves a source, a transmission path, and a receiver. While vibration is related to noise, it differs in that noise is generally considered to be pressure waves transmitted through air, while vibration is usually associated with transmission through the ground or structures. As with noise, vibration consists of an amplitude and frequency. A person’s response to vibration will depend on their individual sensitivity as well as the amplitude and frequency of the source.

Vibration can be described in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration in terms of peak particle velocities (inches/second) or root mean square (rms) velocities (VdB). Standards pertaining to perception as well as damage to structures have been developed for vibration in terms of peak particle velocity.

As vibrations travel outward from the source, they excite the particles of rock and soil through which they pass and cause them to oscillate. Differences in subsurface geologic conditions and distance from the source of vibration will result in different vibration levels characterized by different frequencies and intensities. In all cases, vibration amplitudes will decrease with increasing distance. The maximum rate, or velocity of particle movement, is the commonly accepted descriptor of the vibration "strength".

EXISTING ENVIRONMENTAL SETTING

Identification of Existing Sensitive Receptors

Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels, and because of the potential for nighttime noise to result in sleep disruption. Additional land uses such as schools, transient lodging, historic sites, cemeteries, and places of worship are also generally considered sensitive to increases in noise levels. These land use types are also considered vibration-sensitive land uses in addition to commercial and industrial buildings where vibration would interfere with operations within the building, including levels that may be well below those associated with human annoyance.

The nearest identified sensitive receptor location to the project site is the Pacific Shores Center office/professional/commercial uses to the immediate south and east of the project site. The nearest office/professional building within this center is approximately 500 feet from the project site entrance, 800 feet from project construction/operational noise sources. The interior areas of these uses are considered noise-sensitive. The Pacific Shores Center also includes recreational facilities, with the nearest playing field (baseball diamond) also over 500 feet from the project site, also considered sensitive receptors. The Westpoint Harbor is also considered a noise-sensitive receptor.

The nearest noise-sensitive receptor locations located along Seaport Boulevard between the project site and Highway 101 are the interior office spaces associated with the Port of Redwood City Administration Building (50 feet from the frontage road centerline), and office spaces within the Britannia Seaport Centre (130 feet from the frontage road centerline). The outdoor dining/patio area of the Sequoia Yacht Club is located approximately 400 feet from the Seaport Boulevard centerline which is also identified as residential use. Refer to Appendix F for further details about the identified sensitive receptors.

Existing Noise Sources and Levels

To establish existing noise and vibration levels, an ambient noise survey was conducted by Bollard Acoustical Consultants, in October 2020. The following summarizes the results. For complete details, including locations of measurements and measurement data, refer to Appendix F of this document.

The existing ambient noise environment in the project vicinity is defined primarily by local traffic on Seaport Boulevard and existing industrial operations within the Port of Redwood City. To quantify existing ambient noise levels in the immediate project vicinity and at receptors located further south along Seaport Boulevard, both long- and short-term noise surveys were conducted.

The long-term noise surveys consisted of continuous monitoring of sound near the project site entrance (Site LT-1 on Figure 2 in Appendix F) between noon on October 1st and 11 am on October 5th, 2020 (95 consecutive hours), and a location 70 feet from the centerline of Seaport Boulevard at the Redwood City Marina (Site LT-2 on Figure 2 in Appendix F), between September 14-16, 2021 (72 consecutive hours). In addition to the long-term noise surveys, short-term (15-minute) monitoring was conducted adjacent to the nearest office/professional buildings to the southeast during the 11 am hour of October 5, 2020. The short-term noise survey site is labelled ST-2 on Figure 2 of Appendix F.

The continuous (long-term) noise survey indicated that existing noise levels near the project entrance ranged from 55-63 dB L_{dn} , with the lower end of the measured levels occurring during the weekend period. At the other site, which is 70 feet from the centerline of Seaport Boulevard at the Redwood City Marina, the continuous noise survey indicated that existing noise levels ranged from 69-70 dB L_{dn} . The higher ambient noise levels measured at the site were due to a much higher volume of trucks due to the other industrial uses located between this site and the project site.

The short-term noise survey location which was adjacent to the nearest office/professional buildings to the southeast indicated average and maximum ambient noise levels of 48 dB L_{eq} and 56 dB L_{max} , respectively. These levels are considered to be atypically low which was because of the level of observed activity occurring within the office park.

The existing ambient vibration environment in the project vicinity was subjectively evaluated as being imperceptible during the site visit despite operations occurring within the project area and heavy truck usage on Seaport Boulevard. It was also measured a vibration measurement and the levels ranged from approximately 35 to 54 VdB at the measurement site.

Because the project site is located in a location with industrial and business park land uses around it and as a result several noise sources exist in the project vicinity, predominantly vehicle traffic on the Seaport Blvd Road and the US Highway 101. Other existing noise sources include equipment used in industries nearby, and operational activities associated with adjacent commercial and industrial land uses (e.g., parking lots, loading docks and delivery trucks).

NOISE AND VIBRATION REGULATIONS

Federal Transit Authority Vibration Criteria

To address the human response to ground vibration, the Federal Transit Authority (FTA) has guidelines for maximum-acceptable vibration impact criteria for different types of land uses. Table 3.1-1 shows vibration impact criteria for general assessment. The FTA also provides guidance about vibration levels that can cause damage to structures. Table 3.1-2 shows FTA's criteria for assessing damage to structures.

Table 3.1-1 Ground-Borne Vibration Impact Criteria for General Assessment

Land Use Category	Ground-Borne Vibration Impact Levels (VdB re 1 microinch/second)		
	Frequent Events ¹	Occasional Events ²	Infrequent Events ³
<i>Category 1:</i> Buildings where vibration would interfere with interior operations	65 ⁴	65 ⁴	65 ⁴
<i>Category 2:</i> Residences and buildings where people normally sleep	72	75	80
<i>Category 3:</i> Institutional land uses with primarily daytime uses	75	78	83

Notes: VdB re 1 microinch/second = vibration decibels referenced to 1 microinch/second and based on the root mean square velocity amplitude.

¹ "Frequent Events" is defined as more than 70 vibration events of the same source per day.

² "Occasional Events" is defined as between 30 and 70 vibration events of the same source per day.

³ "Infrequent Events" is defined as fewer than 30 vibration events of the same source per day.

⁴ This criterion is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes. Vibration-sensitive manufacturing or research would require detailed evaluation to define acceptable vibration levels.

Source: FTA 2018

Table 3.1-2 Criteria for Assessing Damage to Structures

Building Category	Level, VdB1
I. Reinforced-concrete, steel or timber (no plaster)	102
II. Engineered concrete and masonry (no plaster)	98
III. Non-engineered timber and masonry buildings	94
IV. Buildings extremely susceptible to vibration damage	90

Notes: RMS velocity in decibels (VdB) re 1 micro-inch/second

Source: FTA: 2018

FICON Standards

The Federal Interagency Commission on Noise (FICON) has developed a graduated scale for use in the assessment of project-related noise level increases. Table 3.1-3 was developed by FICON as a means of developing thresholds for impact identification for project-related noise level increases. The rationale for the graduated scale is that test subject's reactions to increases in noise levels varied depending on the starting level of the noise. Specifically, with lower ambient noise environments, such as those below 60 dB L_{dn} , a larger increase in noise levels was required to achieve a negative reaction than was necessary in more elevated noise environments.

Table 3.1-3 Significance of Changes in Cumulative Noise Exposure

Ambient Noise Level (No Project), dBA L_{dn}	Increase Required for Finding of Significance, dBA
<60	+5 or more
60-65	+3 or more
>65	+1.5 or more

Notes: dBA= A-weighted decibel; L_{dn} = day-night average noise level

Source: FICON 1992

Based on the FICON research, and shown above in Table 3.1-5, a 5 dB increase in noise levels due to a project is required for a finding of significant noise impact where ambient noise levels without the project are less than 60 dB L_{dn} . Where pre-project ambient conditions are between 60 and 65 dB L_{dn} , a 3 dB increase is applied as the standard of significance. Finally, in areas already exposed to higher noise levels – specifically pre-project noise levels in excess of 65 dB L_{dn} – a 1.5 dB increase is considered by FICON as the threshold of significance.

Redwood City General Plan Public Safety Element

The Redwood City General Plan Public Safety Element contains the Redwood City exterior noise guidelines for Land Use Planning. Table 3.1-4 indicates normally, and conditionally acceptable noise levels (L_{dn}) adopted by the general plan for the different land uses types.

Table 3.1-4 Redwood City Noise Guidelines for Land Use Planning

Land Use Type	Normally Acceptable (dBA L_{dn})	Conditionally Acceptable (dBA L_{dn})
Regional Commercial Uses	70	75
Office/Professional/Technology Uses	65	75
Marina	60	75
Industrial/ Port	75	85
Open Space/ Recreation	75	80

Source: Redwood City 2010

Threshold of Significance

In accordance with CEQA Appendix G checklist, available local and federal regulations and guidance, the project would result in a significant impact from noise if it would:

- ▶ result in a substantial temporary (i.e., construction) increase in noise levels in the vicinity of the project in excess standards established in the local general plan or noise ordinance (i.e., 110 dBA) or in other applicable local, state, or federal standards.
- ▶ Result in a substantial (i.e., 5 dB or more when ambient noise levels are 60 dB L_{dn} , 3 dB or more when ambient noise levels are 60-65 dB L_{dn} , and 1.5 dB or more when ambient noise levels are more than 65 dB L_{dn}) permanent increase in ambient noise levels in the vicinity of the project in excess standards established in the local general plan (i.e., applicable standards as referenced in Table 3.1-4 and interior level of 45 dBA L_{dn}) or noise ordinance in other applicable local, state, or federal standards.
- ▶ Result in excessive groundborne vibration that exceeds FTA's level for assessing structural damage of 90 VdB and or 75 VdB for assessing human annoyance from frequent events.

3.13.2 Discussion

- a) **Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?**

Construction

Less than significant. The project would result in a temporary increase in noise levels from construction activities. Construction activities would include the use of various types of equipment, such as a backhoe, compactor, dozer, excavator, loader, grader, scraper, water truck, crane, and pile driver. Reference noise levels for construction equipment range from 76 to 101 dBA L_{max} at 50 feet, assuming continual use over one hour (FTA 2018). Thus, assuming the combined noise levels of two pieces of equipment (e.g., dozer and grader), construction noise levels could reach 88 db L_{max} at 50 feet. Refer to Table 6 of Appendix F for reference noise levels and an equipment list.

Since the construction activities related to individual equipment types would not likely occur continuously for a full hour, average construction noise levels would be lower than these reference maximum noise levels. Nonetheless, this analysis uses the higher L_{max} levels as a conservative approach. The nearest sensitive receptors are located at distances ranging from 800 to 2,500 feet from the construction activities. At those distances, applying a standard attenuation rate of 6-dB per doubling of distance from the source, project construction noise levels would range from 24 to 34 dB lower than the reference sound levels for construction equipment, resulting in 64 and 54 dBA L_{max} at 800 feet and 2,500 feet from the source, respectively. Considering construction equipment reference noise levels and distances to nearby receptors (i.e., 800 feet and beyond), noise levels would be well below the Redwood City's Code of Ordinance standard of 110 dB at any point within a residential district of the City and outside of the plane of the project site and construction activities would take place during the daytime hours, consistent with City code. Further, based on the ambient noise survey that was conducted, L_{max} noise levels at the nearest offsite receptors was measured to be 56 dbA L_{max} , which is higher than projected construction noise. Thus, because project-generated construction noise would be below ambient levels, it would not result in a substantial temporary increase in noise. For these reasons, this impact would be less than significant.

Operations

Stationary Sources

Less than significant. Operational stationary noise sources would include operation of the ready-mix production equipment, including onsite truck circulation. Based on reference noise levels for similar operations to the proposed project, the facility would be expected to generate noise levels of 75 dBA L_{eq} and 85 dBA L_{max} at a reference distance of 100 feet from the main noise source of the project (batch plant). Based on the continuous operation of the batch

plant during the proposed typical hours of operation (6 a.m. – 6 p.m.), the average noise level was estimated to be 75 dB L_{dn}. If the plant were to operate continuously for a 24-hour period, the computed level was estimated to be 81 dB L_{dn} at a reference distance of 100 feet. The estimated noise level at the distance of 100 feet from the project was attenuated to estimate the noise levels at the nearest noise-sensitive receptors. In addition, the plant site would be substantially shielded in the direction of the nearest receptors by existing structures including large cement silos. The shielding is predicted to reduce plant noise levels by a minimum of 10 dB at those receptors. All noise modeling outputs are contained in Appendix F. The predicted project noise levels at the nearest receptors resulting from onsite activities are summarized below in Table 3.1-5.

Table 3.1-5 Predicted Plant Site Noise Levels at Nearest Receptors

Receptor	Description	Distance (ft)	6 am - 6 pm Operations (dBA L _{dn})	24-hour Operations (dBA L _{dn})	Noise Standard (dBA L _{dn})	Exceed Standard?
1	Office Buildings to Southeast	800	45	51	65	No
2	Playing Fields to South	800	45	51	75	No
3	Office Buildings to South	2,500	36	42	60	No
4	Yacht Club to East	2,500	36	42	55	No
5	Yacht Club to the South	4,000+	30	36	55	No

Notes: ft=feet; dBA= A-weighted decibel; L_{dn}= day-night average noise levels

Source: Bollard Acoustical Consultants, 2021

As shown above, noise modeling indicates that the noise generation at the proposed CEMEX Ready Mix facility at the Port of Redwood City will be within compliance with the City's normally acceptable noise exposure standards with a considerable margin of safety. In addition, the predicted levels are at or below measured ambient noise levels in the project vicinity. This impact would be less than significant.

Non-Stationary Sources

Less than significant. The project would receive the majority of the raw materials required to manufacture ready mix concrete by barge, which would then be transported as concrete via truck. As a result, the primary off-site noise source for the project would be ready mix trucks on Seaport Boulevard transporting concrete to and from the project site. The project is anticipated to generate up to 186 daily heavy truck trips associated with the proposed production of ready-mix concrete. These trips would be expected to increase the existing ambient noise levels and were modeled to predict the noise levels at the nearby sensitive receptors. Modeling was conducted using the Federal Highway Administration Highway Traffic Noise Prediction Model (FHWA-RD-77-108) and is summarized below in Table 3.1-6.

Table 3.1-6 Predicted Project Traffic Noise Levels at Noise-Sensitive Receptor Locations

Receptor ¹	Receptor Description	Project Noise (dBA L _{dn})	Noise Standard (dBA L _{dn})	Standard Exceeded?
R-1	Interior of business park office building	26	45	No
R-2	Center of business park playing fields	51	75	No
R-3	Interior of Port of RWC office building	34	45	No
R-4	Westpoint Harbor Yacht Club (nearest boats)	38	55	No
R-5	Redwood City Marina (nearest boats)	55	55	No
R-6	Interior of Seaport Center office buildings	29	45	No

Notes: dBA= A-weighted decibel; L_{dn}= day-night average noise levels

¹ Receptor identifications correspond to Figure 2 in Appendix F.

Source: Appendix F

As shown above, project-generated traffic noise levels would not exceed Redwood City's noise standards at the nearest sensitive receptors to the project site. In addition, the ambient noise survey conducted for the project, showed that ambient noise conditions in the project vicinity ranged from 55-63 dB L_{dn} at the nearest receptors to the project site and from 69-70 dB L_{dn} at the nearest noise-sensitive receptors to the project heavy truck route. Relative to these baseline levels, the predicted noise levels would not increase more than 1 dB. Since the project-generated, heavy truck traffic noise levels would be below the City's General Plan noise standards at the nearest sensitive receptors to the project site and haul route, and the project-related increases in ambient noise conditions at those same receptors would not be considered substantial, this impact would be less than significant.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Construction

Less than Significant. During construction of the project, heavy equipment could generate localized vibration in the immediate vicinity of the construction. Reference vibration levels for heavy-duty equipment range from 79 to 104 VdB at 25 feet (FTA 2018). Project construction activities would occur at distances ranging from 800 to 2,500 feet from the nearest sensitive receptors. At those distances, project construction vibration generation would range from 45 to 60 VdB lower than the reference vibration levels, resulting in vibration levels that range from 19 to 59 VdB at the nearest receptors. These levels would not exceed FTA's vibration criteria of 90 VdB for assessing potential structural damage, or FTA's 75 VdB criteria for assessing human disturbance from frequent events. See Appendix F for vibration noise modeling outputs. This impact would be less than significant.

Operations

Less than Significant. To assess long-term operational vibration, reference vibration level data were collected from similar operations to the proposed project. Based on that survey, reference vibration levels ranged from 40 to 58 VdB at 35 feet from concrete batch plant operations. The nearest sensitive receptor is located approximately 800 feet from the proposed batch plant. At that distance, vibration levels would be considerably lower than the levels measured at the 35-foot reference distance. Since the reference levels measured at 35 feet do not exceed the FTA's threshold of 90 VdB for structural damage or 75 VdB for human annoyance, vibration levels at 800 feet would also not exceed the threshold. Therefore, this impact would be less than significant.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. There are no private airstrips or airports within two miles of the project site. The nearest airport to the project site is the San Carlos Airport, located approximately 5.8 miles west of the project site. The project would not include any new land uses where people would live or work in proximity to airport. Therefore, the project would not result in the exposure of people to excessive noise levels associated with airport activity. Thus, the project would have no impact.

3.14 POPULATION AND HOUSING

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. Population and Housing.				
Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.14.1 Environmental Setting

The proposed project site is located within the Port of Redwood City within Redwood City. No housing or other residential communities exist on or adjacent to the site of the proposed project. The nearest landside residential communities are located 1.3 miles to the southwest on Bair Island and Blu Harbor. In addition, recreational vessel liveboards are located approximately 2,500 feet southeast of the project in the Westpoint Harbor and approximately 4,500 feet from the project at the Redwood City Municipal Marina. Redwood City was estimated to have a population of approximately 85,182 as of January 2021 (CA Dept. of Finance 2021). San Mateo County was estimated to have a population of 765,245 as of January 2021 (CA Dept of Finance 2021)

The existing San Carlos Facility has approximately 15 employees.

3.14.2 Discussion

- a) **Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

Net daily commute trips to the proposed project site would increase. An estimated 19 employees would be required to staff the proposed project during operation, which is approximately four more employees than currently employed at the San Carlos Facility.

Less-than-significant impact. The proposed project would support 19 employees at the project site, which would be approximately four more employees than under existing conditions (accounting for employees at the existing San Carlos Facility). The proposed project does not propose the development of new homes, commercial facilities, or roadways that could result in substantial population growth. It is anticipated that the additional four employees anticipated to operate the proposed project would be met with the existing population within the region, and therefore would not induce population growth. This impact would be less than significant.

- b) **Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?**

No impact. The proposed project site is within an existing aggregate processing facility and cement terminal within the Port and does not currently support any form of residential communities or housing. The proposed project would place a ready-mix concrete batch plant on a portion of the existing aggregate and cement facility. Approximately 19 employees would be required to staff the proposed project for operation, which is approximately four more employees

than under existing conditions (accounting for employees at the existing San Carlos Facility). Given the relatively small increase in employment, additional housing would not be required and the project would not directly displace a substantial number of existing people or housing. Therefore, no impact would occur.

3.15 PUBLIC SERVICES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. Public Services.				
Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.15.1 Environmental Setting

Fire protection services to the City of Redwood (including the Port) are provided by the Redwood City Fire Department. Police services are provided by the Redwood City Police Department. K-8 education is provided by the Redwood City School district. The City is also served by the Sequoia Union High School District. Park services are provided by the Redwood City Parks, Recreation, and Community Services Department. The Port has more than one mile of waterfront public access, walkways and viewing areas including waterfront parks with picnic areas, restrooms, and parking. Fishing is allowed from the public fishing pier and public art installations along the waterfront welcome visitors to enjoy our public amenities. The Port is home to one of only two public boat launch ramps with access to San Francisco Bay, south of Coyote Point. Refer to section 3.16, "Recreation" below, for additional information on potential impacts to recreational facilities.

3.15.2 Discussion

- a) **Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:**

No impact. The proposed project would not result in the provision of new or expanded public services such as fire protection, parks, police, and school services. The proposed project would install a ready-mix concrete batch and ancillary structures on a portion of an existing aggregate processing facility within an area characterized by industrial land uses. During operation, the proposed project would be served by City's existing public services. The project would not result in a population increase or an increase or change in land use such that the construction of new or

expanded public services such as fire protection, police services, schools, or parks would be required. Therefore, there would be no impact.

Fire protection?

No impact. Refer to the discussion under question 3.15.2 a) above.

Police protection?

No impact. Refer to the discussion under question 3.15.2 a) above.

Schools?

No impact. Refer to discussion under question 3.15.2 a) above.

Parks?

No impact. Refer to discussion under question 3.15.2 a) above.

Other public facilities?

No impact. Refer to discussion under question 3.15.2 a) above.

3.16 RECREATION

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. Recreation.				
Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.16.1 Environmental Setting

Parks within the City are managed or provided by the City of Redwood Parks, Recreation, and Community Services Department. The public park closest to the proposed project site is the public waterfront and promenade located adjacent to Redwood Landing. In addition, Andrew Spinas Park is located about 2 miles southwest of the proposed project site. Bedwell Bayfront park is located approximately 2 southeast of the project site, within the City of Menlo Park. The Redwood Shores State Marine Park is located approximately 2 miles north of the proposed project site.

The proposed project site supports industrial land uses and is not located within or adjacent to any recreational facilities or land uses.

3.16.2 Discussion

- a) **Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**

No impact. The proposed project does not propose the development of new homes, commercial facilities, or roadways that could result in population growth that may increase the use of nearby recreational facilities or parks. Furthermore, the proposed project site is not located within or adjacent to recreational facilities or land uses. Therefore, there would be no impact.

- b) **Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?**

No impact. The proposed project does not include the construction or expansion of recreational facilities or parks. The proposed project would not construct development such as homes or commercial facilities that may induce population growth, thereby requiring the construction of park space or other recreational facilities that may have an adverse impact to the physical environment. Therefore, there would be no impact.

3.17 TRANSPORTATION

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. Transportation.				
Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.17.1 Environmental Setting

ROADWAY NETWORK

Access to the project site is provided via the surrounding roadway network which includes US Route 101 (US 101), State Route (SR) 84, SR 82, Seaport Boulevard, and Frontage Road.

Federal and State Highways

The following state highway is operated and maintained by Caltrans and provides regional access to the Project site:

- ▶ US 101 is a north-south freeway that traverses the West Coast through the states of Washington, Oregon, and California. Within California, US 101 connects the major metropolitan areas of the San Francisco Bay Area and Los Angeles. Near the project site, US 101 can be accessed via the Seaport Boulevard and US 101 interchange south of the project site.
- ▶ SR 84 is a north-south freeway in the vicinity of the project site. SR 84 provides a direct connection between the two major highways of US 101 and Interstate 280 (I-280) which run parallel to one-another in the region. SR 84 can be accessed via Seaport Boulevard at the US 101 and SR 84 interchange south of the project site.

Roadways

The following roadways provide access to the Project:

- ▶ Seaport Boulevard is a bi-directional four-lane roadway in vicinity of the project site which provides access to the Port. The posted speed limit near the project site is 35 miles per hour (mph). Parking is not generally permitted on either side of the roadway. Sidewalks are present on the eastern side of the roadway; however, bicycle facilities are not present on either side of the roadway.
- ▶ Frontage Road provides direct access to the project site and is a bi-directional two-lane roadway which runs from the intersection of Seaport Court south of the project site to the northernmost entrance of the Port. Frontage Road runs parallel and adjacent to Seaport Boulevard (to the east) and the two roadways are separated by a landscaped raised median. Additionally, railroad tracks run parallel and adjacent to Frontage Road to the west.

The posted speed limit near the project site is 25 mph. Near the Project site, parking is prohibited on both sides of the roadway. Sidewalks and bicycle facilities are not present along the road.

BICYCLE AND PEDESTRIAN FACILITIES

The bicycle and pedestrian transportation system in Redwood City is composed of local and regional bike lanes, bike paths, and bike routes. Bicycle facilities as classified in the Citywide Transportation Plan (Redwood City 2018:11-12), also known as Redwood City Moves (RWCmoves), are as follows:

- ▶ Shared-Use Paths (Class I) provide a completely separate right-of-way and are designated only for bicycle and pedestrian use;
- ▶ Bicycle Lanes (Class II) are dedicated lanes for bicyclists generally adjacent to the outer vehicle travel lanes;
- ▶ Bicycle Routes (Class III) are designated by signs or pavement markings for shared use with motor vehicles, but have no separated bike right-of-way or lane striping;
- ▶ Cycle Track/Separated Bikeway (Class IV) provide a right-of way designated exclusively for bicycle travel in a roadway and are protected from other vehicle traffic by physical barriers, including, but not limited to flexible posts, raised curbs, or parked cars.

No bicycle facilities are present in the vicinity of the project site along Seaport Boulevard or Frontage Road. Pedestrian facilities (sidewalks) in the vicinity of the project site are limited to a continuous sidewalk along the east side of Seaport Boulevard.

TRANSIT SYSTEM

Caltrain and SamTrans provide transit service in Redwood City and surrounding communities. Caltrain operates 76 daily trains during the weekdays that serve Redwood City, and SamTrans operates 18 bus routes in the City (Redwood City 2018:15). Caltrain operates express "Baby Bullet" service to San Francisco and San Jose, providing regional transit access for Redwood City residents and employees. Additionally, Caltrain operates the Seaport Centre shuttle from the Redwood City Caltrain station to Seaport Centre approximately one mile south of the project site. The Redwood City Transit Center is located approximately 2.25 miles southwest of the project site. The SamTrans 270 bus loop, which has one-hour headways throughout the day, stops along Blomquist Street and Maple Street approximately a mile and a half from the project site.

REGULATORY SETTING

Senate Bill 743

Senate Bill (SB) 743, passed in 2013, required the Governor's Office of Planning and Research (OPR) to develop new State CEQA guidelines that address traffic metrics under CEQA. As stated in the legislation, upon adoption of the new guidelines, "automobile delay, as described solely by level of service (LOS) or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment pursuant to this division, except in locations specifically identified in the guidelines, if any." State CEQA Guidelines Section 15064.3 was added on December 28, 2018, to assist with determining the significance of transportation-related impacts from a proposed project. The new guideline requires that the analysis is based on VMT instead of congestion and delay-based metrics (e.g., LOS). The change in the focus of transportation analysis is the result of legislation (SB 743) and is intended to shift the emphasis from congestion to reducing greenhouse gas emissions, promoting a diversity of land uses, and developing multimodal transportation networks. Pursuant to CEQA Guidelines Section 15064.3(c), this change in analysis is mandated to be used beginning July 1, 2020.

OPR Technical Advisory on Evaluating Transportation Impacts in CEQA

In December of 2018, OPR published the most recent version of the *Technical Advisory on Evaluating Transportation Impacts in CEQA* (Technical Advisory) which provides guidance for VMT analysis. The OPR Technical Advisory states that lead agencies may screen out VMT using project size, maps, transit availability, and provision of affordable housing. Many agencies use these screening thresholds to identify when a project should be expected to cause a less-than-significant impact without conducting a detailed study.

Redwood City Transportation Analysis Manual

The Redwood City Transportation Analysis Manual was developed to provide guidance related to evaluating land use and transportation infrastructure projects' effects on the transportation system. The Transportation Analysis Manual was adopted in July 2020 and serves decision-makers and the public in their review of projects for compliance in both CEQA and non-CEQA analysis (Redwood City 2020).

The Transportation Analysis Manual identifies VMT screening thresholds based on the Technical Advisory presented above. These screening thresholds are identified below:

- ▶ Transit Priority Areas (TPA): Projects located within ½-mile walkshed around major transit stops (i.e., Redwood City Transit Center Station) or within ¼ mile walkshed around high-quality transit corridors (i.e., El Camino Real) in Redwood City [as shown on Figure F-2 of the Transportation Analysis Manual]. However, TPA screening would only apply if the project meets all of the following criteria:
 - Floor Area Ratio (FAR) of 0.75 or more; and
 - Total square footage of 500,000 square feet or less; and
 - Proposed parking does not exceed minimum required by the Zoning Code or applicable plan; and
 - Project is consistent with the Redwood City's General Plan, applicable Specific Plan, or applicable Sustainable Communities Strategy (as determined by the lead agency, with input from MTC); and
 - Existing on-site affordable residential units are maintained or increased; and
 - Less than significant levels of VMT are expected due to project-specific or location-specific information.
- ▶ Affordable Housing: 100 percent restricted affordable residential projects in infill locations (i.e., development within unused and underutilized lands within existing development patterns) and near transit (i.e., is within half a mile of a transit stop).
- ▶ Small Projects: Projects defined as generating 150 or fewer average daily vehicle trips, absent substantial evidence indicating that a project would generate a potentially significant level of VMT. Examples of projects that may generate 150 average daily trips include:
 - ~15 units of single family residential
 - ~20 units of multifamily residential
 - ~15,000 s.f. office
 - ~20,000 s.f. industrial

Each project is required to document the estimated number of trips it will generate.

- ▶ Locally Serving Public Facility: Locally serving public facilities that encompasses government, civic, cultural, health, and infrastructure uses and activity which contribute to and support community needs. Locally serving public facilities include police stations, fire stations, passive parks (parks designed for use in an informal way and typically less developed), branch libraries, community centers, public utilities, and public schools. Public facilities will generally have a maximum intensity of 1.0 FAR and a maximum height of three stories: higher structure heights are permitted for facilities within Downtown per the Downtown Precise Plan.

- ▶ Neighborhood-Serving Retail Project: Neighborhood-serving retail projects that are less than 30,000 square feet, which serve the immediate neighborhoods and have a similar use within three miles. Examples include dry cleaners, coffee shops, convenience markets, pharmacies, tutoring centers and daycare centers.

Redwood City Moves

RWCmoves serves as the citywide transportation plan for Redwood City. Adopted in July 2018, RWCmoves provides a framework for a balanced multimodal transportation network as it seeks to improve transportation within the City. RWCmoves is built off of the City's General Plan and identifies the following goals to support the City's vision:

- ▶ Eliminate traffic fatalities and severe injuries for all modes by 2030;
- ▶ create a walking and bicycling-friendly community that provides a safe, balanced, and convenient transportation system
- ▶ provide seamless connections and improved street access to all areas within the City, but especially along mixed-use corridors designated in the General Plan and Citywide Transportation Plan;
- ▶ embrace innovation in all forms of emerging technologies, especially in ways to creatively manage congestion and the transportation system;
- ▶ reach over 50 percent of all trips being by non-driving modes by 2040; remaining automobile trips should be shared rides and/ or zero emission trips;
- ▶ invest in projects that support a resilient, equitable and sustainable transportation system.

3.17.2 Discussion

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Less-than-significant impact. Railroad right-of-way consisting of one rail line, serving freight heavy rail, is located just south of the project site running parallel and adjacent to Frontage Road. The railroad runs along the western side of Frontage Road and Seaport Boulevard in the vicinity of the project site. The nearest Caltrain station, providing commuter rail service with approximately 30-minute headways on weekdays, is located at Redwood City Station at the Redwood City Transit Center approximately 3 miles from the project site. Additionally, Caltrain operates the Seaport Centre shuttle from the Redwood City Caltrain station to Seaport Centre approximately one mile south of the project site. The SamTrans 270 bus loop servicing the Blomquist Street and Maple Street bus stop, which is located approximately a mile and a half from the project site, has one-hour headways throughout the day. RWCmoves identifies future transit access and service enhancements along Seaport Boulevard (Redwood City 2018:49); however, detailed information regarding location, facility type, and programmed funding has not been determined.

The number of employees that would access the CEMEX facilities during operational activities is anticipated to be 19 (which is four more employees than the existing San Carlos Facility). Thus, due to the modest increase in potential transit riders associated with the project, the existing transit services in the vicinity of the project would provide sufficient capacity for the any project-generated increase in demand for transit service. Additionally, the project is located off of Frontage Road; and thus, would not conflict with future transit service and facilities envisioned along Seaport Boulevard by RWCmoves if planned, programmed, and built in the vicinity of the project site. Therefore, the project would not result in a substantial increase in demand for transit facilities, or conflict with a program, plan, ordinance, or policy addressing transit.

Pedestrian facilities are not present along Frontage Road and only exist on the eastern side of Seaport Boulevard. Additionally, there are no bicycle facilities within the vicinity of the project site. RWCmoves identifies the area along Seaport Boulevard as a future active transportation corridor (Redwood City 2018:38); although, the plan does not specify facility type, estimated cost, or programmed funding for implementation.

All proposed project improvements are located within CEMEX owned Assessor Parcel Number (APN) 054-300-480 and, thus, would not alter the surrounding roadway network. As is currently the case, all trucks would be required to use Frontage Road and avoid use of Seaport Boulevard until Frontage Road merges with Seaport Boulevard farther to the southwest. Along Seaport Boulevard, there is a multi-use path separated from Seaport Boulevard by landscaping and a curb which avoids any conflict between pedestrian and cyclist with existing and future traffic along the roadway. Therefore, the project would not conflict with bicycle or pedestrian improvements. Employees anticipated to access the project site during operations is estimated to be 19; thus, there would not be a substantial increase in the demand for additional bicycle or pedestrian facilities.

For the reasons detailed above, the project would not result in an increase in demand for transit, bicycle, or pedestrian facilities; disrupt any such existing or planned service or facilities; or conflict with a program, plan, ordinance, or policy addressing these facilities. Therefore, the project would result in a less-than-significant impact and no mitigation is required.

b) Conflict or be inconsistent with CEQA Guidelines section 15064.3(b), which pertains to vehicle miles travelled?

Less than significant impact. The stated intent of SB 743, as described above in the "Regulatory Setting" above, is to promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses. The greenhouse gas emissions of trips associated with heavy vehicles serving the project site are addressed in Chapter 3.8, "Greenhouse Gas Emissions." Moreover, through the implementation of statewide regulations such as CARB's Sustainable Freight Strategy, which will transition heavy-duty trucks, including Port drayage trucks, operating within California to be 100 percent electric by 2045. Additionally, heavy vehicle trips associated with industrial land uses would occur regardless of the available modes of transportation (e.g., walking, bicycling, public transit) or the mix of land uses in the project vicinity. Further, CEQA Guidelines Section 15064.3(a) states that VMT refers to the amount and distance of *automobile* travel attributable to a project (*emphasis added*). The OPR Technical Advisory describes that the term "automobile" as used in Section 15064.3(a), refers to on-road passenger vehicles, specifically cars and light trucks; heavy vehicles are not included in the definition.

Therefore, limiting the VMT analysis to automobile travel would be consistent with the intent of SB 743 and CEQA Guidelines Section 15064.3(a), and the ability to reduce greenhouse gas emissions from land use decisions and the availability of alternatives to automobile travel. As such, for purposes of determining a significant transportation impact under CEQA, heavy vehicle VMT associated with goods and material movement is not a consideration in the impact analysis presented below.

Construction

As detailed in Chapter 2, "Project Description," project construction would last approximately five months and, at the peak of project construction, 15 construction workers would access the project site per day. Project construction activities would be temporary and intermittent in nature; and thus, would not result in long-term increases in vehicular trips. Additionally, no phase of construction would overlap with operation of the project.

The VMT of construction workers is not newly generated; instead, it is redistributed throughout the regional roadway network based on the different work sites in which workers travel to each day. Therefore, construction workers are not generating new VMT each day, only redistributing it. Additionally, even if the trips generated during project construction were considered, workers are expected to generate a total of 30 daily trips at the peak of construction activities, and assuming that construction workers would not carpool and would generate two trips per worker per day. Therefore, the number of daily construction trips generated would be fewer than 150 trips per day, which is the screening threshold for small projects as detailed in the Redwood City Transportation Analysis Manual. Therefore, VMT generated during construction activities would be temporary, intermittent, and the project construction is not expected to significantly increase VMT in the region. Impacts would be less than significant.

Operations

Although heavy vehicle VMT is not the focus of SB 743, Chapter 2, "Project Description", identifies project objectives which include the reduction of VMT and associated environmental impacts by reducing the need to transport raw materials to an off-site ready-mix concrete plant. Currently, raw materials, including aggregates and cement, are hauled from the Port to an existing ready-mix concrete facility located in San Carlos approximately 5 miles from the project site. Implementation of the project would decommission the San Carlos facility due to the consolidation of activities at the project site.

The existing throughput at the San Carlos facility—using a 3-year average (2017-2019) to account for annual fluctuations—is 81,723 cubic yards per year. There were 12,628 annual dry bulk haul truck trips (42 daily trips), 18,270 annual concrete mixer truck trips (61 daily trips), 8,970 employee commute trips (30 daily trips), and 1,196 annual maintenance/service vehicle trip (4 daily) representing an annual average over this 3-year period. Because the 42 daily trips associated with the dry bulk haul trips to the San Carlos facility would no longer occur, the proposed project would result in a reduction of approximately 211 daily VMT.¹

Furthermore, the San Carlos facility is currently served by 15 employees, and the project anticipates that 19 employees will access the project site for daily project operations. The 15 current employees located at the San Carlos facility will likely relocate to the project site once operations begin; thus, increasing the total number of employees by only four. Assuming all employees travel by single occupancy vehicle and do not carpool, the number of new project-generated trips would equate to a total of eight trips, while if it was conservatively assumed that all employee trips were newly generated a total of 38 daily trips would be generated. Therefore, the number of daily trips generated by employees using either approach would be fewer than 150 trips per day; thus, satisfying the screening threshold for small projects as detailed in the Transportation Analysis Manual. Additionally, the consolidation of facilities as outlined above would result in a reduction in daily VMT. Therefore, operational activities are not expected to significantly increase VMT in the region. Impacts would be less than significant.

Summary

Due to the consolidation of facilities, the project would minimize VMT by eliminating haul truck trips between the Port and San Carlos facilities. Once operational, the project employee commute trips, which would result in a net increase of eight additional trips, would not exceed Redwood City Transportation Analysis Manual screening criteria for projects that generate fewer than 150 trips per day. Additionally, construction worker trips and vehicular activity related to construction would be minimal, totaling 30 daily trips at the peak of construction. Furthermore, construction VMT is not newly generated but instead temporary and redistributed between work sites. For these reasons, the project would not conflict or be inconsistent with CEQA Guidelines section 15064.3(b); and thus, would result in a less than significant impact to VMT, and no mitigation is required.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less-than-significant impact. Projects developed in the Port of Redwood City are subject to City design standards and regulations. The project would not require the construction, re-design, or alteration of any public roadways. Vehicles would access the project site from an existing, improved entrance to the cement terminal along Frontage Road. Before construction activities, the applicant would obtain the necessary construction-related encroachment permit from Redwood City to address any potential work in the public right-of-way from planned construction activities; however, no work in the public right-of-way is expected. Additionally, Section 29.6 of the Redwood City Municipal Code requires the approval of a traffic control plan if any lanes of traffic would be closed (Ord. No. 2390, § 3, 1-28-13). The Redwood City Community Development and Transportation Department provides Engineering Standards and Specifications for projects located within the City. Thus, the project would follow all standards identified in Section 01 5500, "Traffic Regulations", pertaining to traffic safety during construction activities.

¹ 211 daily VMT was calculated based on 42 daily trips multiplied by a distance of 5 miles.

All on site roadway improvements associated with the project, such as a rebuilt driveway (if needed, but not currently expected), would be constructed in accordance with Redwood City design and safety standards. Additionally, the project is subject to the City's review process which would ensure that the project design would comply with all applicable industry roadway/driveway design standards. Furthermore, in accordance with City and industry-wide standards, the project would provide adequate sight distance and turning radii at all access points. Therefore, the project would not substantially increase transportation-related hazards; and thus, would result in a less-than-significant impact and no mitigation is required.

d) Result in inadequate emergency access?

Less-than-significant impact. The project would not require the construction, re-design, or alteration of any public roadways. As detailed in Chapter 2, "Project Description", construction work would occur primarily within the CEMEX owned APN 054-300-480. Emergency access would be subject to review by the City and responsible emergency service agencies; thus, ensuring the project would be designed to meet all applicable emergency access and design standards. Therefore, the project would not result in inadequate emergency access and would result in a less-than-significant impact.

3.18 TRIBAL CULTURAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. Tribal Cultural Resources.				
Has a California Native American Tribe requested consultation in accordance with Public Resources Code section 21080.3.1(b)?	<input type="checkbox"/> Yes			<input checked="" type="checkbox"/> No
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.18.1 Environmental Setting

Under PRC section 21080.3.1 and 21082.3, the Port must consult with tribes traditionally and culturally affiliated with the project site that have requested formal notification and responded with a request for consultation. The parties must consult in good faith. Consultation is deemed concluded when the parties agree to measures to mitigate or avoid a significant effect on a tribal cultural resource when one is present or when a party concludes that mutual agreement cannot be reached. Mitigation measures agreed on during the consultation process must be recommended for inclusion in the environmental document.

On August 17, 2021, the Port sent notification letters that the project was being addressed under CEQA to the following tribal representatives:

- ▶ Amah Mutsun Tribal Band of Mission San Juan Bautista, Irene Zwierlein, Chairperson
- ▶ Costanoan Rumsen Carmel Tribe, Tony Cerda, Chairperson
- ▶ Indian Canyon Mutsun Band of Costanoan, Ann Marie Sayers, Chairperson
- ▶ Indian Canyon Mutsun Band of Costanoan
- ▶ Kanyon Sayers-Roods, MLD Contact
- ▶ Muwekma Ohlone Indian Tribe of the SF Bay Area, Charlene Nijmeh, Chairperson
- ▶ Muwekma Ohlone Indian Tribe of the SF Bay Area, Monica Arellano, Vice Chairwoman
- ▶ The Ohlone Indian Tribe, Andrew Galvan

- ▶ Wuksache Indian Tribe/Eshom Valley Band, Kenneth Woodrow, Chairperson
- ▶ Tamien Nation, Quirina Luna Geary, Chairperson

No tribes responded to the notification letter within the 30-day window pursuant to PRC 21080.3.1.

A record search of NAHC Sacred Lands File (SLF) was completed on July 27, 2021. The NAHC search indicated that the SLF was negative for the presence of Native American resources within the project site.

3.18.2 Discussion

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- a) **Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?**

No impact. As described above in Section 3.5, "Cultural Resources," the NWIC records search (NWIC File No. 21-0052) identified no previously recorded prehistoric archaeological resources within the project site or the within the 0.5-mile radius. A search of the NAHC's SLF revealed no sites of tribal significance in the area. Because the project site contains no tribal cultural resources that are listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources, there would be no impact.

- b) **A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?**

No impact. As discussed above, no tribes responded to the notification letter within the 30-day window pursuant to PRC 21080.3.1. In addition, a search of the NAHC's SLF revealed no sites of tribal significance in the area. Because the project site contains no tribal cultural resources determined to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, there would be no impact.

3.19 UTILITIES AND SERVICE SYSTEMS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX. Utilities and Service Systems.				
Would the project:				
a) Require or result in the relocation or construction of construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project’s projected demand, in addition to the provider’s existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.19.1 Environmental Setting

The project site is located on the greater Cemex property, which currently receives domestic water, as well as wastewater and storm water collection and treatment services, from Redwood City. Existing City water, wastewater, and stormwater facilities are provided along Frontage Road, adjacent to the project site. The San Francisco Public Utilities Commission (SFPUC) is a wholesale water supplier to all of the Bay Area Water Supply and Conservation Agency (BAWSCA) member agencies, and is the only wholesale water supplier to Redwood City.

Wastewater generated within City limits is collected and conveyed to the Silicon Valley Wastewater Treatment (SVCW) plant, which provides regional wastewater treatment services in Redwood Shores. The plant currently has an operating capacity of 29 million gallons per day (mgd), average dry weather flow. Of that, Redwood City has been allocated approximately 13.8 mgd of capacity (Redwood City 2010).

Recology San Mateo County, through a contract with the City, handles solid waste collection and disposal for the project area with solid waste disposal facilities provided at Corinda Los Trancos (Ox Mountain) Landfill. The landfill is currently permitted through 2035 and has a remaining capacity of 22 million tons (CalRecycle 2021). Electricity and natural gas service is provided to the project site by PG&E. Telecommunication facilities are also available in the project area via several providers, including AT&T, CenturyLink, and Cox Communications.

3.19.2 Discussion

- a) **Require or result in the relocation or construction of construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?**

Less-than-significant impact. The project would involve the addition of a ready-mix concrete plant to the greater Cemex property in Redwood City. As part of the project, the existing concrete plant in San Carlos (approximately 3 miles west of the project site) would cease operations. On-site utility service would be extended from the existing Cemex facilities to the project site, including a water utility line for concrete production purposes. As noted in Chapter 2, "Project Description," the annual water demand of the project would be approximately 6.2 million gallons per year (19 acre-feet per year), which would be partially offset by concrete production being ceased at the San Carlos Facility. Wastewater collection service would continue to be provided via the existing facilities within the greater Cemex property with additional portable facilities to be provided as part of the project on an as-needed basis. Stormwater drainage facilities would be expanded within the project site to address project-related activities but would not require the expansion of Redwood City collection/treatment facilities. All project-related stormwater would be collected and contained on-site in accordance with applicable WDRs for Aggregate and/or Concrete Facilities and the greater property's SWPPP, which would be amended to include the project site.

On-site uses would also not require the extension of natural gas service to the project site due to the types of uses proposed. Electricity and telecommunication service would be extended to the project site. The evaluation of the extension of the aforementioned utility facilities to the project site, including their construction, is included as part of the overall evaluation of impacts provided herein. Additional or substantially more adverse significant impacts related to utility-related facilities are not anticipated as a result of project-implementation. As a result, impacts would be less than significant, and no mitigation is required.

- b) **Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?**

Less-than-significant impact. The project would increase on-site water demands by approximately 6.2 million gallons per year (19 acre-feet per year), as noted above. However, this demand would be offset by the decommissioning of the San Carlos facility such that the net increase in annual water demand in the region would be 4.2 million gallons per year or approximately 13 acre-feet per year. In addition, the project's total water demand would be roughly equivalent to 90 residential units (assuming 2.21 persons per household and a total annual demand of 0.148 acre-feet per year per residential unit [Redwood City, 2019]). For perspective, a "water demand project", as defined by State CEQA Guidelines 15155, would be the water demand equivalent to more than approximately 500 single-family homes and would require a project-specific water supply assessment. The City has prepared a 2020 Urban Water Management Plan (UWMP) in accordance with the UWMP Act of 1983 (California Water Code Sections 10610-10657). Based on water supply and demand projections provided in the City's 2020 UWMP (Redwood City 2021), the projected demand of the project is considered to be within the demand/supply projections of the City and part of the assumed annual growth in water demand for the City. As a result, implementation of the project would not lead to insufficient water supplies related to existing entitlements and resources, nor would it require new or expanded entitlements. As necessary and in accordance with City requirements, the project would comply with the applicable provisions of the City's Water Shortage Contingency Plan to further reduce temporary water demands within the City service area. Impacts would be less than significant, and no mitigation is required.

- c) **Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?**

Less-than-significant impact. Under the proposed project, any additional employees associated with the project would utilize existing on-site wastewater collection facilities within the greater Cemex property or portable facilities that may be provided on-site. As noted above, wastewater via current infrastructure within the city limits is conveyed

to the SVCW. The additional demand for wastewater service as a result of the 19 employees would be within the potential demand for the current on-site uses and would not be expected to result in the need for additional wastewater treatment capacity. Moreover, the decommissioning of the San Carlos Facility would transfer approximately 15 employees to the project site, resulting in a net new total of only four additional employees. Notably, the San Carlos Facility is also connected to the SVWC plant. As noted above, the SVCW plant has a design capacity of 29 mgd for average dry weather flow and is undertaking plant improvements to improve peak weather flow capacity (SVCW 2020). As a result, the minimal increase in flows from the greater Cemex property as a result of the project are not anticipated to result in inadequate capacity at the SVCW plant. Impacts would be less than significant, and no mitigation is required.

- d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?**
- e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?**

Less-than-significant impact. Regional landfill capacity is available at the Ox Mountain Landfill currently, and on-site services (i.e., collection and disposal) are handled by Recology San Mateo County. It is assumed that solid waste collection and disposal would continue to be provided at the existing Cemex property with implementation of the project. Wastes derived from concrete batching include mixer washout, sludge and returned excess of fresh concrete. Based on the assumption that on-site processes may result in solid waste equivalent to 0.45 percent of total production (Science Direct 2021), annual solid waste produced by the project would be approximately 1,125 tons per year or approximately 4.3 tons per day (Mon-Fri)². Taking into account the decommissioning of the San Carlos facility, this would result in a potential net increase of approximately 2.9 tons per day. Solid waste fluctuates daily and is regularly monitored by the County Sanitation Districts of San Mateo County to ensure there is sufficient landfill space available to dispose of municipal solid wastes. The project would generate ordinary domestic solid waste in quantities typical of industrial uses. Additionally, the project will be subject to the City's and other construction recycling programs. As noted above Ox Mountain Landfill is permitted to process 3,598 tons of refuse a day, has an estimated remaining capacity of 22.2 million cubic yards, and is estimated to close in 2034. Considering the remaining capacity of the nearby landfill, sufficient capacity is considered to be available to serve the project. It should be noted that in the likely case that the nearby landfill closes within the life of the project, additional landfills are owned and operated by Recology and would be available to serve the project. As such, the project would not result in a significant increase in solid waste generation that would exceed available landfill capacity and would comply with applicable solid waste reduction and recycling requirements. Impacts would be less than significant, and no mitigation is required.

² Note that this is a very conservative estimate and the amount is likely below 1 ton per day.

3.20 WILDFIRE

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. Wildfire.				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Require the installation of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.20.1 Environmental Setting

CAL FIRE has mapped the Fire Hazard Severity Zones (FHSZs) for the entire State. FHSZs are based on an evaluation of fuels, fire history, terrain, housing density, and occurrence of severe fire weather and are intended to identify areas where urban fires could result in catastrophic losses. FHSZs are categorized as: Moderate, High, and Very High. According to CAL FIRE’s Fire Resource Assessment Program FHSZ Geographic Information System data, the project site is located within a Non-FHSZs (CAL FIRE 2021).

3.20.2 Discussion

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Less than significant. All proposed changes would occur on the existing Cemex site. The proposed project would not alter the existing roadway system, construct barriers to emergency or other evacuation plans, and would not obstruct implementation of the County of San Mateo Emergency Operations Plan or the City of Redwood City Wildfire Action Plan and Evacuation resources (County of San Mateo 2015; Redwood City 2021). Therefore, the proposed project would not physically interfere with an adopted emergency response plan or evacuation plan. The impact would be less than significant.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Less than significant. The project site is located within a Non-FHSZ, on a relatively flat topography, with existing industrial structures in the project vicinity and immediately adjacent to proposed features. Nothing proposed by the project would have the potential exacerbate wildfire risk. The impact would be less than significant.

- c) Require the installation of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?**

Less than significant. The proposed project would not alter the existing roadway system or construct fuel breaks that could exacerbate wildfire risk. The project would connect utilities, currently onsite, to the proposed office, maintenance, and plant structures for operational requirements associated with these buildings and structures. However, connecting utilities onsite would have little to no potential to exacerbate fire risk as such connections would be conducted by trained technicians (including electricians) and workers. Impacts would be less than significant.

- d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?**

No impact. The project site is located within a Non-FHSZ and the project site is flat. There is no topography that may be burned from wildfire and then result in runoff, post-fire slope instability, or drainage changes. No impact would occur.

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XXI. Mandatory Findings of Significance.				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.21.1 Environmental Setting

State CEQA Guidelines Section 15064(h)(2) states that:

A lead agency may determine in an initial study that a project’s contribution to a significant cumulative impact will be rendered less than cumulatively considerable and thus is not significant. When a project might contribute to a significant cumulative impact, but the contribution will be rendered less than cumulatively considerable through mitigation measures set forth in a mitigated negative declaration, the initial study shall briefly indicate and explain how the contribution has been rendered less than cumulatively considerable.

State CEQA Guidelines Section 15130(b) identifies the following three elements that are necessary for an adequate cumulative analysis:

- ▶ A list of past, present, and probable future projects producing related or cumulative impacts, including those projects outside the control of the lead agency, or a summary of projections contained in an adopted general plan or related planning document that describes or evaluates conditions contributing to the cumulative effect.
- ▶ A summary of expected environmental effects to be produced by those projects. The summary shall include specific reference to additional information stating where the information is available.
- ▶ A reasonable analysis of the cumulative impacts of the relevant projects and an examination of reasonable options for mitigating or avoiding any significant cumulative effects.

A list of past, present, and probable future projects is provided in Table 3.21-1. Past projects include all historic development that has combined to create the existing environmental condition. Present projects are defined as those that are under construction but not yet operational. Probable future projects are defined as those for which a development application has been submitted or credible information is available to demonstrate that project development is the probable outcome.

Projects were selected based on their location within the cumulative study area for the project and the potential to cause impacts related to the impacts of the project. The geographic scope of the cumulative impact analysis area varies based on the environmental topic. The study area for each environmental topic is described under the environmental topic headings below.

Table 3.21-1 Cumulative Projects List

Project Number	Name	Location	Description	Status
1	Fishing Pier	460 Seaport Ct.	Replace fishing pier	Project is currently under construction and will be completed in Q4 2021. Project is categorically exempt from CEQA.
2	Rail Improvements on Herkner Road	Adjacent to 695 Seaport Blvd.	Replace rail crossing components	Engineering drawings are being prepared, Port will solicit contracting bids in 4Q 2021. Construction is anticipated to commence in early Q2 2022. Project is categorically exempt from CEQA.
3	First Responder Jet Dock Between Wharves 4&5	Between Wharves 4 & 5, Redwood Creek Channel	Floating dock designed for first responder fire and police boats.	In conceptual design phase. Construction is estimated to occur in 2023.
4	Maintenance Dredging	Redwood Creek Channel	Dredge 34,084 cubic yards of sediment from Wharves 1, 2, 3 and 4.	Project commenced September 2021. Project is categorically exempt from CEQA.
5	Ferry Project	9 acre parcel adjacent to 876 Seaport Blvd.	Future ferry terminal	Feasibility Study completed and currently the Business Plan is being drafted. If the Water Emergency Transportation Authority (WETA), Port, and Redwood City Council approve the Business Plan, then the planning and CEQA process will commence.

3.21.2 Discussion

- a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?

Less-than-significant impact. As described in Sections 3.1 to 3.21 of this environmental checklist, notably Sections 3.4, "Biological Resources", and 3.5, "Cultural Resources", and Section 3.18, "Tribal Cultural Resources", the project would not have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a

fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory. A mitigation measure (MM BIO-1) is identified to reduce potentially significant impacts related to biological resources (i.e. avoiding nesting birds) to less-than-significant. No other significant impacts were identified and, after implementation of MM BIO-1, all impacts would be less than significant.

b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

Less-than-significant impact. Because the project would have no impact on agriculture and forest resources, cultural resources, land use and planning, mineral resources, public services, recreation, and tribal cultural resources, it would have no potential to contribute to significant cumulative impacts related to those resource areas. The project would have less-than-significant impacts on aesthetics, air quality, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, population and housing, public services, recreation, transportation, and utilities and service systems. With mitigation, the project would have a less-than-significant impact on biological resources. The project would not result in any significant and unavoidable impacts. Analysis of the project’s cumulative effects is provided below for each environmental topic addressed in Sections 3.1 to 3.20 of the checklist that has potential to result in impacts that are less than significant or less than significant with mitigation.

Aesthetics

As described in Section 3.1, the project would have a less-than-significant impact related to light and glare. The project would have no impact on a scenic vista, scenic resource viewed from a state highway, or associated with a conflict with applicable zoning and other regulations governing scenic quality.

The cumulative study area for aesthetics includes the project site and surrounding areas that may combine to result in cumulative lighting and glare impacts. Existing light sources include those typical of an urban industrial setting, including exterior security lighting, street and vehicle lighting, and spillover lighting from buildings. Additionally, the future Ferry Project would add additional sources of light and glare. However, these lighting and glare sources are not so substantial as to create a cumulatively significant light and glare impact.

Based on the analysis in Section 3.1, aesthetics impacts would not be cumulatively considerable because light sources required for temporary construction activities and operation would be directed on-site and would be of similar intensity as existing light sources. Therefore, the project would not contribute to a cumulative effect on aesthetics.

Air Quality

As described in Section 3.3, the project would have less than significant impacts related to conflicts with the applicable air quality plan, increases in criteria pollutants, exposure of sensitive receptors to substantial pollutant concentrations, and emissions of odors. No mitigation is required as there would be no potentially significant impacts that would require its application.

The cumulative study area for air quality is the SFBAAB, which includes San Mateo County. San Mateo County is currently designated as nonattainment for both the federal and state ozone standards, the federal and state PM_{2.5} standard, and the state PM₁₀ standard (CARB 2018, 2019a). The region is designated as in attainment or being unclassifiable for all other NAAQS and CAAQS (BAAQMD 2017a). Air pollutant emissions associated with project construction are addressed as a cumulative impact in Section 3.3. Based on the analysis in Section 3.3, air quality impacts would not be cumulative considerable because the short-term construction of the project would not generate emissions of criteria air pollutants or precursors that would exceed BAAQMD’s established trigger levels, which were developed as a metric to indicate whether a project’s emissions would cumulatively contribute to the nonattainment designations in the SFBAAB. In addition, the project would not expose sensitive receptors to quantities of pollutants greater than significance thresholds, nor would a significant risk of adverse health impacts result from

exposure. As such, impacts related to the exposure of sensitive receptors to substantial pollutant concentrations would not be cumulatively considerable. Furthermore, impacts related to odors would not be cumulatively considerable because odors would dissipate rapidly from the source with an increase in distance. Therefore, the project would not contribute to a cumulative impact on air quality.

Biological Resources

As described in Section 3.4, the project would have no impact related to a conflict with any local policies or ordinances protecting biological resources or any habitat conservation plans; therefore, no cumulative analysis is required for this topic area. The project would have a less-than-significant impact related to adverse effects on sensitive habitats, state or federally protected wetlands, and the movement of wildlife species. With mitigation, the project would have a less-than-significant impact related to adverse effects on special-status species (i.e. avoiding impacts on nesting birds).

The cumulative study area for biological resources includes the area adjacent to the project site and within the Port's boundaries. However, projects have been and would continue to be required to comply with the migratory bird treaty act (MBTA), which requires avoidance of nesting seasons during construction activities. In addition, the project site and surrounding area have ongoing activities that nesting birds in the area would be used to. Moreover, cumulative projects listed in Table 3.21-1 are anticipated to have less-than-significant impacts on sensitive species, habitats, state and federal wetlands, and the movement of wildlife species as they would not directly impact sensitive biological resources or would fully mitigate any potential impact. Combined, these projects would have a less-than-significant cumulative impact on biological resources. Therefore, the project's contribution to less-than-significant cumulative impacts on nesting birds would not be cumulatively considerable.

Energy

As described in Section 3.6, the project would have less than significant impacts related to the wasteful, inefficient, or unnecessary consumption of energy resources and conflicts with renewable energy or energy efficiency plans. The cumulative study area for energy includes the Peninsula Clean Energy/PG&E service area, which is the energy provider for the project site. Impacts related to energy consumption would not be cumulatively considerable because the project would comply with all applicable regulations aimed at increasing energy efficiency and renewable energy development. Therefore, the project would not contribute to a cumulative effect on energy and no further analysis is required.

Geology and Soils

As described in Section 3.7, the project would have no impact related to earthquake faults, ground failure, soils supporting septic tanks or alternative waste water disposal systems, and paleontological resources; therefore, no cumulative analysis is required for these topic areas. The project would have a less than significant impact related to rupture of earthquake faults, seismic ground shaking, landslides, soil erosion, and expansive soils.

Impacts related to geology and soils would not be cumulatively considerable because the geographic context for geology and soils impacts is generally site-specific, rather than cumulative in nature. Each development site has unique geologic considerations that would be subject to uniform site development and construction standards. Therefore, the cumulative study area for geology and soils includes all areas within the project site where ground disturbing activities would occur. The cumulative study area is susceptible to seismic ground shaking due to the proximity of active faults, but none of the cumulative projects listed in Table 3.21-1 would exacerbate the potential for seismic ground-shaking and cumulative impacts would be less than significant. Therefore, the project would not contribute to a cumulative effect on geology and soils.

Greenhouse Gas Emissions

As described in Section 3.8, the project would have a less than significant impact related to the generation of GHG emissions and conflicts with applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions. The issue of global warming and climate change is inherently a cumulative issue because the GHG emissions associated with an individual project cannot be shown to have a material effect on global climate. Thus, the quantity of GHG emissions associated with project construction is addressed as a cumulative impact in Section 3.8.

Because amortized GHG emissions associated with project construction would be below the adjusted BAAQMD bright line threshold of 660 MTCO_{2e} per year, impacts related to GHG emissions would not be cumulatively considerable. Therefore, the project would not contribute to a cumulative effect on GHG emissions.

Hazards and Hazardous Materials

As described in Section 3.9, the project would have no impact related to being located on a site listed as part of Government Code Section 65962.5, airport safety hazards and noise, and wildland fires; therefore, no cumulative analysis is required for these topic areas. With mitigation, the project would have less than significant impacts related to the routine transport, use, or disposal of hazardous materials; reasonably foreseeable accidental releases of hazardous materials; and a hazardous materials release within proximity to schools.

The cumulative study area for hazards and hazardous materials is the area around the project site and present and reasonably foreseeable development projects listed in Table 3.21-1. As indicated in the analysis under Section 3.9, there are many regulations that apply to the control and management of hazardous materials, which are enforced by the California Highway Patrol and Caltrans on local roadways while the use of these materials is regulated by DTSC, as outlined in CCR Title 22. The project applicant would be required to comply with the Cal EPA's Unified Program, which protects Californians from hazardous waste and hazardous materials by ensuring consistency throughout the state regarding the implementation of administrative requirements, permits, inspections, and enforcement at the local regulatory level. Projects occurring in the vicinity of the proposed project and which would propose the use of hazardous materials would be managed by the San Mateo County Environmental Health Services Department, which is the designated Certified Unified Program Agency, and in accordance with the regulations included in the Unified Program (e.g., hazardous materials release response plans and inventories, California Uniform Fire Code hazardous material management plans and inventories). Such compliance would reduce the potential for impacts associated with hazardous materials during project construction and operation to less than cumulatively considerable levels. Therefore, the proposed project's incremental contribution of less-than-significant impacts on less-than-cumulatively significant hazardous materials impacts would not be cumulatively considerable.

Hydrology and Water Quality

As described in Section 3.10, the project would have less than significant impacts related to a violation of water quality standards and degradation of surface water quality, groundwater supplies and recharge, alteration of drainage patterns, project inundation, and conflicts with water quality control plans or sustainable groundwater management plans.

The cumulative study area for hydrology and water quality is the area surrounding the project site and the cumulative projects listed in Table 3.21-1. Like hazardous materials, water quality is heavily regulated by existing laws and procedural requirements including the CWA Section 401 Water Quality Certification and the NPDES Construction General Permit and individual NPDES permits for industrial uses.

Based on the above discussion, the project, in combination with past, present, and probable future projects, could contribute to cumulative effects on water quality. However, these effects would be reduced through compliance with applicable regulations and permits. As such, implementation of these projects combined would not be expected to violate water quality standards, substantially degrade water quality, or conflict with water quality control plans. Therefore, cumulative impacts related to hydrology and water quality would be less than significant and the project's incremental contribution would not be cumulatively considerable.

Noise

As described in Section 3.13, the project would have no impact related to excessive noise exposure from airports or private airstrips. The project would have less than significant impacts related to the generation of a substantial increase in ambient noise levels in excess of applicable standards and the generation of excessive groundborne vibration or noise levels.

The cumulative study area for noise includes the project site and adjacent land uses, including nearby noise-sensitive receptors. The cumulative study area is in a highly industrialized area with ambient noise levels influenced by adjacent transportation corridors and industrial land uses.

Based on the analysis in Section 3.13, noise impacts would not be cumulatively considerable because (1) no noise-sensitive receptors would be subject to noise levels in excess of City standards or excessive groundborne vibration and (2) no buildings or structures would be close enough to experience structural damage from groundborne vibration resulting from construction and operational activities. Therefore, the project would not contribute to a cumulative effect on noise and no further analysis is required.

Population and Housing

As described in Section 3.14, the project would have a less than significant impact related to inducing unplanned population growth and no impact related to displacing a substantial number of people.

The cumulative study area for population and housing includes the project site and the Port's boundaries. There are no residential land uses within the Port's jurisdiction, but there are liveboards at the marinas.

Impacts related to population and housing would not be cumulatively considerable because the project would not induce unplanned population growth. Approximately 15 workers would be present on the project site on a peak day during the construction period and are expected to commute from the surrounding area. The number of jobs created for project construction would represent a negligible and temporary increase in employment within the cumulative study area. Furthermore, the project does not propose new homes or businesses and would not expand existing infrastructure. Therefore, the project would not contribute to a cumulative effect on population and housing and no further analysis is required.

Transportation

As described in Section 3.17, the project would have a less than significant impact related to conflicts with programs, plans, ordinances, or policies addressing the circulation system; conflicts with CEQA Guidelines section 15064.3, subdivision (b); hazards from geometric design features or incompatible uses; inadequate emergency access; and insufficient parking that would decrease public coastal access.

The cumulative study area for transportation includes the project site and the Port's jurisdiction. Existing roadways, bicycle and pedestrian facilities, and public transit services within the cumulative study area are identified in Section 3.17.

The cumulative projects would not result in cumulatively significant transportation impacts because they are small projects that would not create significant VMT and, in the case, of the Ferry Project, would serve to improve transportation around the Bay. Cumulative impacts would be less than significant. Therefore, project would not contribute to a cumulative effect on transportation.

Utilities and Service Systems

As described in Section 3.19, the project would have a less than significant impact on water, wastewater treatment and stormwater drainage, electric power, natural gas, telecommunications, and solid waste facilities.

The cumulative study area for utilities and service systems includes the service areas for the utility providers serving the project site. These utility providers include Redwood City for water and wastewater treatment, PCE/PG&E for electricity, and Recology San Mateo County for solid waste. The cumulative projects would have only a very small demand for utilities given the scope and nature of the cumulative projects. Cumulative utility impacts would be less than significant. Therefore, the project would not contribute to a significant cumulative effect on utilities and service systems since a significant cumulative impact is not present.

Wildfire

As described in Section 3.20, the project would have a less than significant impact on wildfire, including impairing an adopted emergency plan, exposing project occupants to pollutant concentrations from wildfires, and from the installation of fire-related infrastructure.

The cumulative study area for wildfire includes the Port area. Like the proposed project, the cumulative projects would have little to no impacts related to wildfire given their locations and their characteristics. Cumulative wildfire impacts would be less than significant. Therefore, the project would not contribute to a significant cumulative effect on wildfire since a significant cumulative impact is not present.

Required Mitigation Measures

With implementation of MM BIO-1 described in Section 3.4, the project would not result in any cumulatively considerable impacts.

c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

Less-than-significant impact. As described in Sections 3.1 to 3.20 of this environmental checklist, the project would not result in substantial environmental effects on human beings either during construction or during operation. A mitigation measure is identified to reduce potentially significant impacts related to biological resources (i.e. avoiding nesting birds) to less-than-significant. No significant impacts were identified on human beings, either directly or indirectly. Therefore, the project would not result in impacts that would cause substantial adverse effects on human beings.

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4 REFERENCES

1 Introduction

No references used in this chapter.

2 Project Description

No references used in this chapter.

3 Environmental Checklist

No references used in this section.

3.1 Aesthetics

California Department of Transportation. 2021. *California State Scenic Highways*. Available: <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways>. Accessed August 13, 2021.

Caltrans. See California Department of Transportation.

City of Redwood City. 2010 (October 11). *Redwood City General Plan*. Available: <https://www.redwoodcity.org/departments/community-development-department/planning-housing/planning-services/general-plan-precise-plans/general-plan>. Accessed August 13, 2010.

3.2 Agriculture and Forest Resources

California Department of Conservation. 2016. *Important Farmland Finder* mapping tool. 2016. Accessed August 2021. Available: <https://maps.conservation.ca.gov/DLRP/CIFF/>.

CDC. See California Department of Conservation.

City of Redwood City. 2021. Community GIS. Available: <http://webgis.redwoodcity.org/community/>. Accessed August 13, 2021.

3.3 Air Quality

BAAQMD. See Bay Area Air Quality Management District.

Bay Area Air Quality Management District. 2017a. *Air Quality Standards and Attainment Status*. Available: <https://www.baaqmd.gov/about-air-quality/research-and-data/air-quality-standards-and-attainment-status>. Accessed August 13, 2021.

———. 2017b. *2017 Clean Air Plan: Spare the Air, Cool the Climate*. Available: <http://www.baaqmd.gov/~media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a-proposed-final-cap-vol-1-pdf.pdf?la=en>. Accessed September 11, 2019.

———. 2017c. *California Environmental Quality Act, Air Quality Guidelines*. Available: http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed March 18, 2019.

———. 2020a (February). Risk and Hazard Screening Analysis Process Flow Chart. Available: https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/tools/2020_02_20-screening-approach-flow-chart-pdf.pdf?la=en&rev=4e977f21bbe0466b8d151f252b735df6. Accessed August 24, 2021.

———. 2020b (March). BAAQMD Health Risk Calculator Beta 4.0. Available: <https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/tools/baaqmd-health-risk-calculator-beta-4-0-xlsx.xlsx?la=en&rev=dab7d85a772d45caa9c99e59395bf12d>. Accessed August 24, 2021.

- . 2021a. Permitted Stationary Sources Risk and Hazards GIS map. Available: <https://baaqmd.maps.arcgis.com/apps/webappviewer/index.html?id=2387ae674013413f987b1071715daa65>. Accessed August 24, 2021.
- . 2021b. Permit to Operate. Plant #2939 CEMEX Construction Materials Pacific, LLC. 1026 Bransten Rd. San Carlos, CA 94070.
- California Air Resources Board. 2003. *HARP User Guide*. Sacramento, CA. Accessed: February 12, 2016. Available: <http://www.arb.ca.gov/toxics/harp/docs/userguide/allchapters.pdf>.
- . 2013. *California Almanac of Emissions and Air Quality—2013 Edition*. Available: <http://www.arb.ca.gov/aqd/almanac/almanac13/almanac13.htm>. Accessed April 16, 2018.
- . 2018 (October). *Area Designations for National Ambient Air Quality Standards*. Last updated October 2018. Available: <https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations>. Accessed August 13, 2021.
- . 2019a (August). *Area Designations for State Ambient Air Quality Standards*. Last updated August 2019. Available: <https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations>. Accessed August 13, 2021.
- . 2019b. *Facility Detail Risk Selection*. Cemex Construction Materials Pacific, LLC. Facility ID : 2939. Available: https://www.arb.ca.gov/app/emsinv/facinfo/facdet.php?co_=41&ab_=SF&facid_=2939&dis_=BA&dbyr=2019&dd=. Accessed August 20, 2021.
- CARB. See California Air Resources Board.
- Compass Land Group. 2021. *Port of Redwood City Ready-Mix Concrete Plant Project. Air and Greenhouse Gas Emissions Study*. McClellan, CA.
- EPA. See U.S. Environmental Protection Agency.
- U.S. Environmental Protection Agency. 2018. *Criteria Air Pollutants*. Available: <https://www.epa.gov/criteria-air-pollutants#self>. Last updated March 8, 2018. Accessed April 16, 2018.
- Zhu, Y., W.C. Hinds, S. Kim, and S. Shen. 2002. Study of Ultrafine Particles Near a Major Highway with Heavy-duty Diesel Traffic. In *Atmospheric Environment* 36:4323–4335.

3.4 Biological Resources

California Department of Fish and Wildlife. 2020 (September 9). California Sensitive Natural Communities. Available: <https://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities>. Accessed July 21, 2021.

CDFW. See California Department of Fish and Wildlife.

3.5 Cultural Resources

Far Western Anthropological Group. 2008. *Archaeological Feasibility Study for the WETA Redwood City Ferry Terminal Project, Redwood City, California*. Report No. S-037252. On file at Northwest Information Center, Sonoma State University.

Pacific Legacy. 1999. Archaeological Survey and Record Search Results for the RMC Lonestar Cement Terminal and PGE Facilities Replacement, Redwood City, California. Report No. S-021602. On file at Northwest Information Center, Sonoma State University.

3.6 Energy

California Air Pollution Control Officers Association. 2016. California Emissions Estimator Model. Version 2016.3.2. Available caleemod.com. Accessed December 29, 2020.

- California Energy Commission. 2020. *California Gasoline Data, Facts, and Statistics*. Available: [https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-gasoline-data-facts-and-statistics#:~:text=In%202015%2C%2015.1%20billion%20gallons,Board\)%20and%2010%20percent%20ethanol.](https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-gasoline-data-facts-and-statistics#:~:text=In%202015%2C%2015.1%20billion%20gallons,Board)%20and%2010%20percent%20ethanol.) Accessed October 12, 2020.
- California Public Utilities Commission. 2019. *California Renewables Portfolio Standard Annual Report*. Available: https://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/Utilities_and_Industries/Energy_-_Electricity_and_Natural_Gas/2019%20RPS%20Annual%20Report.pdf. Accessed October 12, 2020.
- . 2020. *Natural Gas and California*. Available: https://www.cpuc.ca.gov/natural_gas/#:~:text=California's%20natural%20gas%20utilities%20provide%20service%20to%20over%2011%20million%20gas%20meters.&text=Although%20very%20small%20in%20number,care%20customers%20consume%20about%2035%25. Accessed October 12, 2020.
- California Air Pollution Control Officers Association. 2016. *California Emissions Estimator Model Version 2016.3.2*. Available: <http://www.caleemod.com/>. Accessed December 29, 2020.
- CAPCOA. See California Air Pollution Control Officers Association
- CEC. See California Energy Commission.
- CPUC. See California Public Utilities Commission.
- Climate Registry, The. 2021. *2021 Default Emission Factors Document*. Available: https://www.theclimateregistry.org/wp-content/uploads/2021/05/2021-Default-Emission-Factor-Document.pdf?mc_cid=4b45d12237&mc_eid=5f138d1baa. Accessed August 20, 2021.
- EIA. See U.S. Energy Information Administration.
- Peninsula Clean Energy. 2020a. *Looking Ahead. Strategic Plan 2020-2025*. Available: <https://www.peninsulacleanenergy.com/wp-content/uploads/2020/06/PCE-Strategic-Guide-Online-W.pdf>. Accessed August 13, 2021.
- . 2020b. *Power Mix*. Available: <https://www.peninsulacleanenergy.com/power-mix/>. Accessed August 13, 2021.
- U.S. Energy Information Administration. 2019. *Investor-Owned Utilities Served 72% of U.S. Electricity Customers in 2017*. Available: <https://www.eia.gov/todayinenergy/detail.php?id=40913#:~:text=The%20two%20largest%20IOUs%20are,%2C%20and%20municipal%20Drum%20utilities.> Accessed October 12, 2020.
- . 2020. *California State Profile and Energy Estimates*. Available: <https://www.eia.gov/state/analysis.php?sid=CA#:~:text=California%20is%20the%20largest%20consumer,used%20in%20the%20transportation%20sector.> Accessed October 12, 2020.

3.7 Geology and Soils

- California Department of Conservation. 2019. *California Earthquake Hazards Zone Application*. Available: <https://www.conservation.ca.gov/cgs/geohazards/eq-zapp>. Accessed August 12, 2021.
- CDC. See California Department of Conservation.
- CEMEX Construction Materials Pacific, LLC. 2020. *Storm Water Pollution Prevention Plan*.
- City of Redwood City. 2010. *Redwood City New General Plan EIR – Section 4.6, Geology and Soils*. Available: <https://www.redwoodcity.org/home/showpublisheddocument/5029/635782669631430000>. Accessed August 12, 2021.
- Geocon. 2020. *Preliminary Geotechnical Evaluation – Cemex Port of Redwood City Ready-Mix Concrete Plant*.
- Treadwell & Rollo. 2012. *Geotechnical Investigation, Port of Redwood City – Wharves 1 & 2 Replacement Project*.

U.S. Geological Survey. 1998. Geology of the Onshore Part of San Mateo County, California: Derived from the Digital Database Open-File 98-137. Available: <https://pubs.usgs.gov/of/1998/of98-137/smmmap.pdf>. Accessed August 12, 2021.

3.8 Greenhouse Gas Emissions

BAAQMD. See Bay Area Air Quality Management District.

Bay Area Air Quality Management District. 2017. *California Environmental Quality Act, Air Quality Guidelines*. Available: http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed March 18, 2019.

California Air Pollution Control Officers Association. 2016. California Emissions Estimator Model. Version 2016.3.2. Available calemod.com. Accessed December 29, 2020.

California Air Resources Board. 2017. *California's 2017 Climate Change Scoping Plan*. Available: https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping_plan_2017.pdf?_. Accessed July 22, 2021.

CAPCOA. See California Air Pollution Control Officers Association

CARB. See California Air Resources Board.

City of Redwood City. 2020 (November). *Climate Action Plan*. Available: <https://www.redwoodcity.org/home/showpublisheddocument/22781/637426822669070000>. Accessed August 20, 2021.

Intergovernmental Panel on Climate Change. 2014. *Climate Change 2014. Synthesis Report*. https://www.ipcc.ch/site/assets/uploads/2018/05/SYR_AR5_FINAL_full_wcover.pdf. Accessed October 6, 2021.

IPCC. See Intergovernmental Panel on Climate Change

Port of Redwood City. 2020 (January). *Port of Redwood City 2020 Vision Plan*. Available: https://782212a8-b0fc-46e8-958b-591493c263bd.filesusr.com/ugd/9d6aca_08cc17636948496fa38e13a4bf93d8d3.pdf. Accessed August 20, 2021.

United Nations. 2015 (December 13). *Historic Paris Agreement on Climate Change: 195 Nations Set Path to Keep Temperature Rise Well Below 2 Degrees Celsius*. Available: <https://unfccc.int/news/finale-cop21>. Accessed July 22, 2021.

3.9 Hazards and Hazardous Materials

CAL FIRE. See California Department of Forestry and Fire Protection.

California Department of Forestry and Fire Protection. 2008. *Very High Fire Hazard Severity Zones in LRA – Redwood City*. Available: https://osfm.fire.ca.gov/media/5986/redwood_city.pdf. Accessed August 13, 2021.

California Department of Toxic Substances Control. 2021. Envirostor Database Property Search. Available: https://www.envirostor.dtsc.ca.gov/public/map/?global_id=60000555. Accessed August 13, 2021.

DTSC. See California Department of Toxic Substances Control.

State Water Resources Control Board. 2021. Geotracker Database Property Search. Available: <https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=redwood+city>. Accessed August 13, 2021.

SWRCB. See State Water Resources Control Board.

3.10 Hydrology and Water Quality

- Biological Resources Services LLC. 2020 (December). *U.S. Army Corps of Engineers Preliminary Jurisdictional Determination for the Cemex Port of Redwood City Ready-mix Concrete Plant Project San Mateo County, California*. Prepared for Compass Land Group.
- Cemex Redwood City Terminal. 2020. *Storm Water Pollution Prevention Plan Redwood City, California*. California Industrial Activities Storm Water General Permit WDID No. 241I013376.
- Crankshaw, I. 2017 (April). *San Mateo Plain Groundwater Subbasin: A Local Case Study*. *Water in the West*. Accessed August 16, 2021 Available: <https://waterinthewest.stanford.edu/news-events/news-insights/san-mateo-plain-groundwater-subbasin-local-case-study>.
- Federal Emergency Management Agency. 2019. Flood Insurance Rate Map. San Mateo County, California Map Number 06081C0189F.
- FEMA. See Federal Emergency Management Agency.
- Geocon Consultants, Inc. 2020 (December). *Preliminary Geotechnical Evaluation Cemex Port of Redwood City Ready-Mix Concrete Plant Redwood City, California*. Prepared for Compass Land Group.
- San Francisco Bay Conservation and Development Commission. 2011 (October). *Staff Report Living with a Rising Bay: Vulnerability and Adaptation in San Francisco Bay and on its Shoreline*.
- San Mateo County. 2021. Groundwater. Accessed August 16, 2021 available <https://www.smcsustainability.org/energy-water/groundwater/>.
- SMC. See San Mateo County.
- SFBCCDC. See San Francisco Bay Conservation and Development Commission.
- Western Regional Climate Center. 2021. Redwood City, California (047339) Period of Record Monthly Climate Summary. Accessed August 16, 2021 Available <https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca7339>.

3.11 Land Use and Planning

No references used in this chapter.

3.12 Mineral Resources

- CDC. See California Department of Conservation.
- California Department of Conservation. 2015. *Mineral Lands Classification Studied Index*. Accessed August 2021. Available: <https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=mlc>.
- . Mines Online. 2021. Accessed August 2021. Available: <https://maps.conservation.ca.gov/mol/index.html>.

3.13 Noise

- Bollard Acoustical Consultants. 2021. (October). CEMEX Port of Redwood City Ready-Mix Concrete Plant Project. Environmental Noise & Vibration Assessment. Prepared for Compass Land Group. Prepared by Bollard Acoustical Consultants.
- California Department of Transportation. 2013 (September). *Technical Noise Supplement*. California Department of Transportation Division of Environmental Analysis. Sacramento, CA. Prepared by ICF Jones & Stokes.
- Caltrans. See California Department of Transportation.
- Federal Interagency Committee on Noise. 1992 (August). Federal Agency Review of Selected Airport Noise Analysis Issues.
- Federal Transit Administration. 2018. *Transit Noise and Vibration Impact Assessment Manual*. U.S Department of Transportation. Prepared by John A Volpe, National Transportation Systems Center. Available:

https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf. Accessed August 30, 2021.

FICON. See Federal Interagency Committee on Noise.

FTA. See Federal Transit Administration.

Redwood City. 2010 (October). Redwood City General Plan. Available: <https://www.redwoodcity.org/departments/community-development-department/planning-housing/planning-services/general-plan-precise-plans/general-plan>. Accessed: October 14, 2021

3.14 Population and Housing

California Department of Finance. 2021 (May). E-1 Population Estimates for Cities, Counties and the State with Annual Percent Change — January 1, 2020 and 2021.

CA Dept of Finance. See California Department of Finance.

3.15 Public Services

No references used in this chapter.

3.16 Recreation

No references used in this chapter.

3.17 Transportation

Governor's Office of Planning and Research. 2018 (December). *Technical Advisory on Evaluating Transportation Impacts in CEQA*. Available: http://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf. Accessed August 9, 2021.

OPR. See Governor's Office of Planning and Research

Redwood City. 2018 (July). *RWCmoves*. Prepared by Fehr and Peers. Redwood City, CA. Available: http://rwcmoves.com/wp-content/uploads/2018/07/RWCmoves-Transportation-Plan_July16.pdf. Accessed August 9, 2021.

Redwood City. 2020 (July 21). Redwood City Transportation Analysis Manual. Prepared by Fehr and Peers. Redwood City, CA. Available: <https://www.redwoodcity.org/home/showpublisheddocument/22106/637311118467370000>. Accessed August 9, 2021.

3.18 Tribal Cultural Resources

No references used in this chapter.

3.19 Utilities and Service Systems

California Department of Resources Recycling and Recovery. 2021. *Solid Waste Information System – Cordinda Los Trancos Landfill (Ox Mtn) (41-AA-0002)*. Available: <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1561?siteID=3223>. Accessed August 13, 2021.

CalRecycle. See California Department of Resources Recycling and Recovery.

Redwood City. 2010. *General Plan Draft EIR – Hydrology and Water Quality, Section 4.8*. Available: <https://www.redwoodcity.org/home/showpublisheddocument/5033/635782669636570000>. Accessed August 16, 2021.

Redwood City. 2021 (June). 2020 Urban Water Management Plan for City of Redwood City. Available: <https://www.redwoodcity.org/home/showpublisheddocument/23745/637618448235530000>. Accessed December 7, 2021.

- Redwood City. 2019. Engineering Standards, Volume III: Design Criteria. Available: <https://www.redwoodcity.org/home/showpublisheddocument/20382/637183931771200000>. Accessed August 16, 2021.
- Science Direct. 2021. *Concrete Batching*. Available: <https://www.sciencedirect.com/topics/engineering/concrete-batching>. Accessed August 13, 2021.
- Silicon Valley Clean Water. 2020. *Capital Improvement Program 2020 Update*. Available: <https://svcw.org/wp-content/uploads/2020/08/2020-SVCW-CIP-Update.pdf>. Accessed August 16, 2021.
- SVCW. See Silicon Valley Clean Water.

3.21 Wildfire

CAL FIRE. See California Department of Forestry and Fire Protection.

California Department of Forestry and Fire Protection. 2021. FHSZ Viewer. Available: <https://egis.fire.ca.gov/FHSZ/>. Accessed August 12, 2021.

County of San Mateo. 2015 (May 22). *Emergency Operations Plan Basic Plan*.

Redwood City. 2021. *Wildfire Action Plan and Evacuation*. Available: <https://www.redwoodcity.org/departments/fire-department/fire-prevention/defensible-space/action-plan-evacuation>. Accessed August 12, 2021.

3.21 Mandatory Findings of Significance

BAAQMD. See Bay Area Air Quality Management District.

Bay Area Air Quality Management District. 2017a. *Air Quality Standards and Attainment Status*. Available: <https://www.baaqmd.gov/about-air-quality/research-and-data/air-quality-standards-and-attainment-status>. Accessed August 13, 2021.

California Air Resources Board. 2018 (October). *Area Designations for National Ambient Air Quality Standards*. Last updated October 2018. Available: <https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations>. Accessed August 13, 2021.

———. 2019a (August). *Area Designations for State Ambient Air Quality Standards*. Last updated August 2019. Available: <https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations>. Accessed August 13, 2021.

CARB. See California Air Resources Board.

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