# ENVIRONMENTAL INITIAL STUDY & MITIGATED NEGATIVE DECLARATION

Amendment 21-0003 (Use Permit 297-78) Lehigh Cement West, Inc.

March 31, 2022

# ENVIRONMENTAL INITIAL STUDY & MITIGATED NEGATIVE DECLARATION WITH References and Documentation

Prepared by SHASTA COUNTY DEPARTMENT OF RESOURCE MANAGEMENT PLANNING DIVISION 1855 Placer Street, Suite 103 Redding, California 96001

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## SHASTA COUNTY ENVIRONMENTAL CHECKLIST FORM INITIAL STUDY & MITIGATED NEGATIVE DECLARATION

#### 1. Project Title:

Amendment 21-0003 (Lehigh Cement West, Inc.)

#### 2. Lead agency name and address:

Shasta County Department of Resource Management, Planning Division 1855 Placer Street, Suite 103 Redding, CA 96001-1759

#### 3. Contact Person and Phone Number:

Luis Topete, Associate Planner, (530) 225-5532

#### 4. **Project Location:**

The Lehigh Cement West, Inc. cement manufacturing facility is located at 15390 Wonderland Boulevard, Redding, CA 96003, approximately 2 miles north of the intersection of Interstate 5 and Old Oregon Trail on the west side of Wonderland Boulevard (Assessor's Parcel Numbers (APNs) 307-020-002 and 307-030-002). The proposed Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant would be located on APN 307-020-002.

## 5. Applicant/Owner Name and Address:

Lehigh Cement West, Inc. 15390 Wonderland Boulevard Redding, CA 96003

# 6. **Representative Name and Address:**

Benchmark Resources 2515 E. Bidwell Street Folsom, CA 95630

#### 7. General Plan Designation: Mineral Resource (MR)

#### 8. Zoning:

Mineral Resource (MR)

#### 9. Description of Project:

This request is for an amendment to Use Permit 297-78 for the construction of a Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant. The Fortera<sup>TM</sup> ReCarb<sup>TM</sup> process is a proprietary process that will utilize a portion of the carbon dioxide (CO<sub>2</sub>) emissions from the existing Lehigh cement kiln stack as feedstock to produce a Fortera proprietary patented product called Reactive Calcium Carbonate (RCC). The facility would produce approximately 15,000 tons of supplemental cementitious material over a time span of approximately 1.5 years, and then would be decommissioned. This facility would not increase the production of the existing cement plant but would operate as a separate, temporary facility. The facility would be constructed within the existing facility boundary on APN 307-030-002 located along the southwest border of the parcel. Approximately 0.8 acres of disturbed land currently in use by Lehigh Cement West, Inc. for equipment storage would be graded for the installation of the facility. Approximately one half-acre (0.5+/-acres) of impervious surfaces would be added to the project site. Consistent with the existing site, the facility would operate 24 hours per day, 7 days per week. Work hours may be reduced by planned and unplanned outages. Access to the facility site would be through the existing main gate of the Lehigh site located along Wonderland Boulevard. A height exception from the maximum structural height of 45 feet is being requested for four structures. The tallest structure would be 75 feet in height, with additional structures at 60 feet, 54 feet and 50 feet in height, with the CO<sub>2</sub> gas connection proposed at a height of 50 feet.

#### Purpose and Need

The Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant process is estimated to reduce greenhouse gas carbon emissions by 60 percent for every ton of Fortera<sup>TM</sup> RCC cement produced compared to traditional cement production. RCC can be co-blended with Portland cement and used by ready-mix concrete producers as a supplementary cementitious material or used as a 100 percent cementitious binder for materials such as bricks, blocks, and precast structures. The Fortera<sup>TM</sup> ReCarb<sup>TM</sup> manufacturing process will utilize CO<sub>2</sub> emissions from the Lehigh kiln, otherwise the Fortera<sup>TM</sup> ReCarb<sup>TM</sup> plant will operate independently from existing Lehigh Cement West manufacturing process. Thus, the Fortera<sup>TM</sup> ReCarb<sup>TM</sup> plant construction and operation would not interrupt or adversely impact operations of the existing Lehigh cement manufacturing operations.

#### Project Objectives

The Fortera<sup>TM</sup> ReCarb<sup>TM</sup> technology has not yet been tested at a commercial scale. Therefore, the small commercial Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant would serve as a qualitative and quantitative opportunity to meet the following objectives:

- Utilize a simpler and efficient method for manufacturing cementitious supplement, resulting in a product that requires less energy to produce with lower CO<sub>2</sub> emissions.
- Construct a plant that would capture  $CO_2$  directly from an existing cement kiln and use the  $CO_2$  to manufacture a useable product.
- Prove the commercial scalability, the quality of the final cementitious product, and the competitive economics of the ReCarb<sup>TM</sup> technology by operating a small commercial pilot facility.

#### Entitlements

The proposed Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant requires an amendment to Use Permit No. 297-78 for the Lehigh plant. In addition, Lehigh Cement West would require the necessary building and air quality permits to construct this pilot plant. Since construction of the project would disturb less than one acre of disturbed and is already a regulated area under an existing Stormwater Pollution Prevent Plan and Industrial General Permit WDID No. 5R45I024887, a General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities, Order No. 2009-0009 DWQ, NPDES No. CAS000002 (Construction General Permit) will not be required. The project would obtain an Authority to Construct and Permit to Operate from the Shasta County Department of Resource Management Air Quality Management District (AQMD).

The original use permit for the Lehigh plant (Use Permit No. 63) was approved in 1959 and authorized the construction and operation of a cement plant and the "commercial excavation of stone or earth materials." The Lehigh plant currently operates under Use Permit No. 297-78, which was approved in 1978 and authorized Lehigh to modernize the cement plant and to increase quarry production. With regards to air quality, the Lehigh plant operates under Permit No. 02-TV-07b issued by Shasta County AQMD on January 23, 2020. The current use permit approved the plant for an annual cement making capacity of 600,000 tons per year, which is the annual production goal of the plant. The proposed Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant would produce approximately 15,000 tons of supplemental cementitious material per year.

The Statewide General Permit for Storm Water Discharges Associated with Industrial Activities, Order 2014-0057-DWQ, NPDES No. CAS000001 (Industrial General Permit), regulates industrial storm water discharges and authorized non-storm water discharges from industrial facilities in California. The Lehigh plant is subject to the Industrial General Permit through the Standard Industrial Classification (SIC) Code 3241 – Cement, Hydraulic. This SIC code applies to establishments primarily engaged in manufacturing hydraulic cement, including Portland, natural, masonry and pozzolana cements.

#### **Existing Plant Operations**

Lehigh's operations in the Mountain Gate region consist of three main locations: the Lehigh plant where the proposed Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant would be located, the Falkenbury Shale Quarry, and Gray Rocks Limestone

Quarry. Limestone from the Gray Rocks Quarry is crushed and then delivered to the project site by a 1.4-mile-long conveyor. Crushed shale from the Falkenbury Shale Quarry is delivered to the cement plant by haul trucks. The plant manufactures cement using a dry process. Crushed raw materials coming from the quarries are dried and reduced from grain size to a fine powder by the secondary crusher and raw mill. The raw material is then blended by passing compressed air to obtain a uniform and intimate mixture known as kiln feed. The kiln feed is subjected to very high temperatures in a pre-heating tower by means of hot gases from the kiln. The heated and calcined feed then enters the rotating kiln and undergoes a series of chemical reactions where 20 to 30 percent of the material becomes liquid, and lime, silica, and alumina recombine. The fused mass forms small diameter balls of material known as clinker. The clinker enters satellite coolers attached to the discharged end of the kiln. The satellite coolers are externally sprayed with water to encourage temperature dissipation. Cooled clinker is combined with 3 to 5 percent gypsum and ground in finish mills to the required fineness. A small quantity of water is added in the finish mills to cool the final cement product. Final cement product is then conveyed to storage from where the cement is shipped. The finished Portland cement is shipped by rail, bulk truck, or trucked to offsite commercial markets.

The existing cement manufacturing facilities are shown in Figure 3.

#### Proposed Project Operations

#### Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant Elements

The ReCarb<sup>TM</sup> RCC manufacturing equipment and process steps not already present at the Lehigh cement plant include:

- 1. Production feed stock raw materials received from outside vendors: Calcium Oxide (Quick Lime), Granular Ammonium Chloride, Hydrochloric Acid (35 percent), and Aqueous Ammonia (19 percent). CO<sub>2</sub> would be obtained from the on-site kiln before those emissions could be released into the atmosphere.
- 2. Milling (ACM-125) Calcium oxide is milled to achieve appropriate particle size for the process.
- 3. Dissolution Reactor (T-200) Process solution is made.
- 4.  $CO_2$  Exhaust Tie-In (T-310)  $CO_2$  from the kiln is brought in from Lehigh.
- 5. Absorption/CO<sub>2</sub> Capture and Mineral Precipitation (T-310) Quick Lime, process solution, and CO<sub>2</sub> are combined.
- 6. Dewatering slurry clarifier (CLR-400) Process solution is removed from the product via gravity and reused via a closed loop process.
- 7. Pressing (filter press) (F-410) RCC material is mechanically pressed to remove more process solution.
- 8. Product Drying (DR-500) RCC product is heated and dried to remove moisture.
- 9. Product Storage and Dispensing (T-530 & T-531) Final product is moved to storage bins.
- 10. Emissions Abatement Scrubber System and return to stack (C-700) Ammonia emissions are controlled and scrubbed with an HCL abatement system.
- 11. Process Solution Recovery and Reuse (T-600) Process solution removed is reused.
- 12. Wastewater (T-800) Process rinse and descaling wastewater is sent to an approved hazardous waste treatment, storage and disposal facility (TSDF) for treatment.

Figure 4, "Existing and Proposed Facilities," provides a graphic depiction of the proposed Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant facilities in relation to the existing Lehigh plant facilities.

#### Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant Process

The Fortera<sup>™</sup> ReCarb<sup>™</sup> production process utilizes cement kiln CO<sub>2</sub> emissions to manufacture Reactive Calcium Carbonate (RCC) cementitious material. The material is a rare, metastable polymorph of calcium carbonate known as Vaterite, which exists in nature for only a short period of time. Fortera<sup>™</sup> has developed a process that temporarily stabilizes Vaterite long enough to manufacture the product into a stable form. The cementitious properties are preserved during production, and then reactivated the next time the dry powder form is mixed with fresh water, similar to how Portland cement is activated.

Fortera<sup>TM</sup> cement can be used on its own or in a mixture with Portland cement, fly ash, and/or other additives and

fillers. Currently, Lehigh and Fortera<sup>TM</sup> are investigating two scenarios for post-process handling. In Scenario 1, 100% of the Fortera<sup>TM</sup> cement produced would be trucked or transported by rail offsite with no onsite blending. In Scenario 2, 20% of the Fortera<sup>TM</sup> cement production would be trucked or transported by rail offsite with no onsite blending and 80% would be used to offset cement production from Lehigh's existing facility using existing infrastructure.

Necessary chemical feedstock would be brought onsite via truck for use in the Fortera<sup>™</sup> production process. Aqueous ammonia would be stored in a 10,000-gallon tank onsite. All solid and liquid Resource Conservation and Recovery Act (RCRA) and non-RCRA hazardous waste would be shipped to a certified/qualified treatment, storage, and disposal facility (TSDF) for treatment and disposal via Univar Solutions, or other approved and certified waste transporter. No onsite treatment would take place.

#### Hours of Operation

Construction would occur Monday through Friday between the hours of 7 a.m. and 10 p.m. Consistent with the existing Lehigh plant, the proposed Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant would operate 24 hours per day, 7 days per week, except work hours may be reduced by planned and unplanned outages. It is anticipated that the Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant would operate 8,000 hours per year.

#### Utility Providers and Usage

#### Fuels and Electricity

The Lehigh plant obtains power and natural gas from the Pacific Gas & Electric Company (PG&E). Electrical power and natural gas would be provided to the proposed Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant via connections to the existing Lehigh plant power and natural gas distribution infrastructure. No separate power connection to an independent utility company would be required.

Electricity usage would be approximately 1.3 megawatts per day. Anticipated daily natural gas usage would be approximately 4,030 pounds per day.

#### Sanitary and Sewer Systems

Sanitary facilities at the Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant would consist of toilets and sinks in a portable unit. All office and restroom (non-industrial) generated wastewater shall be directed to a permitted onsite wastewater treatment system, unless a variance or determination of non-applicability is obtained from the Shasta County Environmental Health Division.

#### Solid Waste

The project would generate approximately 600 pounds per year of lab waste and approximately one ton per year of trash, and approximately 1,179,360 gallons or 147,420 pounds of Non-RCRA aqueous wastewater per year. Solid waste would be sent to the appropriate certified disposal facilities and would be transported via third-party solid waste transport providers.

#### Access and Vehicle Trips

The Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant would be accessed via existing Lehigh plant roadways. Access to the Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant site would only be through entry into the main gate of the Lehigh plant located along Wonderland Boulevard. Estimated project-generated trips are provided in Table 1, "Project Trip Generation."

TABLE 1				
<b>PROJECT TRIP GENERATION</b>				

Who	Quantity
Fortera <sup>™</sup> Staff	12 employees per day
Raw Material Delivery Vendors	1 truck per day <sup>1</sup>
Wastewater Disposal Vendors	1 truck per day
Haul Truck Vendors	Up to 2 trucks per day or fewer <sup>2</sup>
	Fortera <sup>™</sup> Staff Raw Material Delivery Vendors Wastewater Disposal Vendors

Notes: <sup>1</sup>No additional truck trips would be generated between the project site and the Falkenbury Shale Quarry and Gray Rocks Limestone Quarry as a result of the proposed project.

#### Site Security, Fencing and Lighting

The project site has a security guard at the main entrance at all times, fencing along areas of public access, and appropriate lighting at entrance and production areas. A fence would be constructed prior to project operation at the perimeter of the proposed Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant. The fence would consist of an 8-foot-tall security chain link fencing with a barbed wire top designed and constructed in accordance with ASTM F 2611 "Standard Guide for the Design and Construction of Chain Link Security Fencing" with a gate located at the entrance to the Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant.

Access to the Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant would be solely granted to visitors and personnel who check in with the Lehigh Security Guards at the main gate. Area lighting would consist of elevated fixtures flooding all work areas. Fixtures would be mounted on proposed buildings and on poles, in compliance with Section 17.84.050 of the Shasta County Code. Refer to Section I Aesthetics for additional information about lighting.

A "Fortera<sup>™</sup> Personnel and Visitors Entrance Only" sign would be located by the existing Lehigh entrance sign.

#### **Project Construction**

Approximately 0.8 acres of previously-disturbed land would be graded for the installation of the proposed Fortera<sup>™</sup> ReCarb<sup>™</sup> Plant. The construction process would take place over a period of approximately 26 weeks and would include the use of welders, aerial lifts, cranes, earth moving equipment, generators, and light towers. Construction would occur Monday through Friday between the hours of 7 a.m. and 10 p.m. The project would not disturb more than 1.0 acres and therefore would not be subject to the requirements of the Construction General Permit. Approximately a half-acre (0.5+/- acres) of impervious surfaces would be added to the project site as a result of construction of the proposed project. This area would be located in an area that was previously disturbed.

The Fortera<sup>™</sup> ReCarb<sup>™</sup> Plant site would be graded to allow for the placement of foundations, access roadways, trailers, process equipment, piping, pipe supports, equipment shelters, and material storage tanks/silos. The grading of land for construction would take place throughout the footprint of the proposed Fortera<sup>™</sup> ReCarb<sup>™</sup> Plant. The area to be graded is approximately 0.8 acres. The amount of cut and fill required for project construction would be determined by Lehigh and included in the grading permit for the project. Diverted stormwater drainage would be managed via the updated Stormwater Pollution Prevention Plan, as applicable. No permanent structures would be removed as part of the grading process. Lehigh would apply dust control measures as required by Shasta County AQMD District Rule 3:16, Fugitive, InDirect, or Non-Traditional Sources, and implement stormwater and non-stormwater discharge best management practices that would be defined in the existing Industrial General Permit WDID No. 5R45I024887 and Lehigh West Cement Stormwater Pollution Prevention Plan (SWPPP).

#### **10.** Surrounding Land Uses and Setting:

<u>North</u>: Primarily undeveloped forest land in the Mineral Resource (MR) district and undeveloped forest land that is in the National Recreation Area, Shasta unit (NRA-S) is located immediately north, with Lake Shasta located approximately 0.5 miles to the north.

East: Wonderland Boulevard is located immediately east of the project site, along with some smaller residential lots adjacent to the northeastern corner of APN 307-030-002. A water treatment plant is located immediately east of

APN 307-020-002 in the MR district. Interstate 5 (I-5) is located east of Wonderland Boulevard. Between Wonderland Blvd and I-5 there is mostly General Industrial (M) property that is generally undeveloped with a church and a boat storage and repair facility located in the northeast portion. East of I-5 is primarily undeveloped forest land with some rural residential lots and roads leading to quarries further east.

West: The Union Pacific railroad is located adjacent and west of the project site. West of the railroad is undeveloped forest land in the MR and NRA-S district.

South: Single-family residences are located adjacent to the south side of APN 307-030-002, with a mobile home park located to the southwest.

The project site is located in the foothills of the Klamath Mountains in a relatively small valley carved by the headwaters of the west fork of Stillwater Creek, which drains south to the Sacramento River. The hills surrounding the project site range in height from approximately 1,500 to just over 2,000 feet above mean sea level (msl). The existing cement manufacturing plant slopes gently from north to south, with elevations ranging from approximately 1,000 to 1,100 feet msl. The lower half of APN 307-030-002 and a majority of the northern portion of APN 307-020-002 are primarily undeveloped with an existing tree canopy. An existing rail spur enters the project site from the south of APN 307-030-002. The remainder of the site is the existing Lehigh cement manufacturing plant with a canopy of trees between the existing plant and the residences located at the northeast corner of APN 307-030-002.

# 11. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.):

Central Valley Regional Water Quality Control Board Shasta County Air Quality Management District

12. 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.?

In accordance with Public Resources Code (PRC) Section 21080.3.1, the Wintu Tribe of Northern California & Toyon-Wintu Center (Tribe) filed and Shasta County received a request for formal notification of proposed projects within an area of Shasta County that is traditionally and culturally affiliated with the Tribe. Pursuant to PRC §21080.3.1 the Department of Resource Management sent a certified letter to notify the Tribe that the project was under review and to provide the Tribe 30 days from the receipt of the letter to request formal consultation on the project in writing. To date, no response has been received.

NOTE: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

## 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.

Aesthetics	Agricultural Resources	Air Quality
Biological Resources	Cultural Resources	Energy
Geology / Soils	Greenhouse Gas Emissions	Hazards & Hazardous
Hydrology / Water Quality	Land Use / Planning	Mineral Resources
Noise	Population / Housing	Public Services
Recreation	Transportation	Tribal Cultural Resources
Utilities / Service Systems	Wildfire	Mandatory Findings of Significance

## **DETERMINATION: (To be completed by the Lead Agency)**

On the basis of the initial evaluation:

 $\Box$  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.

 $\Box$  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 of NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Copies of the Initial Study and related materials and documentation may be obtained at the Planning Division of the Department of Resource Management, 1855 Placer Street, Suite 103, Redding, CA 96001. Contact Luis A. Topete, Associate Planner at (530) 225-5532.

Luis A. Topete

Associate Planner

03/31/2022 Date

3/31/22

Date

Paul A. Heliman Director of Resource Management

#### **EVALUATION OF ENVIRONMENTAL IMPACTS:**

- A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parenthesis following each question. A "No Impact" answer is adequately supported if all the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less-than-significant with mitigation, or less-than-significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more, "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less-than-significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less-than-significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less-thansignificant level (mitigation measures from Section XVIII, "Earlier Analyses," may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or Negative Declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
  - a) Earlier Analysis Used. Identify and state where they are available for review.
  - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c) Mitigation Measures: For effects that are "Less-than-significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g. General Plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify the following:
  - a) The significance criteria or threshold, if any, used to evaluate each question; and
  - b) The mitigation measure identified, if any, to reduce the impact to less-than-significant.

	<b>ESTHETICS:</b> Except as provided in Public Resources Code tion 21099, would the project:	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	Have a substantial adverse effect on a scenic vista?				~
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?			r	
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 a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			r	
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			~	

**Discussion:** Figure 6a, "Project Site Photograph Locations," and Figure 6b, "Project Site Photographs (Viewpoints 1 and 2)" provide photographs of the project site from four key viewpoints as well as a map illustrating the locations of these viewpoints. Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations of the project site and in the vicinity, the following findings can be made:

- a) The project would not result in any adverse effect on a scenic vista. A scenic vista is generally defined as a publicly accessible viewpoint that provides expansive views of a highly valued landscape. The Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant site is relatively flat and views from surrounding areas are largely obscured by trees and the varied topography of the area. The only publicly accessible viewpoints of the Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant site are from the east along Wonderland Boulevard. These views are limited to small breaks in the tree line near the main gate and are dominated by industrial facilities. There is no view of the project site which includes a scenic vista, and the project would not visually obstruct a scenic vista.
- b) The project would not substantially damage scenic resources within a scenic highway corridor. The section of I-5 near the project site is eligible for official designation by the State of California as a scenic highway. The Shasta County General Plan also identifies this segment of I-5 as an area of interest for obtaining official scenic highway designation. However, the corridor is forested, and the project site has limited visibility through the trees. The Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant would be located behind and next to existing Lehigh Cement West buildings and structures, which would block most of the proposed plant. The remainder of the Lehigh plant and the entire Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant site would not be visible to travelers along the highway.
- c) The project would not substantially degrade the existing visual character or quality of the site and its surroundings. The project site is in a rural area dominated by forested land with varied topography and scattered development. As discussed previously, the proposed project would not be visible from the I-5 corridor. There are no public trails in the vicinity with views of the project site. Land to the north and west of the site is forested and does not contain any public roads from which the proposed project would be visible. Land immediately south of the project site including parcel 307-030-002 owned by Lehigh Cement West is similarly covered with dense trees which block views from residential development further to the south. The site is visible from Wonderland Boulevard to the east. As shown in Figures 6a and 6b, views of the Lehigh Plant from this public roadway are dominated by industrial buildings and structures, worker vehicles and trucks, fencing, stored equipment and materials. With project implementation, foreground views from this direction would remain unchanged. The proposed improvements would be similar in character and would not represent a substantial change from existing conditions.
- d) Proposed lighting would consist of elevated fixtures flooding all work areas. Fixtures would be mounted on proposed buildings and on poles, in compliance with Section 17.84.050 of the Shasta County Code. The Fortera<sup>™</sup> ReCarb<sup>™</sup> Plant would be operated 24 hours per day, seven days per week. Thus, the proposed lighting would be expected to be in use throughout the nighttime hours. The project would be an extension of the existing Lehigh plant with similar lighting levels and would not be a significant new source of lighting in the area. Due to the forested land surrounding much of the site, and the existing Lehigh plant structures, light spillage from the site would be partially blocked and have minimal effect on the nearest sensitive receptors.

The County Zoning Plan requires that all lighting, exterior and interior, shall be designed and located so as to confine direct lighting

to the premises. A light source shall not shine upon or illuminate directly on any surface other than the area required to be lighted. No lighting shall be of the type or in a location such that constitutes a hazard to vehicular traffic, either on private property or on abutting streets. The project will be conditioned to comply with this lighting requirement of Section 17.84.050 of the County Code.

#### Mitigation/Monitoring: None proposed.

<b>II.</b> <u>AGRICULTURE AND FORESTRY RESOURCES</u> : 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) prepared by the California Dept. 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 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. Would the project:	Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or 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?				~
b) Conflict with existing zoning for agricultural use, or a Williamson Act Contract?				r
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))?				~
<ul> <li>Result in the loss of forest land or conversion of forest land to non-forest use?</li> </ul>				~
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?				~

**Discussion:** Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations of the project site and in the vicinity, the following findings can be made:

- a) The project would not convert any Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland). The project site is outside the Natural Resource Conservation Service (NRCS) Soil Survey and has not been mapped by the California Department of Conservation (DOC) as part of its Farmland Mapping and Monitoring Program (FMMP). However, the area surrounding the proposed Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant site that has been mapped by the DOC is classified as "Other Land" and "Urban and Built-Up Land." The Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant site would be located on previously disturbed land within the existing Lehigh cement manufacturing plant. Thus, the project would not convert any Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) and there would be no impact.
- b) Neither this property nor the surrounding properties are zoned for agricultural use nor are they in a Williamson Act Contract. The project would not conflict with existing zoning for agricultural use, or a Williamson Act Contract.
- c) The project site is not forest land, timberland or zoned Timberland Production. Therefore, the project would not conflict with

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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)).

- d) Section 12220(g) of the California Public Resources Code (PRC) defines forest land as land that can support 10 percent native tree cover of any species and that allows for management of one or more forest resources. The plant site would be located on an active industrial site and separated from the surrounding forest by an access road and railroad line. As the Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant site does not meet the definition of forestland pursuant to Section 12220(g), the project would not result in the loss of forest land or conversion of forestland to non-forest use.
- e) Neither the project site nor the surrounding parcels are classified Farmland or used for agricultural production. The project would have no effect on Farmland in the region. Land immediately north and west of the project site is forested. However, the proposed improvements would not add any permanent roads or other infrastructure which could remove a barrier to development of these areas or otherwise cause their conversion from forestland. The project would not result in any other changes in the existing environment that could result in conversion of Farmland to non- agricultural use, or conversion of forest land to non-forest use.

#### Mitigation/Monitoring: None proposed.

esta poll	<b><u>AIR QUALITY</u>:</b> Where available, the significance criteria blished by the applicable air quality management district or air lution control district may be relied upon to make the following erminations. Would the project:	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	Conflict with or obstruct implementation of the applicable air quality plan?		V		
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?			v	
c)	Expose sensitive receptors to substantial pollutant concentrations?		~		
d)	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			V	

**Discussion:** Based on related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, and the Environmental Permitting Strategy prepared by Trinity Consultants (2022), the following findings can be made:

a-b) The project would not conflict with or obstruct implementation of the Northern Sacramento Valley Planning Area (NSVPA) 2018 Triennial Air Quality Attainment Plan for the Northern Sacramento Valley Air Basin as adopted by Shasta County, or any other applicable air quality plan. The NSVPA Air Quality Attainment Plan (2018) designates Shasta County as an attainment area for all federal standards, yet as a nonattainment area with respect to the ozone California ambient air quality standards.

The attainment plan projects future emissions based upon growth assumptions for the jurisdictions within the plan area and provides implementation measures to limit emissions of ozone precursors accordingly. In general, a project conflicts with or obstructs implementation of the applicable attainment plan if it would result in or induce growth in population, employment, land use, or regional vehicle miles traveled (VMT) that is inconsistent with the growth assumptions and emission projection in the attainment plan.

The proposed use is consistent with the project site's current general plan land use designation and zoning and would not result in unplanned growth. The project would result in negligible employment growth (up to 12 Fortera<sup>™</sup> employees) that would not induce population growth or necessitate the development of new housing. Further, the project would result in a negligible increase in VMT in the region as discussed in Section XVII, "Transportation." Thus, the project would be consistent with the growth assumptions and emission projections in the attainment plan and would not interfere with its implementation.

As discussed above, the project site is located within an area that is designated nonattainment for the state air quality standard for ozone. Ozone is a secondary pollutant, meaning it is not directly emitted. It is formed when volatile organic compounds (VOCs)

or reactive organic gases (ROGs) and nitric oxides (NO) undergo photochemical reactions that occur only in the presence of sunlight.  $NO_x$  is emitted from combustion sources such as cars, trucks and buses, power plants, and off-road equipment. Construction and operation of the proposed project would generate air contaminants, including nitrogen oxide ( $NO_x$ ), reactive organic gases (ROG),  $CO_2$  and particulate matter ( $PM_{10}$  and  $PM_{2.5}$ ). However, as described in detail below, the project would not result in a cumulatively considerable net increase of any criteria air pollutant.

#### **Construction Emissions**

Construction of the proposed project would require clearing of approximately 0.8 acres of previously disturbed land. The construction phase would be approximately 26 weeks and would include the use of welders, aerial lifts, cranes, earth moving equipment, generators, and light towers.

Construction emissions were estimated by Trinity Consultants (2022) using default emission factors from the California Emissions Estimator Model (CalEEMod) and hours of operation provided by the project applicant. Direct and indirect project emissions are presented and compared against the thresholds of significance for criteria pollutant emissions in Table 2, "Construction Emissions."

CONSTRUCTION EMISSIONS									
Description	PM <sub>10</sub> (lb/day)	PM2.5 (lb/day)	NOx (lb/day)	SO <sub>2</sub> (lb/day)	CO (lb/day)	ROG (lb/day)			
Construction Equipment	1.50	1.43	35.76	0.06	29.53	3.54			
Mobile Equipment	0.004	0.003	0.066	0.001	0.273	0.014			
Construction Fugitive Dust Emissions	3.61	1.99							
Fugitive Road Dust Emissions	6.79	1.22							
Project Total	11.90	4.63	35.83	0.06	29.81	3.56			
Shasta County CEQA Mitigation Threshold Level A	80		25			25			
Shasta County CEQA Mitigation Threshold Level B	137		137			137			
Above CEQA Mitigation Threshold?	No	N/A	Yes	N/A	No	N/A			

TABLE 2CONSTRUCTION EMISSIONS

Source: Trinity Consultants 2022.

As indicated in Table 2,  $NO_x$  emissions from construction sources are projected to exceed the SCAQMD Mitigation Threshold Level A. As a result, SCAQMD would require application of both standard mitigation measures (SMM) and appropriate best available mitigation measures (BAMM) during the project's construction phase. Implementation of these measures, as required by Mitigation Measure III.a.c.1), would be considered by the SCAQMD to effectively reduce construction criteria pollutant emissions to a less than significant level.

#### **Operational Emissions**

Operational emissions include both direct emissions from stationary sources and indirect emissions from mobile vehicle emissions and fugitive road dust associated with vehicle trips. Mobile vehicle emissions were estimated by Trinity Consultants (2022) using emission factors and average trip distances from CARB's Emission Factor 2021 model (EMFAC 2021) along with estimated vehicle trips provided by the project applicant. Direct and indirect project emissions are presented and compared against the thresholds of significance for criteria pollutant emissions in Table 3, "Direct Operational Emissions," and Table 4, "Indirect Operational Emissions." As shown in these tables, neither the project's direct nor indirect operational emissions would exceed applicable SCAQMD thresholds. Thus, project operation would not result in a cumulatively considerable net increase of any ozone precursor and this impact would be less than significant.

TABLE 3
DIRECT OPERATIONAL EMISSIONS

PM <sub>10</sub> (tpy)	PM <sub>2.5</sub> (tpy)	NO <sub>x</sub> (tpy)	SO <sub>2</sub> (tpy)	CO (tpy)	ROG (tpy)
11.67	3.61	1.17	0.01	1.96	0.13
25		25			25
No	N/A	No	N/A	N/A	No
	(tpy) 11.67 25	(tpy)         (tpy)           11.67         3.61           25	(tpy)         (tpy)         (tpy)           11.67         3.61         1.17           25          25	(tpy)         (tpy)         (tpy)         (tpy)           11.67         3.61         1.17         0.01           25          25	(tpy)         (tpy)         (tpy)         (tpy)         (tpy)           11.67         3.61         1.17         0.01         1.96           25          25

Source: Trinity Consultants 2022.

	<b>PM</b> <sub>10</sub>	PM2.5	NOx	SO <sub>2</sub>	CO	ROG
Description	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)
Operational Mobile Emissions	0.008	0.004	0.20	0.001	0.02	0.01
Operational Road Dust Emissions	0.63	0.15				
Project Total	0.64	0.16	0.20	0.001	0.02	0.01
Shasta County CEQA Mitigation Threshold Level A	80		25		25	
Shasta County CEQA Mitigation Threshold Level B	137		137		137	
Project Emissions > Threshold?	No	N/A	No	N/A	No	N/A

# TABLE 4 Indirect Operational Emissions

Source: Trinity Consultants 2022.

- c) The nearest sensitive receptors are rural residences located to the south and east of the existing facility. Substantial pollutant concentrations are not anticipated due to the project. As discussed above, construction and operational emissions would be below applicable SCAQMD thresholds with implementation of Mitigation Measure III.a.c.1). The impact would be less than significant with mitigation incorporated.
- d) During construction, the proposed project presents the potential for generation of objectionable odors in the form of diesel exhaust in the immediate vicinity of the site. However, these emissions are short-term in nature and will rapidly dissipate and be diluted by the atmosphere downwind of the emission sources. Additionally, odors would be localized and generally confined to the construction area. Given that there are no natural topographic features (e.g., canyon walls) or manmade structures (e.g., tall buildings) that would potentially trap such emissions, construction-related odors would occur at magnitudes that would not affect substantial numbers of people.

Project operations would not emit any substances that would create objectionable odors. Ammonia emissions would be controlled and scrubbed with a hydrochloric acid (HCL) abatement system. Further, the project site is in a rural area not inhabited by a substantial number of people. The project would not cause air emissions which would create objectionable odors affecting a substantial number of people. This impact would be less than significant.

Mitigation/Monitoring: With the mitigation measures being proposed, the impacts would be less than significant.

III.a.c.1) The following measures shall be implemented throughout the construction phase of the project:

- i. Any person building, erecting, altering, or replacing any article, machine, equipment, or other contrivance which may cause the issuance of air contaminants, shall obtain written authority for such construction from the air pollution control officer of the Shasta County Air Quality Management District.
- ii. No person shall discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such person or the public, or which cause, or have the natural tendency to cause, injury, or damage to business or property.
- iii. All activities associated with a building site for residential, commercial, or industrial use shall be conducted in a manner to control fugitive dust emissions through the use of dust palliative agents or the use of water to mitigate off-site impacts.
- iv. Applicant shall apply for a permit from the Air Quality Management District and obtain any permits required by the District.
- v. Alternatives to open burning of vegetative material on the project site shall be used by the project applicant unless otherwise deemed infeasible by the AQMD. Among suitable alternatives are chipping, mulching, or conversion to biomass fuel.
- vi. The applicant shall be responsible for ensuring that all adequate dust control measures are implemented in a timely and effective manner during all phases of project development and construction.
- vii. All material excavated, stockpiled, or graded should be sufficiently watered to prevent fugitive dust from leaving property boundaries and causing a public nuisance or a violation of an ambient air standard. Watering should occur at least twice daily with complete site coverage, preferably in the mid-morning and after work is completed each day.
- viii. All areas (including unpaved roads) with vehicle traffic should be watered periodically or have dust palliatives applied for stabilization of dust emissions.
- ix. All on-site vehicles should be limited to a speed of 15 miles per hour on unpaved roads.
- x. All land clearing, grading, earth moving or excavation activities on a project shall be suspended when winds are expected to exceed 20 miles per hour.
- xi. All inactive portions of the development site should be seeded and watered until a suitable grass cover is established.
- xii. The applicant shall be responsible for applying non-toxic soil stabilizers (according to manufacturer's specifications) to all inactive construction areas (previously graded areas which remain inactive for 96 hours) in accordance with the Shasta County Grading Ordinance.
- xiii. All material transported off-site shall be either sufficiently watered or securely covered to prevent a public nuisance.
- xiv. Adjacent paved streets shall be swept (recommend water sweeper with reclaimed water) at the end of each day if substantial volumes of soil materials have been carried onto adjacent public paved roads from the project site.

- xv. Prior to final occupancy, the applicant shall reestablish ground cover on the construction-site through seeding and watering in accordance with the Shasta County Grading Ordinance.
- xvi. Minimize idling times either by shutting off equipment when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of the California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at access points.
- xvii. Maintain all construction equipment in accordance with the manufacturer's specifications.
- xviii. Use construction equipment that meets the current off-road engine emission standard (as certified by ARB) or that is repowered with an engine that meets this standard. Tier I, Tier II, and Tier III engines produce significantly less NOx and PM emissions than uncontrolled engines.

IV.	BIOLOGICAL RESOURCES: Would the project:	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	Have a substantial 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 U.S. Fish and Wildlife Service?				7
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				~
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?				~
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?		V		
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				~
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?				~

#### Site Characteristics

The land that would be graded and used for the project site is disturbed hard packed soil currently in use by Lehigh Cement West for equipment storage, and it is not a habitat for sensitive wildlife and plant species.

- a) The location for the Fortera<sup>™</sup> ReCarb<sup>™</sup> Plant site is a disturbed area consisting of compacted soil that is currently utilized by Lehigh West for equipment storage. The project would not disrupt or remove habitat or other ecological requirements for special status animal species.
- b) Based on the dominant plant species observed during previous site surveys and desktop review of the CNDDB, the Lehigh Cement West plant is located in an area classified as Ponderosa Pine Forest and Woodland, which is ranked S4 and is not a rare or sensitive natural community. There is no riparian habitat or other sensitive natural community on the Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant project site. There would be no impact.

- c) The location for the Fortera<sup>™</sup> ReCarb<sup>™</sup> Plant site is a disturbed area consisting of compacted soil that is currently utilized by Lehigh West for equipment storage. The project would not result in the direct removal, filling, or hydrological interruption of state or federally protected wetlands. Drainage will follow the existing route as defined in the Lehigh Cement West SWPPP.
- d) The location for the Fortera<sup>™</sup> ReCarb<sup>™</sup> Plant site would be on a previously disturbed area consisting of compacted soil that is currently utilized by Lehigh Cement West for equipment storage. Approximately less than 0.2 acres (~8,200 ft<sup>2</sup>) of brush and 10 trees may need to be removed to facilitate grading. Though unlikely based on the disturbed nature of the proposed plant location, trees located in this area could provide nesting habitat for migratory birds. Implementation of the proposed mitigation measures require preconstruction surveys for bird nests, bat roosting sites as well as avoidance measures to minimize impacts to any such wildlife, if present. With the proposed mitigation measures, impacts would be less-than-significant.
- e) Shasta County Board of Supervisors Resolution No. 95-157 provides voluntary Oak Woodland Management Guidelines for private landowners. The location for the Fortera<sup>™</sup> ReCarb<sup>™</sup> Plant site is a disturbed area consisting of compacted soil that is currently utilized by Lehigh West for equipment storage. There are approximately 10 trees within the delineated project area that might need to be removed. No trees that would be removed are oak trees. The project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- f) The project would not 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 such plans have been adopted that encompass or otherwise apply to the project site.

**Mitigation/Monitoring:** With the mitigation measures being proposed, the impacts from the project to biological resources would be less-than-significant.

- IV.d.1) In order to avoid impacts to nesting migratory birds and/or raptors protected under federal Migratory Bird Treaty Act and California Fish and Game Code Section 3503 and Section 3503.5, including their nests and eggs, one of the following shall be implemented:
  - a. Vegetation and tree removal activities associated with construction shall occur between September 1 and January 31 when birds are not nesting; or
  - b. If vegetation or tree removal activities occur during the nesting season (February 1 through August 31), a preconstruction nesting survey shall be conducted by a qualified biologist within 14 days of vegetation removal or construction activities. If an active nest is located during the preconstruction surveys, a non-disturbance buffer shall be established around the nest by a qualified biologist in consultation with the Department of Fish and Wildlife (CDFW). No vegetation removal, tree removal or construction activities shall occur within this non-disturbance buffer until the young have fledged, as determined through additional monitoring by the qualified biologist. The results of the pre-construction surveys shall be sent electronically to CDFW at <u>R1CEQARedding@wildlife.ca.gov</u>.
- IV.d.2) In order to avoid impacts to bats, the following shall be implemented:
  - a. Conduct removal and disturbance of trees outside of the bat maternity season and bat hibernacula (September 1 to October 31).
  - b. If removal or disturbance of trees will occur during the bat maternity season, when young are non-volant (March 1 August 31), or during the bat hibernacula (November 1 March 1), large trees (those greater than 5 inches in diameter) shall be thoroughly surveyed for cavities, crevices, and/or exfoliated bark that may have high potential to be used by bats within 14 days of tree removal or disturbance. The survey shall be conducted by a qualified biologist or arborist familiar with these features to determine if tree features and habitat elements are present. Trees with features potentially suitable for bat roosting should be clearly marked prior to removal and humane evictions must be conducted by or under the supervision of a biologist with specific experience conducting exclusions. Humane exclusions could consist of a two-day tree removal process whereby the non-habitat trees and brush are removed along with certain tree limbs on the first day and the remainder of the tree on the second day.

V. CULTURA	L RESOURCES – Would the project:	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
	ubstantial adverse change in the significance of a esource pursuant to §15064.5?				v
	ubstantial adverse change in the significance of an ical resource pursuant to §15064.5?				~
c) Disturb any formal cem	y human remains, including those interred outside of neteries?				~

a-b) The location for the project is previously disturbed and cleared land approved for use by Lehigh Cement West. The project area is not considered sensitive for the presence of significant prehistoric and historic period resources. There are no evident above surface historical or cultural resources present within the proposed project area. The project would not cause a substantial adverse change in the significance of an historical resource or archeological resource.

In accordance with Public Resources Code (PRC) Section 21080.3.1, the Wintu Tribe of Northern California & Toyon-Wintu Center (Tribe) filed and Shasta County received a request for formal notification of proposed projects within an area of Shasta County that is traditionally and culturally affiliated with the Tribe. Pursuant to PRC §21080.3.1 the Department of Resource Management sent a certified letter to notify the Tribe that the project was under review and to provide the Tribe 30 days from the receipt of the letter to request formal consultation on the project in writing. To date, no response has been received.

Although there is no evidence to suggest that the project would result in any significant effect to historical, archeological, paleontological, unique geologic resource, or human remains, there is always the possibility that such resources or remains could be encountered. Therefore, a condition of approval will require that if, in the course of development, any archaeological, historical, or paleontological resources are uncovered, discovered or otherwise detected or observed, ground disturbance activities in the affected area shall cease and a qualified archaeologist shall be contacted to review the site and advise the County of the site's significance. If the findings are deemed significant by the Environmental Review Officer, appropriate mitigation shall be required.

c) The project site is not on or adjacent to any known cemetery or burial area. Therefore, there is no evidence to suggest that the project would disturb any human remains.

Pursuant to California Health and Safety Code Section 7050.5, in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site until the coroner has determined if the remains are subject to his or her authority. If the coroner determines that human remains are not subject to his or her authority and recognizes or has reason to believe the remains to be those of a Native American, he or she shall contact the NAHC within 24 hours.

<u>VI.</u>	<b>ENERGY</b> – Would the project:	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?			~	
b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				~

#### Mitigation/Monitoring: None proposed.

- a) The project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation. Construction of the proposed improvements would require the use of construction equipment and generate construction-related vehicle trips that would combust fuel, primarily diesel and gasoline. Once constructed, the project would involve operation of new equipment and lighting powered by electricity and natural gas as well as worker vehicle trips that would combust gasoline. The use of this energy is necessary to improve the site and expand operations and is not wasteful or unnecessary consumption of energy resources. Construction contractors would comply with SCAQMD rules for excessive equipment idle time as well as the mandatory measures in the California Building Energy Efficiency Standards and the California Green Building Code. This impact would be less than significant.
- b) The project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. State and local agencies regulate the use and consumption of energy through various methods and programs. As a result of the passage of Assembly Bill 32 (AB 32) (the California Global Warming Solutions Act of 2006) which seeks to reduce the effects of Greenhouse Gas (GHG) Emissions, a majority of the state regulations are intended to reduce energy use and GHG emissions. These include, among others, California Code of Regulations, Title 24, Part 6 California Energy Code, and the California Code of Regulations, Title 24, Part 11– California Green Building Standards Code (CALGreen). At the local level, the County's Building Division enforces the applicable requirements of the Energy Efficiency Standards and Green Building Standards in Title 24. The project would have no effect on the County's efforts to develop renewable energy sources for County facilities. An objective of the project is to utilize a simpler and more efficient method for manufacturing cementitious supplement, resulting in a product that requires less energy to produce. There would be no impact.

Mitigation/Monitoring:	None proposed.

<u>VII</u>	. GEOLOGY AND SOILS – Would the project:	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	<ul> <li>Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:</li> <li>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 Division of Mines and Geology Special Publications 42.</li> <li>ii) Strong seismic ground shaking?</li> <li>iii) Seismic-related ground failure, including liquefaction?</li> <li>iv) Landslides?</li> </ul>			r	
b)	Result in substantial soil erosion or the loss of topsoil?			~	
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?			V	
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?			~	
e)	Have soils incapable of adequately supporting the use of septic			~	

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VII. GEOLOGY AND SOILS – Would the project:	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				
<ul> <li>f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?</li> </ul>				~

**Discussion:** The Mountain Gate region is underlain by a complex group of sedimentary and metamorphic rocks of the Paleozoic age, intruded by Mesozoic granodiorite and diorite igneous rock. The valley which contains the project site and Mountain Gate community is underlain by granodiorite igneous rock with a relatively thin topsoil that was essentially all removed during earlier development periods.

The area is mapped by the Natural Resources Conservation Service Web Soil Survey as being underlain primarily by the Holland, deep-Marpa families complex, 20 to 40 percent slopes, and the Chawanakee-Chaix families complex, 40 to 60 percent slopes. Both soils are characterized as gravelly and cobbly loams underlain by weathered bedrock at depths ranging from 11 to 50 inches below the ground surface. The soils are well drained and do not meet hydric criteria. However, as noted above, the soils on the project site have been heavily disturbed by past and current activities.

Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, the following findings can be made:

- a) The project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - i) Rupture of a known earthquake fault;

According to the Alquist-Priolo Earthquake Fault Zoning Maps for Shasta County, there is no known earthquake fault on the project site.

ii) Strong seismic ground shaking;

There are no known earthquake faults in the vicinity of the project site. According to the Shasta County General Plan Section 5.1, Shasta County has a low level of historic seismic activity. The entire County is in Seismic Design Category D. According to the Seismic Hazards Assessment for the City of Redding, California, prepared by Woodward Clyde, dated July 6, 1995, the most significant earthquake at the project site may be a background (random) North American crustal event up to 6.5 on the Richter scale at distances of 10 to 20 km. All structures shall be constructed according to the seismic requirements of the currently adopted California Building Standards Code (CBC). In addition, a soils report would be required for the project that would determine the expansive potential of site soils and provide recommendations for site preparation and construction methods. Compliance with these CBC standards and soils report recommendations would ensure that the structures and associated improvements are designed and constructed to withstand expected seismic activity and associated potential hazards. This impact would be less than significant.

iii) Seismic-related ground failure, including liquefaction;

According to the California Department of Conservation, the project site and surrounding area are not designated as earthquake hazard zones indicating that there is a low risk of ground failures during seismic activity including fault rupture, liquefaction, and landslide. The project site is located in the South Central Region (SCR), which is identified as an area of potential liquefaction in Section 5.1 of the Shasta County General Plan. The currently adopted Code requires preparation and review of a site specific soils report as part of the building design and approval process. The soils report must be prepared by a California registered professional engineer and would address potential seismic-related ground failure concerns, if any. There is no evidence of seismic-related ground failure, including liquefaction on or near the project site.

iv) Landslides.

See discussion of item VII(a)(iii) above. The project site has relatively flat topography, the surrounding slopes are densely vegetative which promotes slope stability, the region is at low risk of a seismic-induced landslide according to the California Department of Conservation, and the project site is not located at the top or toe of any significant slope. There is no evidence of landslides on the subject property or the surrounding area.

b) Project construction would involve grading, excavating, and other soil-disturbing activities that could result in erosion. The project would require a grading permit from Shasta County which would include requirements for erosion and sediment control, including

retention of topsoil. The Lehigh Plant is subject to the Industrial General Permit. Lehigh has prepared and filed with the Central Valley Regional Water Quality Control Board a Notice of Intent (NOI) and Industrial SWPPP for the Lehigh plant, and periodically updates the SWPPP, most recently in 2019 (Lehigh 2019). The SWPPP would be updated by Lehigh to address the changes to the Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant facilities and operations resulting from the development of the proposed Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant. The SWPPP would consider the full range of erosion control BMPs, including any additional site-specific and seasonal conditions that could result in substantial erosion from the Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant site. Therefore, compliance with the Industrial General Permit SWPPP would reduce the potential for substantial soil erosion from operation of the proposed project to a less than significant level.

- c) The project would not 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. The Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant site is part of an industrial site that was developed several decades ago and there is no indication of instability of the underlying soil. Further, as discussed previously, the region has a low level of seismic activity, is not within an Earthquake Hazard Zone and has predominantly level topography. The threat of landslide, lateral spreading, subsidence, liquefaction, or collapse would be less than significant.
- d) See discussion of item VII(a)(ii) above. A soils report would be required for the project that would determine the expansive potential of site soils and provide recommendations for site preparation and construction methods. The California Building Standards Code (CBC) enforced by Shasta County requires a soils report be prepared and submitted with building permit applications. The report must be prepared by a California Licensed Engineer and would adequately address soil conditions at the site. Compliance with existing CBC standards and soil report recommendations would minimize risk to the public and property from the effects of expansive soils, if present at the Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant site. This impact would be less than significant.
- e) During project construction, portable toilets would be provided for workers in compliance with Shasta County Municipal Code Section 8.41.160. During project operation, sewage from the proposed bathroom facilities trailer would be treated via an onsite wastewater treatment system unless a variance or determination of non-applicability is obtained from the Environmental Health Division. If required, the treatment system would be designed and operated in accordance with Shasta County Municipal Code Chapter 8.41, which requires soil testing to ensure site soils meet minimum requirements. This impact would be less than significant.
- f) Upon review of the Minerals Element of the General Plan, there is no evidence to suggest that the project would directly or indirectly destroy a unique geologic feature.

Although there is no evidence to suggest that the project would result in any significant effect to historical, archeological, paleontological, unique geologic resource, or human remains, there is always the possibility that such resources or remains could be encountered. Therefore, a condition of approval will require that if, in the course of development, any archaeological, historical, or paleontological resources are uncovered, discovered or otherwise detected or observed, ground disturbance activities in the affected area shall cease and a qualified archaeologist shall be contacted to review the site and advise the County of the site's significance. If the findings are deemed significant by the Environmental Review Officer, appropriate mitigation shall be required.

VII	I. GREENHOUSE GAS EMISSIONS: Would the project:	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			V	
b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				~

Mitigation/Monitoring: None proposed.

**Discussion:** Based on related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, and the Environmental Permitting Strategy prepared by Trinity Consultants (2022), the following findings can be made:

a-b) In 2005, the Governor of California signed Executive Order S-3-05, establishing that it is the State of California's goal to reduce statewide greenhouse gas (GHG) emission levels. Subsequently, in 2006, the California State Legislature adopted Assembly Bill (AB) 32, the California Global Warming Solutions Act. In part, AB 32 requires the California Air Resources Board to develop and adopt regulations to achieve a reduction in the State's GHG emissions to year 1990 levels by year 2020. In 2016, SB 32 and its companion bill AB 197 amended Health and Safety Code Division 25.5, establishing a new climate pollution reduction target of 40 percent below 1990 levels by 2030.

California Senate Bill (SB) 97 established that an individual project's effect on GHG emission levels and global warming must be assessed under CEQA. SB 97 further directed that the State Office of Planning and Research (OPR) develop guidelines for the assessment of a project's GHG emissions. Those guidelines for GHG emissions were subsequently included as amendments to the CEQA Guidelines. The guidelines did not establish thresholds of significance and there are currently no state, regional, or county guidelines or thresholds with which to direct project-level CEQA review. As a result, Shasta County reserves the right to use a qualitative and/or quantitative threshold of significance until a specific quantitative threshold is adopted by the state or regional air district.

The United States Environmental Protection Agency (EPA) identifies four primary constituents that are most representative of the GHG emissions. They are:

- Carbon Dioxide (C0<sub>2</sub>): Emitted primarily through the burning of fossil fuels. Other sources include the burning of solid waste and wood and/or wood products and cement manufacturing.
- Methane (CH<sub>4</sub>): Emissions occur during the production and transport of fuels, such as coal and natural gas. Additional emissions are generated by livestock and agricultural land uses, as well as the decomposition of solid waste.
- Nitrous Oxide (N<sub>2</sub>0): The principal emitters include agricultural and industrial land uses and fossil fuel and waste combustion.
- Fluorinated Gases: These can be emitted during some industrial activities. Also, many of these gases are substitutes for ozonedepleting substances, such as CFC's, which have been used historically as refrigerants. Collectively, these gases are often referred to as "high global-warming potential" gases.

The primary generators of GHG emissions in the United States are electricity generation and transportation. The EPA estimates that nearly 85 percent of the nation's GHG emissions are comprised of  $C0_2$ . The majority of  $C0_2$  is generated by petroleum consumption associated with transportation and coal consumption associated with electricity generation. The remaining emissions are predominately the result of natural-gas consumption associated with a variety of uses.

Trinity Consultants (2022) quantified GHG emissions for the project's stationary and construction sources. The estimated preliminary Project emissions are shown in Table 5, "Project Greenhouse Gas Emissions." Emissions of GHGs have been quantified for the stationary and construction sources at the facility. The County has historically utilized a quantitative non-zero project-specific threshold for GHG emissions based on a methodology recommended by the California Air Pollution Control Officers Association (CAPCOA) and accepted by the California Air Resources Board (CARB). According to CAPCOA's Threshold 2.3, CARB Reporting Threshold, 10,000 metric tons of carbon dioxide equivalents per year (MT CO<sub>2</sub>e/yr) is recommended as a quantitative non-zero threshold. The use of this quantitative non-zero project-specific threshold is consistent with practices of other agencies in the county and throughout the state of California.

	TABLE 5
PROJECT	GREENHOUSE GAS EMISSIONS
	Proliminary Project Emissions (D

	Preliminary Project Emissions (Direct
Pollutant	Emissions) (MT/yr)
GHG (CO <sub>2</sub> e)	-3,430

As Table 5 indicates, the project would result in a reduction of GHG emissions from the facility. Construction equipment and activities associated with making the proposed improvements would generate greenhouse gas emissions, including carbon dioxide. However, the emissions emitted during construction would be limited and temporary. Therefore, the project would not conflict with applicable GHG plans or policies and would be considered to have a less than significant and beneficial impact to the environment. In addition, the project would be consistent with SB 32 and its companion bill AB 197 which amended Health and Safety Code Division 25.5, establishing a new climate pollution reduction target of 40 percent below 1990 levels by 2030 by reducing GHG emissions compared with baseline emissions.

#### Mitigation/Monitoring: None proposed.

IX. <u>HAZARDS AND HAZARDOUS MATERIALS</u> : Would the project:	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?		7		
b) Create a significant hazard to the public or the environment		~		

IX. proj	HAZARDS AND HAZARDOUS MATERIALS: Would the ect:	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
	through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				~
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?				~
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?				>
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				~
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?			~	

a-b) The project would not create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. The project design includes a secondary containment wall around the entire Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant with sufficient capacity to contain 110 percent of the largest tank volume (25,000 gallons) including the volume of a 24-hour rainfall as determined by a 25-year storm. In addition, the proposed hydrochloric acid (HCI) and aqueous ammonia tanks would be surrounded by a diked wall to provide secondary containment of these hazardous substances and prevent accidental release into the environment in accordance with California Fire Code Section 5004.2.2.4 Hazardous Materials - Secondary Containment for Outdoor Storage of Corrosive liquids regulatory requirements.

As a facility that would handle hazardous materials, the Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant would be subject to multiple layers of regulation intended to minimize potential risks to public health and the environment. The project would involve the transport, storage and use of hazardous materials including hydrochloric acid (35 percent) and aqueous ammonia (19 percent). However, with implementation of mitigation measure (IX.a.b.1), the proposed facility would be required to prepare a Hazardous Material Business Plan (HMBP) and submit it via the California Environmental Reporting System (CERS). The Shasta County Department of Resource Management, Environmental Health Division is the local Certified Unified Program Agency (CUPA) and would be responsible for approving and enforcing the HMBP. The HMBP would contain a detailed response plan for a release or threatened release of a hazardous material at the facility and would prevent or minimize risk to public health and the environment in the event of an accidental release.

In addition to HMBP requirements, the Lehigh Plant currently implements a Spill Prevention, Control, and Countermeasure Plan (SPCCP) (Lehigh 2020). Per mitigation measures (IX.a.b.1), the SPCCP would be updated to address the changes to the project site facilities and operations resulting from the development of the proposed Fortera<sup>™</sup> ReCarb<sup>™</sup> Plant. The project would also need to comply with the California Accidental Release Prevention Program (CalARP), as applicable. To ensure compliance with the CalARP program, mitigation measure (IX.a.b.2) requires the project applicant to coordinate with the Shasta County Environmental Health Division, the administering agency for the CalARP program, to prepare a Risk Management Plan (RMP) and Prevention Program in accordance with all applicable requirements. The RMP and Prevention Program would describe all proposed operations involving hazardous materials including location(s) of materials, types of materials, quantities and schedule, and planned safety measures. Implementation of these emergency response plans and oversight by the Shasta County Environmental Health Division would further ensure that the potential of releases of hazardous materials would be minimized, and that any spills are quickly and effectively addressed.

All solid and liquid RCRA and non-RCRA hazardous waste would be shipped to a certified/qualified treatment, storage, and disposal facility (TSDF) for treatment and disposal. No onsite treatment would take place. Hazardous materials such as industrial

fuels, oils, and solvents may be stored at the site during construction. If it is necessary to store such material in reportable quantities, they shall be included in the HMBP to be submitted. With the mitigation measures proposed, potential impacts would be less than significant.

- c) The project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. The nearest school, Grand Oaks Elementary School, is over four miles south of the project site. There would be no impact.
- d) The project is not located on a site which is included on a list of hazardous materials sites compiled by the California Department of Toxic Substances Control pursuant to Government Code Section 65962.5.
- e) The project is not located within an airport land use plan or within two miles of a public airport or public use airport.
- f) The proposed improvements would be constructed within an existing industrial facility and would not involve any improvements to surrounding roads. Further, the project would not add a substantial number of new vehicle trips on local roadways or Interstate 5. A review of the project and the Shasta County and City of Anderson Multi-Jurisdictional Hazard Mitigation Plan, and the Shasta County Emergency Operations Plan, indicates that the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- g) The project is located in an area designated as "Very High" fire hazard severity zone and within a State Responsibility Area. The project would add a negligible number of new employees at the facility and would not significantly increase exposure of people to wildland fire hazards. While the project would add new buildings and equipment, there would be no changes to existing site access points and all roadways, driveways and buildings would be constructed in accordance with Shasta County Fire Safety Standards. These standards require, but are not limited to, the clearing of combustible vegetation around all structures for a distance of not less than 30 feet on each side or to the property line. The California Public Resources Code Section 4291 includes a "Defensible Space" requirement of clearing 100 feet around all buildings or to the property line, whichever is less. These existing regulations would minimize risk of wildland fire from the project site and this impact would be less than significant.

Mitigation/Monitoring: With the mitigation measures being proposed, the impacts would be less-than-significant.

- IX.a.b.1) Prior to operation of the Fortera<sup>™</sup> ReCarb<sup>™</sup> Plant, the plant operator shall prepare a Hazardous Materials Business Plan consistent with Shasta County Environmental Health Division requirements to address the use of hydrochloric acid and aqueous ammonia on the project site. In addition, Lehigh Cement West, Inc. shall update its existing Spill Prevention, Control, and Countermeasure Plan (SPCCP) to address the proposed changes to project site facilities and operations.
- IX.a.b.2) Prior to issuance of a building permit for the Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant, the plant operator shall coordinate with the Shasta County Environmental Health and Planning divisions, as well as the Mountain Gate Fire Protection District to develop a Risk Management Plan (RMP) and Prevention Program for the proposed project in accordance with California Code of Regulations Titles 19 and 27. The RMP shall be submitted to the Environmental Health Division for review and approval prior to issuance of a building permit and the Prevention Plan shall be implemented prior to facility operation.

X. <u>1</u>	HYDROLOGY AND WATER QUALITY: Would the project:	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			v	
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.			V	
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:			V	
	(i) result in substantial erosion or siltation on- or off-site:				
	(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;				
	(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or				

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X. <u>1</u>	HYDROLOGY AND WATER QUALITY: Would the project:	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
	provide substantial additional sources of polluted runoff; or (iv) impede or redirect flows?				
d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				~
e)	Conflict with or obstruct implementation of a water quality control plan or sustainable management plan?			V	

a) The project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. Grading and construction activities would be subject to the provisions of a grading permit and existing Industrial General Permit SWPPP, both of which would require measures to address erosion and siltation containment on-and off-site.

The existing Lehigh plant is subject to the Industrial General Permit. Lehigh has prepared and filed with the Central Valley Regional Water Quality Control Board a NOI and Industrial SWPPP for the site, and periodically updates the SWPPP, most recently in 2019 (Lehigh 2019). The SWPPP is implemented in conjunction with a Spill Prevention, Control, and Countermeasure Plan (SPCCP) (Lehigh 2020). The SWPPP and SPCCP would be updated by Lehigh to address the changes to the project site facilities and operations resulting from development of the proposed Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant. The SPCCP protects water quality by requiring measures to prevent, control, and effectively contain spills of hazardous materials. The Industrial SWPPP protects water quality by:

- 1. Demonstrating compliance with the Industrial General Permit;
- 2. Identifying pollutant sources potentially affecting the quality of storm water discharges;
- 3. Developing Best Management Practices (BMPs) to reduce or prevent storm water pollutants associated with industrial activities;
- 4. Measuring the effectiveness of BMPs in preventing or reducing pollutants in storm water discharges and authorized nonstorm water discharges;
- 5. Outlining the Monitoring Implementation Plan;
- 6. Providing measurable goals for the implementation of the SWPPP; and
- 7. Ensuring that practices at the facility to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges are evaluated and revised to meet changing facility conditions.

Therefore, through adherence to construction standards, including erosion and sediment control measures, during project construction, and updating and implementing the Industrial SWPPP and SPCCP during project operation, water quality impacts of the proposed project would be minimized, and water quality and waste discharge standards would not be violated. This impact would be less than significant.

- b) The project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. Water service for the proposed development would be provided by the Mountain Gate Community Services District. The District is responsible for review of groundwater supplies prior to approving the water supply for the project. The District has indicated that they can provide water service to the proposed project. Therefore, the project is unlikely to result in a substantial depletion of groundwater supplies or interfere substantially with groundwater recharge.
- c) The project would not substantially alter the existing drainage pattern of the site or area, or add impervious surfaces, in a manner which would (i) result in substantial erosion or siltation on- or off-site; (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; (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 (iv) impede or redirect flows.

Approximately 0.8 acres of disturbed hard packed soil currently in use by Lehigh Cement West for equipment storage would be graded and used for the project site. The project would add approximately one half-acre of new impervious surfaces to the Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant site. Stormwater originating from the footprint of the plant would be captured and released via a pipeline to the

original existing culvert drainage course and stormwater retention basin #5 and tested as required per the Industrial General Permit SWPPP prior to release. Implementation of the measures required by the grading permit would minimize erosion and sedimentation on and offsite.

- d) The project is not in a flood hazard, tsunami, or seiche zone. The project is located just south of Shasta Lake, but northeast of Shasta Dam and not within the dam failure inundation area of Shasta Dam or any other local dams (Division of Safety of Dams 2021). The project site is separated from Shasta Lake by a hill with an elevation of over 1,400 feet msl and seiches are not identified as a potential hazard in the Multi-Jurisdictional Hazard Mitigation Plan for Shasta County (Shasta County and City of Anderson 2017). The facility's HMBP (see Section IX, "Hazards and Hazardous Materials") would ensure that hazardous materials are properly stored and would thereby minimize the risks of hazardous materials releases in the very unlikely event of site inundation.
- e) The project would not conflict with or obstruct implementation of a water quality control plan or sustainable management plan. The project would not create a new source of polluted runoff and would implement measures to manage site drainage. This impact would be less than significant.

#### Mitigation/Monitoring: None proposed.

XI.	LAND USE AND PLANNING - Would the project:	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	Physically divide an established community?				~
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?				~

**Discussion:** Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, the following findings can be made:

- a) The project site is located in a rural area along an interstate that is not an established community. Further, the proposed improvements would be constructed within an existing industrial site and would not divide or impede access within the surrounding area. There would be no impact.
- b) The project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. The project, as proposed, is consistent with the Mineral Resource (MR) General Plan land use designation and Mineral Resource (MR) zone district of the project site. Included in this designation and zoning are areas used for extraction, processing, stockpiling, and shipping, and adjacent undeveloped areas within the same ownership as the mining operation site. The cement plant operations are supported by two nearby quarries: the Falkenbury Shale Quarry and the Gray Rocks Limestone Quarry. Limestone and shale are mined at the quarries and transported to the cement plant. The proposed use is consistent with the existing cement manufacturing uses on the site.

#### Mitigation/Monitoring: None proposed.

<u>XII</u>	. MINERAL RESOURCES – Would the project:	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
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?				~
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?				~

**Discussion:** Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, the following findings can be made:

a-b) The project would not result in the loss of availability of a known mineral resource or mineral resource recovery site. The California Surface Mining and Reclamation Act (SMARA) of 1975, was enacted in response to land use conflicts between urban growth and essential mineral production. SMARA requires the State Geologist to classify land into Mineral Resource Zones (MRZs) based on the known or inferred mineral resource potential of that land. The project site is not located within a mapped mineral resources zone identified by the Mineral Land Classification (MLC) study for Shasta County (DOC 1997). The Shasta County General Plan does not identify mineral resources of local importance beyond those identified in the MLC study.

The project would construct new facilities within an existing mineral resource processing facility. The Fortera<sup>™</sup> ReCarb<sup>™</sup> process would increase the quantity of cement product produced per ton of aggregate mined, thereby increasing the efficiency of use of mineral resources from existing mining operations in the County. There would be no impact.

#### Mitigation/Monitoring: None proposed.

<u>XII</u>	I. NOISE – Would the project result in:	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
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 applicable standards of other agencies?			V	
b)	Generation of excessive groundborne vibration or groundborne noise levels			~	
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?				v

**Discussion:** Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, the following findings can be made:

a) The project would develop a new facility at the existing Lehigh cement manufacturing facility, which would generate both temporary and permanent noise.

Existing noise in the vicinity of the proposed Fortera<sup>TM</sup> ReCarb<sup>TM</sup> plant is primarily generated by the existing cement manufacturing plant. Traffic noise on I-5 is also a substantial source of noise in the vicinity. As described in the Noise Element of the Shasta County General Plan, the Lehigh cement manufacturing plant produces noise levels of 54.5 dB L<sub>eq</sub> at a distance of approximately 500 feet from the main plant. The noise is generally steady-state in nature. The distance to the hourly 50 dB L<sub>eq</sub> noise level contour is predicted to be approximately 850 feet from the main plant. The Noise Element notes that the County has received complaints from blasting at the quarries, but no complaints are noted regarding noise from the cement manufacturing plant. The proposed Fortera<sup>TM</sup> ReCarb<sup>TM</sup> plant is located more than 1,500 feet from the centerline of I-5. Table N-II of the Noise Element indicates that the distance to the 60 dB L<sub>dn</sub> noise contour for traffic noise from the centerline of the I-5 is approximately 762 feet. Therefore, highway noise is less than 60 db L<sub>dn</sub> at the propose Fortera<sup>TM</sup> ReCarb<sup>TM</sup> plant and would not be a substantial source of noise relative the existing cement manufacturing plant.

The Noise Element defines sensitive receptors as residential areas, parks, schools, churches, hospitals, and long-term care facilities. The nearest sensitive receptors to the Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant site are residences in the rural community to the south and east. Noise standards in Shasta County are contained in the Noise Element of the General Plan; the County does not have a noise ordinance. Policy N-b of the Noise Element states that noise created by a proposed non-transportation land use shall be mitigated so as not to exceed the specific noise level standards summarized in Table 6, "Noise Level Performance Standards for New Projects," as measured immediately within the property line of adjacent lands designated as noise sensitive. There are no standards that limit construction noise in the General Plan.

TABLE 6
NOISE LEVEL PERFORMANCE STANDARDS FOR NEW PROJECTS

Noise Level Descriptor	Daytime (7 a.m. to 10 p.m.)	Nighttime (10 p.m. to 7 a.m.)
Hourly L <sub>eq</sub> , dB	55	50

Source: Table N-IV in the Shasta County General Plant Noise Element

**Notes:** Noise created by a proposed non-transportation land use shall be mitigated so as not to exceed the noise levels specified above at the property line of adjacent lands designated as noise sensitive. The noise levels specified above shall be lowered by 5 dB for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises.

Noise generated from stationary sources generally attenuate at a rate of 6 to 7.5 dBA per doubling of distance for hard and soft sites, respectively (Caltrans 1998). Additionally, because sound pressure levels are based on a logarithmic scale, they cannot be simply added or subtracted. For instance, if one noise source emits a sound level of 90 dBA and a second source is placed beside the first and also emits a sound level of 90 dBA, the combined sound level is 93 dBA, not 180 dBA. When the difference between two noise levels is 10 dBA or more, the amount to be added to the higher noise level is zero.

Construction of the facility would take place over a period of approximately 26 weeks and would include the use of welders, aerial lifts, cranes, earth-moving equipment, generators, and light towers. Construction would occur Monday through Friday between the hours of 7 a.m. and 10 p.m. The use of construction equipment would be a new temporary source of noise in the vicinity of the project site. The typical construction noise levels for different phases of construction and the estimated construction noise at the nearest sensitive receptor are shown in Table 7, "Construction Noise, dBA L<sub>eq</sub>." As shown in Table 7, the construction noise levels at the nearest residence to the project site would be less than the 50 dBA L<sub>eq</sub> standard for long-term operational nighttime noise. In addition, construction noise levels in the vicinity of the project would be less than significant.

 TABLE 7

 CONSTRUCTION NOISE, dBA Leq

		Estimated Noise Level at Nearest
Construction Phases	Industrial Projects	Sensitive Receptor
Ground Clearing	84	44
Excavation	89	49
Foundations	78	38
Erection	87	47
Finishing	89	49

**Source**: Typical construction noise levels are based on Table 2-15 of U.S. Environmental Protection Agency (EPA) 1973, Legal Compilation on Noise, Volume 1. Noise levels at nearest sensitive receptors were estimated based on the equations and methodology in Table 4-27 and Table 4-30 in the *Transit Noise and Vibration Impact Assessment Manual* (Federal Transit Administration [FTA] 2018).

Notes: The noise levels presented are typical of projects with all pertinent equipment present at the site.

During operation, the proposed project would generate 12 employee vehicle trips per day and approximately 4 truck trips per day. The project is located in an active cement manufacturing facility that is situated near the I-5 highway. Based on the additive properties of noise, the addition of 12 passenger car trips and 4 truck trips to a location with an active cement manufacturing facility located near a highway would not be a perceptible new source of noise to the area.

The operation of the proposed Fortera<sup>™</sup> ReCarb<sup>™</sup> facility would generate noise from multiple pieces of equipment. The equipment would generally operate 24 hours per day, 7 days per week. Mechanical equipment is generally designed to generate noise levels beneath the Occupational Health and Safety Administration's 8-hour Permissible Noise Exposure Limit (PEL) of 90 dBA (Occupational Safety and Health Standards: Occupational Health and Environmental Control [Standard No. 1910.95]). Based on the methodology of the Transit Noise and Vibration Impact Assessment Manual (FTA 2018) to estimate the attenuation of sound with distance and shielding from trees and existing Lehigh Cement West buildings and equipment, the estimated noise levels at the nearest sensitive receptor that would be generated by equipment with noise levels of 90 dBA at 3 feet is less than 25 dBA. This noise level is well below the 50 dBA L<sub>eq</sub> standard for long-term operational nighttime noise. Because the Fortera ReCarb plant would be located behind the Lehigh Cement West plant, the noise from the Fortera<sup>™</sup> ReCarb<sup>™</sup> Plant would be the same as the noise generated by the existing Lehigh plant, which is indicated in the Noise Element to be 54.5 dB L<sub>eq</sub> at 500 feet.

Based on the additive properties of noise, the two facilities would together generate noise levels of approximately 57.5 feet dB  $L_{eq}$  at 500 feet. Accounting for the attention of sound with distance and building enclosures the estimated noise level at the nearest sensitive receptor would be 47 dB  $L_{eq}$ , which is less than the 50 dB  $L_{eq}$  standard for long-term operational nighttime noise. It should be noted that this calculation does not account for noise reduction through shielding by trees or local topography. Consequently, the potential of the operation of the proposed Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant to result in permanent increase in ambient noise levels in excess of the standards of the Noise Element of the Shasta County General Plan would be less than significant.

- b) The project would not result in the generation of excessive groundborne vibration or groundborne noise levels. Vibration attenuates rapidly with distance. The construction and operation of the proposed Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant would not involve equipment or activities that could generate perceptible vibration at the nearest sensitive receptors, located to the south and east of the existing facility. Typically, only impulsive sources of vibration, such as blasting or pile driving, are perceptible at these distances. The project construction and operation would not require blasting or pile driving. Therefore, the potential for the proposed project to generate excessive groundborne vibration or groundborne noise would be less than significant.
- c) The project is not located within the vicinity of a private airstrip or an airport land use plan, or within two miles of a public airport or public use airport.

Mitigation/Monitoring: None proposed.

<u>XI</u>	7. POPULATION AND HOUSING – Would the project:	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
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)?			V	
b)	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				~

**Discussion:** Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, the following findings can be made:

- a) The project does not involve the construction of any new housing units and would add a negligible number of new permanent jobs. Some temporary employment may be created during the construction phase. No new roads or other infrastructure would be constructed or extended which could facilitate development offsite. The project would not induce substantial unplanned population growth in an area, either directly or indirectly. This impact would be less than significant.
- b) The project does not include demolition of any existing housing. The project would not displace any people or existing housing, necessitating the construction of replacement housing elsewhere. There would be no impact.

#### Mitigation/Monitoring: None proposed.

<b>XV.</b> <u>PUBLIC SERVICES</u> : Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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:	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
Fire Protection?			~	
Police Protection?			~	
Schools?			~	
Parks?				~
Other public facilities?			~	

The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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:

#### Fire Protection

The project is located in an area which is designated as a "Very High" fire hazard severity zone and within a State Responsibility Area. The property receives fire protection services from the Mountain Gate Fire Protection District who has expressed no fire suppression concerns for this project. The project would not trigger any requirement for additional fire apparatus, personnel, or otherwise significantly impact fire protection services. Fire extinguishers would be installed throughout the plant to suppress incipient fires. Potential impacts to fire protection would be mitigated through the payment of applicable development impact fees prior to the issuance of a Certificate of Occupancy.

#### **Police Protection**

The County has a total of 165 sworn and 69 non-sworn County peace officers (Sheriff's deputies) for an approximate population of 66,858 (2020 U.S. Census) persons in the unincorporated area of the County. That is a ratio of one officer per 286 persons. The project is not expected to induce substantial growth in the area. Further, the project would include security features such as a security chain link fence with a barbed wire top at the Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant site's perimeter. A gate would be located at the entry road to the proposed plant and access would be limited by security guards at the main gate. These measures would minimize security risks at the site and demand for law enforcement services. No significant additional level of police protection is necessary. Additionally, potential impacts to police protection would be mitigated through the payment of applicable development impact fees prior to the issuance of a Certificate of Occupancy.

#### Schools

The project would add a negligible number of new jobs at the project site and would not be expected to directly or indirectly generate any new school enrollments or otherwise affect schools. Potential impacts to schools would be mitigated through the payment of applicable development impact fees prior to the issuance of a Certificate of Occupancy.

#### Parks

The project is located in the unincorporated portion of Shasta County which does not have a formal park and recreation program normally found within incorporated cities.

#### **Other Public Facilities**

Potential impacts to general government services, public health, the library system, animal control, and the roadway system would be mitigated through the payment of applicable development impact fees prior to the issuance of a Certificate of Occupancy.

#### Mitigation/Monitoring: None proposed.

XV	I. <u>RECREATION</u> :	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	Would the project 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?				~
b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				~

**Discussion:** Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, the following findings can be made:

a) The project would not 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. The County does not have a neighborhood or regional parks system or other recreational facilities.

b) The project would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. The project does not involve any uses that would increase demand for parks or other recreational facilities.

Mitigation/Monitoring: None proposed.

XV	II. <u>TRANSPORTATION</u> : Would the project:	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?			V	
b)	Conflict or be inconsistent with CEQA Guidelines Section 15064.3 subdivision (b)?			~	
c)	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			~	
d)	Result in inadequate emergency access?			~	

**Discussion:** Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, the following findings can be made:

- a) The project would not conflict with a program, ordinance or policy establishing measures of effectiveness for the performance of addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. The project site is in a rural area with no transit, bicycle or pedestrian facilities or associated programs or plans in the project vicinity. The project would not include any improvements to public roads or intersections and would generate a negligible number of new vehicle trips entering and leaving the site. As shown in Table 1 above, a total of 12 vehicle and 4 truck trips would be generated by the project each day. These trips would occur at different times throughout the day as employees would work in two shifts. This increase would have a negligible effect on traffic operations. The project would not conflict with the goals and policies of the Shasta County Circulation Element, the Regional Transportation Plan, or any other programs or policies addressing the circulation system. The project would not generate enough traffic to significantly reduce the volume-to-capacity ratio of adjacent roadways to a reduced level of service. This impact would be less than significant.
- b) The project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). Senate Bill (SB) 743 of 2013 (CEQA Guidelines Section 15064.3 et seq.) established a change in the metric to be applied in determining transportation impacts associated with development projects. Rather than the delay-based criteria associated with a Level of Service (LOS) analysis, the change in vehicle miles traveled (VMT) as a result of a project is now the basis for determining CEQA impacts with respect to transportation and traffic. As of the date of this analysis, the County of Shasta has not yet adopted thresholds of significance related to VMT. As a result, the project related VMT impacts were assessed based on guidance provided by the California Governor's Office of Planning and Research (OPR) in the publication Transportation Impacts (SB 743) CEQA Guidelines Update and Technical Advisory, 2018.

Pursuant to the Governor's Office of Planning and Research's December 2018 Technical Advisory on Evaluating Transportation Impacts in CEQA, this project would be considered a small project, generating significantly fewer than 110 trips per day, and is assumed to have a less than significant transportation impact.

- c) The project would not substantially increase hazards due to a geometric design feature or incompatible uses. The project proposes access to the plant from the existing access road that serves the rest of the facility. The proposed use would be compatible with the adjacent Lehigh plant, and truck traffic would be coordinated between operations. This impact would be less than significant.
- d) The project would not result in inadequate emergency access. Access to the plant utilizing existing roads would originate from the main access road that serves the rest of the facility. Access driveways would be designed to comply with County Code and inspected by the Mountain Gate Fire Protection District to ensure adequate emergency access. The project has been reviewed by the Mountain Gate Fire Protection District which has determined that there is adequate emergency access.

Mitigation/Monitoring: None proposed.

XVIII. <u>TRIBAL CULTURAL RESOURCES</u> : Would the project:	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
<ul> <li>a) 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:</li> <li>i) 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), or</li> <li>ii) 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 of the resource to a California Native American tribe.</li> </ul>				

a) The project would not cause a substantial adverse change in the significance of a tribal cultural resource as there is no evidence of historical resources at the site that are listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources; or 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 accordance with Public Resources Code (PRC) Section 21080.3.1, the Wintu Tribe of Northern California & Toyon-Wintu Center (Tribe) filed and Shasta County received a request for formal notification of proposed projects within an area of Shasta County that is traditionally and culturally affiliated with the Tribe. Pursuant to PRC §21080.3.1 the Department of Resource Management sent a certified letter to notify the Tribe that the project was under review and to provide the Tribe 30 days from the receipt of the letter to request formal consultation on the project in writing. To date, no response has been received.

Mitigation/Monitoring: None proposed.

XIX proj	K. <u>UTILITIES AND SERVICE SYSTEMS</u> : Would the ect:	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas or telecommunications facilities, the construction or relocations of which could cause significant environmental effects?			2	
b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			2	
c)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand				~

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	K. <u>UTILITIES AND SERVICE SYSTEMS</u> : Would the ject:	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
	in addition to the provider's existing commitments?				
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?			7	
e)	Comply with Federal, State, and local management and reduction statutes and regulations related to solid waste?				~

- a) The project would require the construction of new and expanded utilities to serve the proposed Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant. Water would be provided via a new connection to the existing Lehigh plant potable water system. All office and restroom (non-industrial) generated wastewater shall be directed to a permitted onsite wastewater treatment system unless a variance or determination of non-applicability is obtained from the Environmental Health Division. Electric power, natural gas, and telecommunications facilities would be extended onto the Fortera<sup>TM</sup> ReCarb<sup>TM</sup> Plant site via connections to the existing site power and natural gas distribution infrastructure. Construction, extension, and/or relocation of these utilities could have an adverse physical effect on the environment. These potential environmental effects may include construction air emissions, soil erosion, use of hazardous materials, changes in drainage patterns, and short-term generation of noise. Compliance with existing regulations and implementation of the mitigation measures provided in this initial study would reduce each of these potential effects to a less-than-significant level.
- b) The proposed project would have an annual water demand of approximately 10.6 acre-feet. This represents approximately six percent of Lehigh Cement West, Inc.'s water use for existing operations. Approximately 10.4 acre-feet of the project's water demand, used in plant operations, would be supplied from Lehigh's existing reservoir. The remainder would be potable water, used for eyewash/shower stations and toilets, and would be supplied via a new connection to the existing Lehigh plant potable water system. The Mountain Gate Community Services District has indicated that they can provide water service to the proposed project. Sufficient water supplies would be available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years. This impact would be less than significant.
- c) The project would not be served by a wastewater treatment provider. All office and restroom (non-industrial) generated wastewater shall be directed to a permitted onsite wastewater treatment system, unless a variance or determination of non-applicability is obtained from the Environmental Health Division. During project construction, portable toilets would be provided for workers in compliance with Shasta County Code Section 8.41.160.
- d) The project would not 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. The project would generate approximately 600 pounds per year of lab waste, approximately one ton per year of trash, and approximately 1,179,360 gallons or 147,420 pounds of Non-RCRA aqueous waste per year. Solid waste would be sent to the appropriate certified disposal facilities and would be transported via third-party solid waste transport providers to a certified treatment, storage, and disposal facility. The estimated additional annual pounds of solid waste to the waste stream would be insignificant and would not exceed the capacity of any receiving solid waste facilities. The project would be served by Waste Management disposal services and by the West Central Landfill which has sufficient capacity to accommodate the project's solid waste disposal needs.
- e) The project would comply with Federal, State, and local management and reduction statutes and regulations related to solid waste. The proposed project would be required to comply with applicable elements of AB 1327, Chapter 18 (California Solid Waste Reuse and Recycling Access Act of 1991) and other local, state, and federal waste disposal standards.

#### Mitigation/Monitoring: None proposed.

	. WILDFIRE: If located in or near state responsibility areas or is classified as very high fire hazard severity zones, would the ect:	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	Substantially impair an adopted emergency response plan or emergency evacuation plan?				~
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?			2	
c)	Require the installation or maintenance 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?			~	
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?			~	

- a) The project would not substantially impair an adopted emergency response plan or emergency evacuation plan. The proposed improvements would be constructed within an existing industrial facility and would not result in any changes to local roads that would affect how evacuation plans may be implemented or that would impede access for emergency response vehicles in the area. The project would add a negligible number of new workers to the project site and would not necessitate new or expanded evacuation routes. Further, no lane closures or other road obstructions would occur during the project construction phase. The project would not affect implementation of the Shasta County and City of Anderson Multi-Jurisdictional Hazard Mitigation Plan or the Shasta County Emergency Operations Plan.
- b-d) The project would not exacerbate wildfire risks or related risks to the public and the environment. The project does not include any infrastructure or other improvements which could increase fire risk, such as overhead electrical wires. Further, the plant's HMBP and the Lehigh Plant's SPCC (which would be updated to include the proposed Fortera<sup>™</sup> ReCarb<sup>™</sup> plant) (see Section IX, "Hazards and Hazardous Materials") would include a detailed plan for emergency conditions, such as wildfire, to prevent, minimize and respond to an accidental release of hazardous materials.

Mitigation/Monitoring: None proposed.

XX	I. <u>MANDATORY FINDINGS OF SIGNIFICANCE</u> :	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
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 the self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		2		
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 the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			7	
c)	Does the project have environmental effects which will cause				

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XXI. <u>MANDATORY FINDINGS OF SIGNIFICANCE</u> :	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
substantial adverse effects on human beings, either directly or indirectly?		>		

#### **Discussion:**

a) Based on the discussion and findings in Section II. Air Quality, Section IV. Biological Resources, and Section IX. Hazards and Hazardous Materials, there is evidence to support a finding that the project could 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 the self-sustaining levels, threaten to eliminate a plant or animal community, or substantially reduce the number or restrict the range of a rare or endangered plant or animal. With the incorporation of the proposed mitigation measures into the project, the impacts would be less-than-significant.

Based on the discussion and findings in Section V. Cultural Resources, there is no evidence to support a finding that the project would have the potential to eliminate important examples of the major periods of California history or prehistory.

- b) Based on the discussion and findings in all Sections above, there is no evidence to suggest that the project would have significant impacts that are cumulatively considerable.
- c) Based on the discussion and findings in Section II. Air Quality and Section IX. Hazards and Hazardous Materials, there is evidence to support a finding that the project could have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly. With the incorporation of the proposed mitigation measures into the project, the impacts would be less-than-significant.

**Mitigation/Monitoring:** With the mitigation measures being proposed, the impacts from the project would be less than significant. See the attached Mitigation Monitoring Program (MMP) for a complete listing of the proposed mitigation measures, timing/implementation of the measures, and enforcement/monitoring agent(s).

#### **INITIAL STUDY COMMENTS**

#### PROJECT NUMBER <u>ADMC21-0003 – Lehigh Cement West, Inc.</u>

#### **GENERAL COMMENTS:**

**Special Studies:** The following project-specific studies have been completed for the proposal and will be considered as part of the record of decision for the Mitigated Negative Declaration. These studies are available for review through the Shasta County Planning Division.

1. Environmental Permitting Strategy, Trinity Consultants, February 18, 2022

Agency Referrals: Prior to an environmental recommendation, referrals for this project were sent to agencies thought to have responsible agency or reviewing agency authority. The responses to those referrals (attached), where appropriate, have been incorporated into this document and will be considered as part of the record of decision for the Mitigated Negative Declaration. Copies of all referral comments may be reviewed through the Shasta County Planning Division. To date, referral comments have been received from the following State agencies or any other agencies which have identified CEQA concerns:

1. California Department of Fish and Wildlife

**Conclusion/Summary:** Based on a field review by the Planning Division and other agency staff, early consultation review comments from other agencies, information provided by the applicant, and existing information available to the Planning Division, the project, as revised and mitigated, is not anticipated to result in any significant environmental impacts.

#### SOURCES OF DOCUMENTATION FOR INITIAL STUDY CHECKLIST

All headings of this source document correspond to the headings of the initial study checklist. In addition to the resources listed below, initial study analysis may also be based on field observations by the staff person responsible for completing the initial study. Most resource materials are on file in the office of the Shasta County Department of Resource Management, Planning Division, 1855 Placer Street, Suite 103, Redding, CA 96001, Phone: (530) 225-5532.

#### GENERAL PLAN AND ZONING

- 1. Shasta County General Plan and land use designation maps.
- 2. Applicable community plans, airport plans and specific plans.
- 3. Shasta County Zoning Ordinance (Shasta County Code Title 17) and zone district maps.

#### **ENVIRONMENTAL IMPACTS**

#### I. AESTHETICS

- 1. Shasta County General Plan, Section 6.8 Scenic Highways, and Section 7.6 Design Review.
- 2. Zoning Standards per Shasta County Code, Title 17.
- 3. California Department of Transportation (Caltrans). Scenic Highways. https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways (accessed September 17, 2021).

#### II. AGRICULTURAL AND FORESTRY RESOURCES

- 1. Shasta County General Plan, Section 6.1 Agricultural Lands.
- 2. Shasta County Important Farmland 2016 Map, California Department of Conservation.
- 3. Shasta County General Plan, Section 6.2 Timber Lands.
- 4. Soil Survey of Shasta County Area, California, published by U.S. Department of Agriculture, Soil Conservation Service and Forest Service, August 1974.
- California Department of Conservation. California Important Farmland Finder. https://maps.conservation.ca.gov/DLRP/CIFF/ (accessed September 21, 2021)
- 6. California Department of Conservation. *Important Farmland Categories*. https://www.conservation.ca.gov/dlrp/fmmp/Pages/Important-Farmland-Categories.aspx

#### **III. AIR QUALITY**

- 1. Shasta County General Plan Section, 6.5 Air Quality.
- 2. Sacramento Valley Air Quality Engineering and Enforcement Professionals (SVAQEEP). 2018. Northern Sacramento Valley Planning Area 2018 Triennial Air Quality Attainment Plan.
- 3. Shasta County Air Quality Management District (SCAQMD). 2003. Protocol for Review Land Use Permitting Activities. Procedures for Implementing the California Environmental Quality Act.
- Trinity Consultants. 2022 (February 18). Environmental Permitting Strategy for the Fortera Small Commercial Plant at Lehigh's Redding Facility. Letter Memorandum to Erika Guerra, Lehigh Hanson, Keith Krugh, Lehigh Hanson, and Bret Armanini, Fortera.

#### **IV. BIOLOGICAL RESOURCES**

- 1. Shasta County General Plan, Section 6.2 Timberlands, and Section 6.7 Fish and Wildlife Habitat.
- 2. Natural Diversity Data Base Records of the California Department of Fish and Wildlife.
- 3. County of Shasta. Board of Supervisors Resolution No. 95-157. Oak Woodland Management Guidelines.

#### V. CULTURAL RESOURCES

- 1. Shasta County General Plan, Section 6.10 Heritage Resources.
- 2. Records of, or consultation with, the following:
  - a. The Northeast Information Center of the California Historical Resources Information System, Department of Anthropology, California State University, Chico.
  - b. Local Native American representatives.

#### VI. ENERGY

- 1. California Global Warming Solutions Act of 2006 (AB 32)
- 2. California Code of Regulations Title 24, Part 6 California Energy Code
- 3. California Code of Regulations Title 24, Part 11 California Green Building Standards Code (CALGreen)

#### VII. GEOLOGY AND SOILS

- 1. Shasta County General Plan, Section 5.1 Seismic and Geologic Hazards, Section 6.1 Agricultural Lands, and Section 6.3 Minerals.
- 2. County of Shasta, Erosion and Sediment Control Standards, Design Manual
- 3. Soil Survey of Shasta County Area, California, published by U.S. Department of Agriculture, Soil Conservation Service and Forest Service, August 1974.
- 4. Alquist Priolo, Earthquake Fault Zoning Maps.
- 5. California Department of Conservation. California Geological Survey. California Earthquake Hazards Zone Application.

https://maps.conservation.ca.gov/cgs/EQZApp/App/ (accessed September 21, 2021).

#### VIII. GREENHOUSE GAS EMISSIONS

- 1. Shasta Regional Climate Action Plan
- 2. California Air Pollution Control Officers Association (White Paper) CEQA & Climate Change, Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act
- 3. Trinity Consultants. 2022 (February 18). Environmental Permitting Strategy for the Fortera Small Commercial Plant at Lehigh's Redding Facility. Letter Memorandum to Erika Guerra, Lehigh Hanson, Keith Krugh, Lehigh Hanson, and Bret Armanini, Fortera.

#### IX. HAZARDS AND HAZARDOUS MATERIALS

- 1. Shasta County General Plan, Section 5.4 Fire Safety and Sheriff Protection, and Section 5.6 Hazardous Materials.
- 2. Shasta County and City of Anderson. 2017. Multi-Jurisdictional Hazard Mitigation Plan.
- 3. Records of, or consultation with, the following:
  - Shasta County Department of Resource Management, Environmental Health Division. а
  - Shasta County Department of Public Works. b.
  - California Environmental Protection Agency, California Regional Water Quality Control Board, Central Valley Region. c.
- 4. State Water Resources Control Board. GeoTracker. https://geotracker.waterboards.ca.gov/ (accessed September 19, 2021).
- California Department of Forestry and Fire Protection (CAL FIRE). Fire Hazard Severity Zone Viewer. https://egis.fire.ca.gov/FHSZ/ (accessed September 19, 2021).

#### X. HYDROLOGY AND WATER QUALITY

- 1. Shasta County General Plan, Section 5.2 Flood Protection, Section 5.3 Dam Failure Inundation, and Section 6.6 Water Resources and Water Quality.
- 2. Flood Boundary and Floodway Maps and Flood Insurance Rate Maps for Shasta County prepared by the Federal Emergency Management Agency, as revised to date.
- 3. Records of, or consultation with, the Shasta County Department of Public Works acting as the Flood Control Agency and Community Water Systems manager.
- 4. Division of Safety of Dams. 2021. Dam Breach Inundation Map Web Publisher. https://fmds.water.ca.gov/webgis/?appid=dam prototype v2 (accessed October 14, 2021).
- 5. Shasta County and City of Anderson. 2017. Multi-Jurisdictional Hazard Mitigation Plan.

#### XI. LAND USE AND PLANNING

- 1. Shasta County General Plan land use designation maps and zone district maps.
- 2. Shasta County Assessor's Office land use data.

#### XII. MINERAL RESOURCES

- 1. Shasta County General Plan Section 6.3 Minerals.
- 2. Department of Conservation, Division of Mines and Geology. 1997. Mineral Land Classification of Alluvial Sand and Gravel, Crushed Stone, Volcanic Cinders, Limestone, and Diatomite within Shasta County, California. DMG Open-File Report 97-03.

#### **XIII. NOISE**

- 1. Shasta County General Plan, Section 5.5 Noise and Technical Appendix B.
- 2. Charles M. Salter Associates. 1998. Acoustics—Architecture, Engineering, the Environment.
- 3. Federal Transit Administration (FTA). 2018 (September). Transit Noise and Vibration Impact Assessment Manual. FTA Report No. 0123.
- 4. U.S. Environmental Protection Agency (EPA) 1973, Legal Compilation on Noise, Volume 1.
- 5. Continental Blower, LLC. n.d. Technical Data Sheet, "151" Series.
- 6. Hosokawa Micron Powder Systems, 2021. Hosokawa Micron Powder Systems Proposal for MIKO-100 ACM System.

#### **XIV. POPULATION AND HOUSING**

- 1. Shasta County General Plan, Section 7.1 Community Organization and Development Patterns.
- 2. Census data from the California Department of Finance.
- 3. Shasta County General Plan, Section 7.3 Housing Element.

#### **XV. PUBLIC SERVICES**

- 1. Shasta County General Plan, Section 7.5 Public Facilities.
- 2. Records of, or consultation with, the following:
  - Shasta County Fire Prevention Officer. a.
  - b. Shasta County Sheriff's Department.
  - Shasta County Office of Education. c.
  - Shasta County Department of Public Works. d.

#### **XVI. RECREATION**

1. Shasta County General Plan, Section 6.9 Open Space and Recreation.

#### XVII. TRANSPORTATION/TRAFFIC

- 1. Shasta County General Plan, Section 7.4 Circulation.
- 2. Records of, or consultation with, the following:
  - a. Shasta County Department of Public Works.
- 3. State of California. Governor's Office of Planning and Research. 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA.

#### XVIII. TRIBAL CULTURAL RESOURCES

1. Tribal Consultation in accordance with Public Resources Code section 21080.3.1

#### XIX. UTILITIES AND SERVICE SYSTEMS

- 1. Records of, or consultation with, the following:
  - a. Pacific Gas and Electric Company.
  - b. Shasta County Department of Resource Management, Environmental Health Division.
  - c. Shasta County Department of Public Works.

#### XX. WILDFIRE

1. Office of the State Fire Marshall-CALFIRE Fire Hazard Severity Zone Maps.

#### XXI. MANDATORY FINDINGS OF SIGNIFICANCE

None

#### MITIGATION MONITORING PROGRAM (MMP) FOR AMND21-0003 – LEHIGH CEMENT WEST, INC.

	Mitigation Measure/Condition	Timing/Implementation	Enforcement/Monitoring	Verification (Date & Initials)
Section III. Air	r Quality			
III.a.c.1) The pha: i. ii. ii. iv. v. v. vi. vi. vii.	following measures shall be implemented throughout the construction se of the project: Any person building, erecting, altering, or replacing any article, machine, equipment, or other contrivance which may cause the issuance of air contaminants, shall obtain written authority for such construction from the air pollution control officer of the Shasta County Air Quality Management District. No person shall discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such person or the public, or which cause, or have the natural tendency to cause, injury, or damage to business or property. All activities associated with a building site for residential, commercial, or industrial use shall be conducted in a manner to control fugitive dust emissions through the use of dust palliative agents or the use of water to mitigate off-site impacts. Applicant shall apply for a permit from the Air Quality Management District and obtain any permits required by the District. Alternatives to open burning of vegetative material on the project site shall be used by the project applicant unless otherwise deemed infeasible by the AQMD. Among suitable alternatives are chipping, mulching, or conversion to biomass fuel. The applicant shall be responsible for ensuring that all adequate dust control measures are implemented in a timely and effective manner during all phases of project development and construction.	Prior to Issuance of Grading / Building Permit During Project Construction Prior Final Occupancy In Perpetuity	Resource Management, Planning / Building Division	
xii.	watered until a suitable grass cover is established.			

Mitigation Measure/Condition	Timing/Implementation	Enforcement/Monitoring	Verification (Date & Initials)
<ul> <li>stabilizers (according to manufacturer's specifications) to all inactive construction areas (previously graded areas which remain inactive for 96 hours) in accordance with the Shasta County Grading Ordinance.</li> <li>xiii. All material transported off-site shall be either sufficiently watered or securely covered to prevent a public nuisance.</li> <li>xiv. Adjacent paved streets shall be swept (recommend water sweeper with reclaimed water) at the end of each day if substantial volumes of soil materials have been carried onto adjacent public paved roads from the project site.</li> <li>xv. Prior to final occupancy, the applicant shall reestablish ground cover on the construction-site through seeding and watering in accordance with the Shasta County Grading Ordinance.</li> <li>xvi. Minimize idling times either by shutting off equipment when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of the California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at access points.</li> <li>xvii. Maintain all construction equipment in accordance with the manufacturer's specifications.</li> <li>xviii. Use construction equipment that meets the current off-road engine emission standard (as certified by ARB) or that is re-powered with an engine that meets this standard. Tier I, Tier II, and Tier III engines produce significantly less NOx and PM emissions than uncontrolled engines.</li> <li>Section IV. Biological Resources</li> <li>IV.d.1) In order to avoid impacts to nesting migratory birds and/or raptors protected under federal Migratory Bird Treaty Act and California Fish and Game Code Section 3503 and Section 3503.5, including their nests and eggs, one of the following shall be implemented:         <ul> <li>a. Vegetation and tree removal activities associated with construction shall occur between September 1 and January 31 when birds are</li></ul></li></ul>	Prior to Issuance of Grading Permit	Resource Management, Planning Division / California Department of Fish and Wildlife	Initials)
(February 1 through August 31), a pre-construction nesting survey shall be conducted by a qualified biologist within 14 days of vegetation removal or construction activities. If an active nest is located during the preconstruction surveys, a non-disturbance buffer shall be established around the nest by a qualified biologist in consultation with the Department of Fish and Wildlife (CDFW). No vegetation removal, tree removal or construction activities shall occur within this non- disturbance buffer until the young have fledged, as determined through additional monitoring by the qualified biologist. The results of the pre- construction surveys shall be sent electronically to CDFW at <u>R1CEQARedding@wildlife.ca.gov</u> .			

	Mitigation Measure/Condition	Timing/Implementation	Enforcement/Monitoring	Verification (Date & Initials)
a. Cond sease b. If representations the brith that crevent by brith be cond feature Tree clear cond expense a two are to	to avoid impacts to bats, the following shall be implemented: duct removal and disturbance of trees outside of the bat maternity on and bat hibernacula (September 1 to October 31). moval or disturbance of trees will occur during the bat maternity on, when young are non-volant (March 1 - August 31), or during pat hibernacula (November 1 - March 1), large trees (those greater 5 inches in diameter) shall be thoroughly surveyed for cavities, ices, and/or exfoliated bark that may have high potential to be used ats within 14 days of tree removal or disturbance. The survey shall onducted by a qualified biologist or arborist familiar with these tres to determine if tree features and habitat elements are present. s with features potentially suitable for bat roosting should be rely marked prior to removal and humane evictions must be fucted by or under the supervision of a biologist with specific erience conducting exclusions. Humane exclusions could consist of o-day tree removal process whereby the non-habitat trees and brush removed along with certain tree limbs on the first day and the ainder of the tree on the second day.	Prior to Issuance of Grading Permit	Resource Management, Planning Division	
Section IX. Hazards	and Hazardous Materials			
prepare a H Environmen hydrochlorio Cement We Countermea	eration of the Fortera <sup>TM</sup> ReCarb <sup>TM</sup> Plant, the plant operator shall fazardous Materials Business Plan consistent with Shasta County intal Health Division requirements to address the use of c acid and aqueous ammonia on the project site. In addition, Lehigh est, Inc. shall update its existing Spill Prevention, Control, and usure Plan (SPCCP) to address the proposed changes to project site d operations.	Prior to Final Occupancy	Resource Management, Building Division / Environmental Health Division	
plant operat and Plannin to develop a proposed pr and 27. The review and a	ance of a building permit for the Fortera <sup>TM</sup> ReCarb <sup>TM</sup> Plant, the for shall coordinate with the Shasta County Environmental Health g divisions, as well as the Mountain Gate Fire Protection District a Risk Management Plan (RMP) and Prevention Program for the oject in accordance with California Code of Regulations Titles 19 RMP shall be submitted to the Environmental Health Division for approval prior to issuance of a building permit and the Prevention e implemented prior to facility operation.	Prior to Issuance of Building Permit	Resource Management, Building Division / Planning Division / Environmental Health Division; Mountain Gate Fire Protection District	