AUTHORITY TO CONSTRUCT ENGINEERING EVALUATION

Reviewed by: _____
Title: APCO EKAPCD
Date: _____

Applicant: **California Portland Cement Company**

Mailing Address: 9350 Oak Creek Road
Mojave, CA 93501

Contact Name: Brian Males, Env. Manager
Phone Number: (661) 823-3731 Fax Number: BMales@calportland.com

Application No.: 1003026V Project #: 220121

Location: 8 mi. west of Mojave on Oak Creek Rd, Mojave QS/T/R: SE24/11N/14W
Latitude/Longitude (Decimal) Latitude: 35.02972 Longitude: -118.31662

Project Title: Increase CO Emissions from Pyroprocessing (PSD)

App. Rec.: 01/21/22 Deemed Complete: 03/02/22
180 Days: 08/29/22 Submittal Date: 08/11/22

Evaluation By: Samuel Johnson

Project Contents:

I. PROPOSAL:

California Portland Cement Company (CPCC) has proposed to increase allowable emissions of carbon monoxide (CO) from their cement kiln to improve kiln performance and meet operational demands, while also complying with current permit limits for oxides of nitrogen (NOx) and ammonia emissions. The modification will result in a significant emissions increase of CO; therefore, evaluation for compliance with Prevention of Significant Deterioration (PSD) in accordance with District Rule 210.4 is required. Evaluation for emission Offsets is not required for CO.

II. APPLICABLE RULES and REGULATIONS:

A. Rule 201 - Permits Required (Amended 05/02/96)
Any person building, altering, or replacing any equipment, the use of which may cause the issuance of air contaminants or the use of which may eliminate or reduce or control the issuance of air contaminants, shall first obtain authorization for such construction from the APCO. An Authority to Construct (ATC) shall remain in effect until the permit to operate the equipment for which the application was filed is granted, denied, or canceled.

B. Rule 208.2 – Criteria for finding of No Significant Environmental Impact [California Environmental Quality Act (CEQA)] (Amended 05/02/96)
Establishes criteria by which a project under review by EKAPCD can be found to have no potential for causing a significant environmental impact, and, thus, be granted a general rule exemption pursuant to Section 15061 (b)(3) of the State CEQA Guidelines.

C. Rule 210.1 - New and Modified Stationary Source Review (Amended 05/04/00)
1) Provide for pre-construction review of new and modified stationary sources of affected pollutants to insure emissions will not interfere with the attainment of ambient air quality standards.
2) Insure that appropriate new and modified sources of affected pollutants are constructed with Best Available Control Technology, and
3) Provide for no significant net increase in emissions from new and modified stationary sources for all non-attainment pollutants and their precursors.

D. Rule 210.4 – Prevention of Significant Deterioration (Amended 1/12/12, Effective 02/8/13)
Incorporates by reference federal Prevention of Significant Deterioration requirements from Title 40, Code of Federal Regulations, Part 52 §52.21.

E. Rule 401 - Visible Emissions (Amended 11/29/93)
A person shall not discharge into the atmosphere emissions as dark as or darker than Ringelmann 1 or 20% opacity for more than 3 minutes in any one hour.

F. Rule 404.1 - Particulate Matter Concentration (Amended 01/24/07)
A person shall not discharge particulate matter in excess of 0.1 grains per cubic foot of gas at standard condition from any single source operation.

G. Rule 406 – Process Weight-Portland Cement Kilns (Adopted 04/18/72, Renumbered 5/89)
Cement Kilns, the construction or modification of which is commenced after August 17, 1971, shall not discharge into the atmosphere particulate matter in excess of the Environmental Protection Agency Standards of Performance.

H. Rule 409 – Fuel Burning Equipment – Combustion Contaminants (Amended 05/07/98)

A. Fuel burning equipment, the construction or modification of which commenced after August 17, 1971, shall not discharge into the atmosphere particulate matter, sulfur dioxide or oxides of nitrogen in excess of the U.S. Environmental Protection Agency Standards of Performance. (See Rule 422.)

B. A person shall not discharge into the atmosphere from any other fuel burning equipment combustion contaminants exceeding in concentration at the point of discharge, 0.1 grain per cubic foot of gas calculated to 12 percent of carbon dioxide (CO2) at standard conditions.

I. Rule 419 - Nuisance (Adopted 4/18/72 Renumbered 5/89) and California Health and Safety Code (CH&SC) §41700
A person shall not 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 persons or the public or which cause or have a natural tendency to cause injury or damage to business or property.

J. Rule 422 Subpart F – Standards of Performance for Portland Cement Plants (Amended 1/13/22)
Incorporates by reference the requirements for portland cement plants under 40 CFR Part 60, Subpart F.

K. Rule 423 Subpart LLL – National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry (Amended 1/13/22)
Incorporates by reference the requirements for portland cement plants under 40 CFR Part 63, Subpart LLL.

III. EQUIPMENT LOCATION & SCHEMATIC:

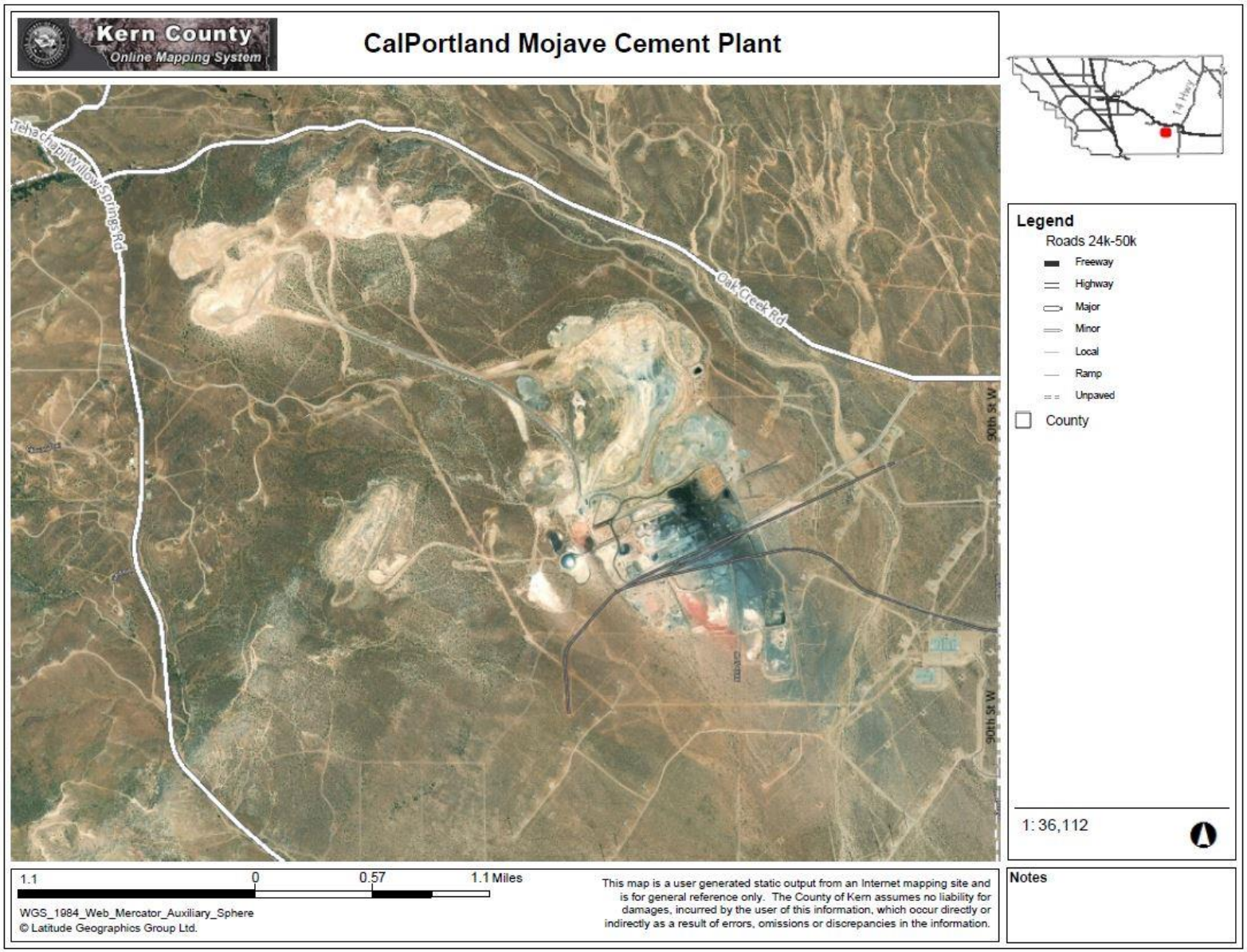


Figure 1: CalPortland Mojave Cement Plant

III. EQUIPMENT LOCATION & SCHEMATIC (cont.):

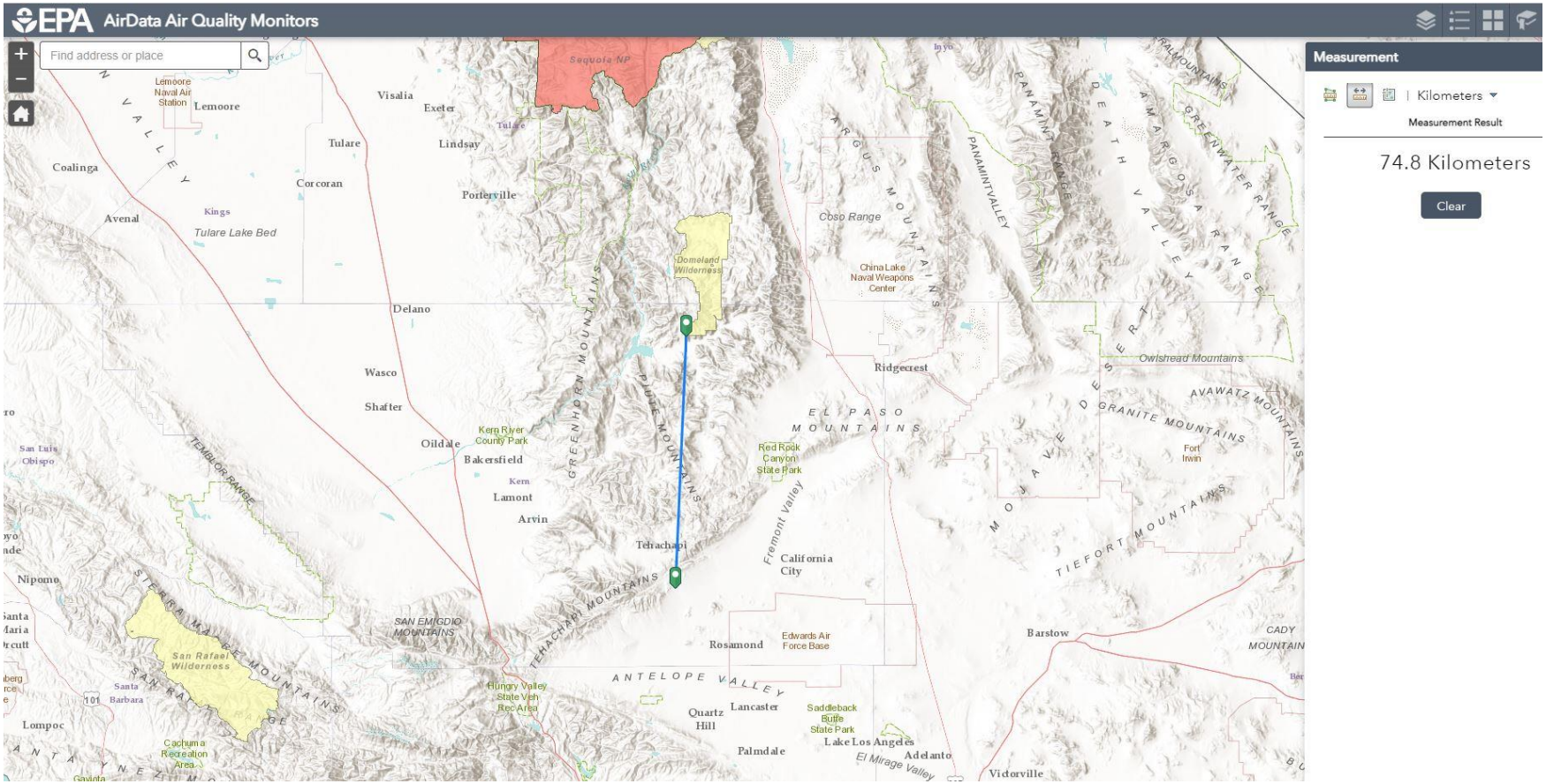


Figure 2: Proximity to Nearest Federal Class I Area

IV. EQUIPMENT LISTING:

1003026V:

A. Oxygen injection system including: Vacuum Swing Absorption (VSA) plant, cryogenic storage tanks, vaporizers, pressure temperature control manifold with associated piping valves, regulators, trim heater and injection nozzles;
B. Scrap tire shipping trailer parking/storage area;
C. Scrap tire receiving conveyor;
D. Scrap tire elevator;
E. Scrap tire weigh bridge and conveyor;
F. Scrap tire sliding air lock gate valve followed by two air lock flap gates;
G. Two first stage preheating cyclones (H4-CC1A and CC1B) exhausting to heat exchanger (H4-6-HE1);
H. Second stage preheater cyclone (H4-6-CC2);
I. Third stage preheater cyclone (H4-6-CC3);
J. Fourth stage preheater cyclone (H4-6-CC4);
K. Gas conditioning tower with water injection;
L. Preheater section exhaust fan and roller mill sweep fan (H4-6-KF1) with 3,000 hp motor;
M. Preheater/precalciner combination burner assembly with coal and/or petroleum coke pipe, natural gas nozzle and fuel oil nozzle;
N. Preheater bypass/beneficiation quench air chamber and blower (H6-6-BL1);
O. Bleed air damper (H6-6-D1) with one drop out box (H6-6-B1) and two screw conveyors (H6-6-SC1 and H6-6-DC1-SC1) ventilated by fabric collector (H6-6-DC1);
P. Beneficiation fabric dust collector (H6-6-DC1) with 432 - 12 in. dia. by 20.83 ft. long fiberglass twill filter tubes, reverse air cleaning mechanism, 300 hp exhaust fan and 50 hp reverse air fan;
Q. Three beneficiation loadout screw conveyors (H6-6-DC1-SC1, SC2, and SC3) ventilated by fabric collector (H6-6-DC2);
R. Beneficiation bucket elevator (H6-6-BE1) ventilated by fabric collector (H6-6-DC2);
S. Beneficiation surge bin (H6-6-B2) ventilated by fabric collector (H6-6-DC2);
T. Beneficiation truck loadout screw conveyor (H6-6-SC4) ventilated by fabric collector (H6-6-DC2);
U. Beneficiation Fuller-Kenyon pneumatic transfer system (H6-6-FP1) and 100 hp compressor ventilated by fabric collector (H6-6-DC2);
V. Beneficiation loadout fabric dust collector (H6-6-DC2) with 64 - 4.75 in. dia. by 10 ft. long polyester filter tubes, pulse jet cleaning mechanism and 15 hp exhaust fan;
W. Beneficiation system alleviator (H6-6-CC1) going to existing surge bin ventilated by fabric collector (H6-6-DC3);
X. Beneficiation surge bin fabric dust collector (H6-6-DC3) with 25 - 4.5 in. dia. by 10 ft. long polyester filter tubes, pulse jet cleaning mechanism and 7.5 hp exhaust fan;
Y. Fuller Company rotary kiln #6 with variable, multiple fuel burner assembly with retractable burner pipes for coal and/or petroleum coke, and nozzles for natural gas and fuel oil;
Z. Coal and/or petroleum coke transfer belt conveyors (R3-BC7 and BC8) (from existing storage) with dust control achieved by maintaining adequate moisture content (supplied by existing coal and/or petroleum coke handling system PTO 1003010C);
AA. Coal and/or petroleum coke storage silo (R3-CSS2) with dust control achieved by maintaining adequate moisture content (supplied by existing coal and/or petroleum coke handling system PTO 1003010C);
BB. Coal and/or petroleum coke mill weigh feeder (H7-6-WF1) ventilated by fabric collector (H7-6-DC1);
CC. Inerting bin (H7-6-CC1) with two dampers (H7-6-D1 and H7-6-D2);
DD. Coal and/or petroleum coke mill (H7-6-CM1), natural gas-fired air heater (H7-6-AH1), and blower (H7-6-BL1) ventilated to fabric collector (H7-6-DC1);

EE. Coal and/or petroleum coke mill hot air (from clinker cooler) cleaning cyclone (H7-6-CC1) with two dampers (H7-6-D1 and D2);
FF. Coal and/or petroleum coke mill hot air alternate flow damper (H7-6-D4) and blower (H7-6-BL2) into kiln #6;
GG. Coal and/or petroleum coke mill fabric dust collector (H7-6-DC1) with 633 - 4.5 in. dia. by 10 ft. long polyester filter tubes, pulse jet cleaning mechanism and 300 hp exhaust fan;
HH. Coal and/or petroleum coke mill mini-bins (H7-6-B1, B2, and B3) ventilated by fabric collector (H7-6-DC1);
II. Two parallel coal and/or petroleum coke airlines (H7-6-AS1 and AS2), blower, and impact scales (H7-6-IS1 and IS2) ventilated by fabric collector (H7-6-DC1);
JJ. Two parallel coal and/or petroleum coke diverter gates (H7-6-DG1 and DG2);
KK. Fuller-Kenyon coal and/or petroleum coke pump (H7-6-FP1) and 150 hp blower with dust control ventilation by fabric collector (H7-6-DC1) (to precalciner burners);
LL. Fuller-Kenyon coal and/or petroleum coke pump (H7-6-FP3) and 150 hp blower with dust control ventilation by fabric collector (H7-6-DC1) (to coal burner H3-6-KBC01 at kiln #6);
MM. Fuller-Kenyon coal and/or petroleum coke pump (H7-6-FP2) and 150 hp blower with dust control ventilation by fabric collector (H7-6-DC1);
NN. Two precalciner hot air (from clinker cooler) dust settling chambers and one damper (H4-6-D1);
OO. One dust settling conveyor belt (H4-6-DCR1) ventilated by fabric collector (H2-6-DC1);
PP. Kiln gas fabric dust collector (H5-6-DC1) (gas from roller mill) with 3,168 – 6.5 in. dia. by 24 ft. long teflon/PTFE filter tubes and 1,750 hp exhaust fan;
QQ. Three kiln gas section screw conveyors (H5-6-DC1-SC2, SC4 and H5-6-SC1);
RR. Kiln gas section bucket elevator (H5-6-BE1) ventilated by fabric collector (D2-6-DC2) (roller mill system);
SS. Two kiln gas section airlines (H5-6-AS1 and AS2) and blower (H5-6-BL1) ventilated by fabric collector (D2-6-DC3) (roller mill system);
TT. Ammonia injection system, reagent for selective non-catalytic reduction system (SNCR), including: 20,000-gallon ammonia storage tank, ammonia pump (H4-6-APS-P1), distribution piping to injection ports at calciner and injection control system;
UU. Hydrated lime injection system, including: 10,000-cu.ft. storage bin, 2400-cfm bin vent filter (H4-6-LIS-DC1) with 10-hp exhaust fan, vibrating bin discharger (H4-6-LIS-BA), weigh bin, rotary feeder, blower with 40-hp motor (H4-6-LIS-BL1) feeding line to kiln feed/stage 2 outlet; and
VV. Lime slurry injection system, including hopper with dual pant leg, slurry tank, rotary feeder, slurry pump with 15-hp motor, and screw conveyor with 3-hp motor; and
WW. Fabric Collector CKD with 3,500-cfm exhaust flow rate

V. ENGINEERING ANALYSIS:

California Portland Cement Company (CPCC) operates a portland cement manufacturing facility west of Mojave, CA. The two primary operations in the manufacture of cement are (1) mining, crushing, and storage of raw materials, and (2) calcining of raw materials into clinker in the pyroprocessing system and crushing of clinker finished cement product.

CPCC has requested to increase the allowable CO emissions from the pyroprocessing system; the new proposed emissions would result in a significant emissions increase (defined in 40 CFR §52.21(b)(23)) of CO, calculated in accordance with 40 CFR §52.21:

	CO (ton/yr)
Baseline Actual Emissions	534
Proposed Potential to Emit	2,277
Contemporaneous Increases	0

Net Emission Increase	1,743
Significant Emission Rate	100
Increase > Significant?	Yes

Since the modification results in a significant emissions increase, evaluation for compliance with Prevention of Significant Deterioration (PSD) for CO emissions is required, and a PSD permit is required to be issued.

Prevention of Significant Deterioration

Major modifications at facilities located in an area designated as attainment for a pollutant are required to implement best available control technology (BACT) and must also demonstrate the emissions increase from the modification would not result in an ambient air concentration increase above the allowable thresholds listed in 40 CFR §52.21(c). Prior to commencing construction the modification is required to be evaluated for compliance with 40 CFR §52.21 subsections (j) through (r).

Source Information

The owner or operator of a proposed source or modification is required to submit all information necessary to perform an analysis or make any determination required by the PSD rule. This includes:

- a description of the location, design capacity, and typical operating schedule of the source or modification;
- a detailed schedule for construction of the source or modification; and
- a detailed description as to what emission controls or reductions of potential emissions are planned for the source or modification, estimates of those emissions, and other information necessary to determine that BACT would be applied to the source or modification

The owner or operator may also be required to provide the following information upon request of the District or EPA:

- air quality impact of the source or modification; and
- air quality impacts of any commercial, industrial, residential, and other growth in the area the proposed source or modification would affect

CPCC included a detailed control technology review, worst-case 1-hour emission estimates, and source impact analysis with the application. Physical construction and/or modification to the kiln is not anticipated to be necessary to allow for the increase in CO emissions from the pyroprocessing system, so a detailed schedule of construction would not apply in this instance.

Control Technology Review

A review of control technologies for reduction of CO emissions was included with the application; this is further discussed in Section VI of this evaluation.

Air Quality Models

Subsection (l) of 40 CFR §52.21 requires the estimates of ambient pollutant concentrations be made using a model and input data meeting the requirements of the EPA's Guideline on Air Quality Models (Appendix W to Part 51). Section 4 of the Guidelines describe appropriate air quality models for assessing pollutant concentrations in ambient air, Section 6 provides general modeling considerations, Section 8 contains the requirements for model input data, and Section 9 provides guidance on the regulatory application of air quality models.

Ambient concentrations of CO were modeled using the AERMOD model, a gaussian plume dispersion model approved by EPA for modeling CO concentrations in ambient air. Meteorological data from the Mojave Air & Space Port National Weather Service station was obtained for years 2016-2020 and preprocessed using AERMET for use in the ARMOD. Terrain data from the National Elevation dataset (NED) was obtained and preprocessed using AERMAP to determine the elevations of each modeled building, source, and receptor in the modeling domain. Receptors were modeled as follows:

- Along the facility fence line, spaced at 25 meter (m) intervals;
- Grid of 25m x 25m spacing out to 500 meters from the source
- Grid of 100m x 100m spacing out to 1 kilometer (km) from the source
- Grid of 500m x 500m spacing out to 5 km from the source
- Grid of 1km x 1km spacing out to 10km from the source

Building downwash impacts were evaluated using Trinity Consultant's *Breeze* software, based on EPA's 1981 *Guidelines for Determination of Good Engineering Practice Stack Height* and algorithms from EPA's Building Profile Input Program – Plume Rise Model Enhancements (BPIP-PRIME) Model.

Proposed dispersion model and input data appear to meet the criteria specified in EPA's Guidelines, and therefore the model is acceptable for assessing the proposed modification's impacts on ambient CO concentrations.

Source Impact Analysis

The owner or operator of the proposed modification is required to demonstrate the modification will not cause or contribute to a violation of a national ambient air quality standard (NAAQS) and will also not result in an increase above the maximum allowable increase above the baseline concentration. The increase in ambient concentration of CO was evaluated using the model described above; results (see Appendix A of this evaluation) and comparison to applicable standards are summarized in the table below:

Pollutant	Averaging Period	Model Results ($\mu g/m^3$)	Significant Impact Level (SIL) ($\mu g/m^3$)	Primary NAAQS ($\mu g/m^3$)	CAAQS ($\mu g/m^3$)	Monitoring *de minimis* Concentration ($\mu g/m^3$)	PSD Increment, Class II Area ($\mu g/m^3$)
CO	1-hour	1,999.91	2,000	40,000	23,000		
	8-hour	336.51	500	10,000	10,000	575	

The increase in ambient concentration of CO is expected to be less than all thresholds of significance for CO; therefore, the proposed modification is not expected to cause or contribute to a NAAQS violation,

Air Quality Analysis

Major modifications are typically required to include an analysis of the existing air quality in the area the modification would impact; this includes at least one year of pre-construction ambient monitoring of the pollutant that would have a significant net emissions increase as a result of the modification to determine whether the project increase in ambient concentrations would result in a violation of the NAAQS. Post-construction ambient monitoring may also be required to determine the actual effects of the modification on air quality in any area. However, subsection (i)(5) of 40 CFR §52.21 allows an exemption from ambient monitoring requirements if the projected increase is less than the amount specified for the pollutant; for CO, this threshold is 575 $\mu g/m^3$ (8-hour avg.).

The source impact analysis indicated that predicted the ambient air concentration would be below the threshold requiring ambient monitoring to be conducted. Additionally, the higher concentrations (>1000 µg/m^3 1-hr, >200 µg/m^3 8-hr) concentrations occur on land used for current or previous CPCC mining operations, is vacant, or at remote locations in wind turbine farms. The off-site receptor expected to be most impacted is a maintenance shop for the Alta Wind Farm, where the CO concentration is anticipated to be 1100 µg/m^3 for the 1-hr average and 163 µg/m^3 for the 8-hr average. Therefore, CPCC is not required to perform an analysis of pre-construction air quality, including ambient monitoring.

Additional Impact Analysis

The owner or operator of the major source or modification is required to provide an analysis of the impairment to visibility, soils, and vegetation that would occur as a result of the modification and any associated commercial, industrial, residential, and other growth.

Per the application, CPCC does not anticipate the modification to result in additional commercial, industrial, or residential growth in the area. CO is a colorless gas that is not anticipated to impact visibility. Documentation of the 2011 review of the CO NAAQS by the EPA (Federal Register, Vol. 76 No. 169) states that there is insufficient information to justify a secondary NAAQS for CO; a secondary NAAQS is intended to protect general welfare of the public, and would include impacts on vegetation with commercial or recreational value.

Therefore, the resulting CO increase from the modification is not expected to have significant impact on visibility, soils, or vegetation, and the requirement for an additional impact analysis has been satisfied.

Additional Requirements for Sources Impacting Federal Class I Areas

Proposed major modifications whose emissions may impact a Federal Class I area are required to have the application and analysis reviewed by the Federal land manager and the Federal official charged with direct responsibility for management of any lands within any such area.

There are no Federal Class I areas within 50 km of the facility (the extent of the allowed modeling domain for AERMOD), and CO is not anticipated to impact visibility. Therefore, the requirements for facilities impacting Federal Class I areas do not apply to this modification.

Source Obligation

The owner or operator is required to construct and operate the source in accordance with the application submitted and terms listed in the permit approving construction. Approval to construct becomes invalid if construction does not commence within 18 months of receipt of such approval or is discontinued for a period of 18 months or more. An extension may be granted if the owner or operator provides sufficient justification that such an extension is justified.

These conditions will be incorporated into the PSD permit and Authority to Construct for the modification.

VI. BACT DETERMINATION:

CPCC's application included a review of control technologies for CO emissions; the following options were reviewed for technical feasibility and cost effectiveness:

- Thermal Oxidation
- Catalytic Incineration

- Excess Air
- Good combustion practices

Thermal oxidation using a regenerative thermal oxidizer (RTO) would be the most efficient method of implementing thermal oxidation; an RTO was estimated to be capable of achieving a 90% reduction in CO from the kiln. However, the thermal oxidizer would require installation of an additional combustion source to provide supplemental heat to oxidize kiln exhaust gases, would likely result in an increase in emissions of SOx and NOx, and increase energy consumption from the facility. The increase in NOx emissions would negatively impact ambient concentration of ozone, for which the area the source is located is designated severe nonattainment. The RTO would be estimated to reduce CO by 2,049 tons per year; cost to install and operate the RTO were estimated at $59.2 million in capital costs and $52 million in annual operating costs, resulting in accost of $31,009 per ton of CO removed. This is significantly above the cost-effectiveness thresholds currently established by San Joaquin Valley APCD and South Coast AQMD at $400/ton and $757/ton, respectively. Therefore a thermal oxidizer would not be cost effective to install.

Catalytic incineration involves passing the combustion gases over a catalyst in addition to an oxidizer to convert CO into CO_2; this results in less supplemental fuel use than a standalone RTO. However, the catalyst bed is susceptible to plugging, fouling, and corrosion; since the cement kiln exhaust gases contain dust, chlorine, and oxides of sulfur, the catalyst is likely to become 'poisoned' by the exhaust gases, rendering it ineffective at controlling CO emissions. Therefore, use of catalytic incineration is not technologically feasible for implementation as BACT.

Increasing the amount of air in the kiln during combustion is anticipated to result in more complete combustion of the fuels fed into the kiln, oxidizing more CO into CO_2 in the combustion reaction. Cement kilns already operate with high amounts of excess air (additional air beyond the minimum amount necessary to combust the fuel at stoichiometric conditions), as this results in a high oxygen, low CO environment that stabilizes the alkali and calcium sulfates in the kiln during pyroprocessing. The high excess air has the downside of producing more NOx emissions, on account of the increased temperature in the combustion zone of the kiln. Additionally, an increase in excess air has not yet been demonstrated as an 'achieved in practice' control technology for CO emissions from cement kilns. Therefore, increasing the excess air in the kiln during combustion would be anticipated to have a negative environmental benefit, and therefore is not technologically feasible for CO control.

A cement kiln that is properly designed and operated (i.e. good combustion practices, GCP) minimizes the formation of CO from fuel combustion; however, it does not reduce the CO that results from the reaction of raw materials in the kiln. Excess CO formation indicates a thermal inefficiency in the kiln, and thereby additional operating costs from the non-optimal fuel consumption in the kiln. GCP have been found to be achieved in practice for limiting CO emissions from cement kilns, and CPCC already utilizes GCP for CO control. The EPA's RACT/BACT/LAER Clearinghouse (RBLC) was reviewed for BACT determinations for existing cement kilns, and a limit of 3.00 lb CO per ton of clinker was the lowest achieved emissions.

Therefore, BACT for the proposed modification shall be good combustion practices and a CO emission limit of 3.00 lb/ton of clinker.

VII. CEQA DETERMINATION:

EASTERN KERN APCD PERMITS - CEQA COMPLIANCE
Instructions for Checklist

This form is designed to be used by the permit application processing engineer in implementing requirements of the California Environmental Quality Act (CEQA) for District permitting activities when the District is the lead or responsible agency under CEQA. The District is generally a responsible agency for portions of development projects requiring District permits. The District is a commenting agency for other parts of a project, such as, indirect source emissions and vehicle trips. Most District permits are considered exempt from CEQA (see District List of Exempt Projects). In most cases the environmental document prepared by the lead agency is adequate for the District permitting action. Certain District permit modifications may require supplemental CEQA documents.

CEQA compliance for a project subject to District permit requirements includes two steps:

A. Determining what CEQA-related information, if any, is required from the applicant to deem the application complete (this may also be identified at the pre-application stage, if there is one[1]).

B. Determining and documenting CEQA compliance for each permit application prior to granting a permit by completing the attached form.

The following instructions correspond to the questions on the form:

B.2. Projects subject to District permits often also require a land use or other permit from other agencies. The permit engineer should check the application or request from the applicant information regarding what other agencies will be requiring permits for the project and who the "Lead Agency" will be. District permit processing should begin as soon as adequate information is available to deem the application complete, even if the lead agency has not completed the environmental document (Govt. Code ' 65941 (b), amended 1993), and if the applicant so requests (Govt. Code ' 65951, amended 1993).

B.3. For District permits that do not fall under the preceding case, the engineer shall receive from the applicant a signed and dated environmental questionnaire (Initial Study checklist).

C.2. As a "responsible agency" under CEQA, the Control Officer shall consider information contained in the lead agency's final EIR or ND prior to granting the District permit. Acting on behalf of the Control Officer, the engineer shall review the ND or EIR and adopt any mitigation measures for air quality impacts or project alternatives over which the District has regulatory discretion.

C.3. If any component of the project is not listed, and if exceptions to these exemptions provided in the form are true, then the project cannot be considered exempt. In making a recommendation to issue the District permit, the permit engineer shall review the environmental questionnaire provided by the applicant to establish the project has no potential for resulting in a significant adverse environmental impact to any environmental media (see Initial Study form). The study shall also demonstrate the project will not contribute to significant cumulative impacts and will not have significant impact itself. Although no further action is required under CEQA, the applicant may request a Notice of Exemption to be filed, to reduce the statute of limitations from 180 days to 30 days, on challenges to the decision the project is exempt from CEQA.

[1] *Preapplication under PRC ' 21080.1(b) amended 1993-at the request of the applicant the lead agency must provide for pre-application consultation on the environmental document.*

EASTERN KERN APCD PERMITS -- CEQA COMPLIANCE CHECKLIST

Completeness Review Form

This form shall be completed by the permit application engineer for all Authority to Construct permit applications. The completed form shall be included in the Engineering Evaluation File.

A. General Information

Application Number: 1003026V
Applicant Name: California Portalnd Cement Company
Project Description: Increase CO Emissions form Pyroprocessing System (PSD)

B. Determination of Completeness

Check the corresponding action to be taken to determine the application is complete for CEQA purposes and fill in blanks where appropriate.

1. Ministerial Exemption

___This permit application is not subject to CEQA because the evaluation is a ministerial action conducted using fixed standards and objective measurements. No discretion or judgment is required in granting of this permit.

2. Project Was Exempted by or is Subject to Negative Declaration or EIR by Another Agency

___This permit application was exempted by or is subject to a ND or EIR prepared (or under preparation) by another agency. The District has received the necessary information indicating another agency is acting as the Lead Agency. Therefore, the application shall be deemed complete for CEQA purposes.

3. All Other Permits

X The District has received from the applicant, a completed, signed and dated environmental questionnaire and any other information necessary for preparing a negative declaration or EIR, if required (see Form Instructions B.3.). Therefore, the application shall be deemed complete for CEQA purposes.

C. Final Action

Check the appropriate action taken by the APCO prior to issuing the final permit.

1. Ministerial Action

___This permit application is exempt from CEQA because the permit evaluation is a ministerial action. CEQA does not apply to ministerial actions. No further action is necessary.

2. Project Was Exempted by or is Subject to Negative Declaration or EIR by Another Agency

___This permit application was exempted by or was subject to an EIR or Negative Declaration by another agency. The final action on the District permit was taken only after review and consideration of information in the certified CEQA document by the Control Officer, or authorized District representative of the Control Officer.

3. Exemption

X This permit application is exempt from CEQA because the project, as a whole, is listed in the District List of Exempt Projects AND because the project has no potential for causing a significant adverse environmental impact. A General Exemption under CEQA Section 15061 (b) (3) applies if the project is not listed in the District Exemption List AND it can be seen with certainty the project will not have a significant adverse effect on the environment. In making this determination,

a. a review of information submitted by the applicant has been conducted indicating there is no potential for a significant adverse environmental impact on any environmental media from the project;
b. emissions offsets were not required by EKAPCD Rule 210.1, Subsection III.B.;
c. recognized Best Available Control Technology (BACT) was proposed; and
d. no unusual circumstances such as location, or cumulative impacts from successive projects of the same type in the same place over time, were determined to result in significant adverse environmental impacts.

4. Permit is Not Exempt from CEQA

___This permit was found not to be exempt from CEQA and no other agency will be conducting a CEQA review for the project. The District has prepared and adopted a Negative Declaration/Addendum or certified an EIR for the project. The final action by the District was taken only after information contained in the final EIR or ND was considered and any significant adverse environmental effects were mitigated to the maximum extent feasible.

EASTERN KERN AIR POLLUTION CONTROL DISTRICT
2700 "M" STREET SUITE 302, BAKERSFIELD, CA 93301-2370
PHONE: (661) 862-5250 • FAX: (661) 862-5251 • www.kernair.org

ENVIRONMENTAL INFORMATION FORM AND INITIAL STUDY EVALUATION

Applicant: California Portland Cement Company

Contact: Brian Males

Title: Environmental Manager **Phone:** (661) 823-3731

Project Description: CO emission increase on the pyroprocessing kiln system (EU 026).

Environmental Information	**Yes**	**No**	**Maybe**
Will the proposed project with regard to the proposed location:			
1. Conflict with the adopted environmental plans and goals of the community?	[ ]	[x]	[ ]
2. Have a substantial, demonstrable negative aesthetic effect?	[ ]	[x]	[ ]
3. Substantially affect a rare or endangered species of animal or plant or the habitat of the species?	[ ]	[x]	[ ]
4. Interfere substantially with the movement of any resident or migratory fish or wildlife species?	[ ]	[x]	[ ]
5. Substantially diminish habitat for fish, wildlife or plants?	[ ]	[x]	[ ]
6. Breach published national, state, or local standards relating to solid waste or litter control?	[ ]	[x]	[ ]
7. Substantially degrade water quality or contaminate a public water supply?	[ ]	[x]	[ ]
8. Substantially degrade or deplete ground water resources or interfere substantially with ground water recharge?	[ ]	[x]	[ ]
9. Disrupt or adversely affect a prehistoric or historic archeological site or a property of historic or cultural significance to a community or ethnic or social group; or a paleontological site except as part of scientific study?	[ ]	[x]	[ ]
10. Induce substantial growth or concentration of population?	[ ]	[x]	[ ]
11. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system?	[ ]	[x]	[ ]
12. Displace a substantial number of people?	[ ]	[x]	[ ]

Environmental Information	Yes	No	Maybe
13. Encourage activities which result in the use of large amounts of fuel, water or energy?	[ ]	[x]	[ ]
14. Use fuel, water or energy inefficiently?	[ ]	[x]	[ ]
15. Increase substantially the ambient noise level for adjoining areas?	[ ]	[x]	[ ]
16. Cause substantial flooding, erosion or siltation?	[ ]	[x]	[ ]
17. Expose people or structures to major geologic hazards?	[ ]	[x]	[ ]
18. Extend a sewer trunk line with capacity to serve new development?	[ ]	[x]	[ ]
19. Disrupt or divide the physical arrangement of an established community?	[ ]	[x]	[ ]
20. Create a potential public health hazard or involve the use, production, or disposal of materials which pose a hazard to people or animal or plant populations in the area affected?	[ ]	[x]	[ ]
21. Conflict with established recreational, educational, religious or scientific uses?	[ ]	[x]	[ ]
22. Convert prime agricultural land to non-agricultural use or impair the agricultural productivity of prime agricultural land?	[ ]	[x]	[ ]
23. Interfere with emergency response or evacuation plans?	[ ]	[x]	[ ]
24. Violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations?	[ ]	[x]	[ ]
25. Emits Greenhouse Gas (GHG) emissions greater than 25,000 tons?	[ ]	[x]	[ ]

NOTE: Please attach any pertinent explanatory information.

CERTIFICATION:

I hereby certify the statement furnished above and in attached exhibits present the data and information required for this initial evaluation to the best of my ability, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Print Signing Authority Name If Different: Joe Yochum

Signature: _____ **Date:** 10 JAN 22

VIII. EMISSION CALCULATIONS:

A. Assumptions:
1. Post-Project CO emissions: 3.0 lb/ton clinker
2. Maximum clinker production: 4,600 ton/day (application)
3. Expected operating schedule: 330 days/year
4. Maximum hourly CO emissions: 2,553 lb/hr (application)

B. Emission calculations:

$$2{,}553.00\frac{lb}{hr} \times 24\frac{hr}{day} = 61{,}272.00\frac{lb}{day}$$

$$3.0\frac{lb}{ton} \times 4{,}600\frac{ton}{day} \times 330\frac{day}{year} \times \frac{1}{2000}\frac{ton}{lb} = 2{,}277.00\frac{ton}{yr}$$

Previous CO Emissions (from ATC No. 1003026D, Project No. 850414)

$$183.50\frac{lb}{hr} \times 24\frac{hr}{day} = 4{,}404.00\frac{lb}{day}$$

$$4{,}404.00\frac{lb}{day} \times 365\frac{day}{yr} \times \frac{1}{2000}\frac{ton}{lb} = 803.73\frac{ton}{yr}$$

Emission Change Summary:

	lb/day	ton/yr
Existing	4,404.00	803.73
Proposed	61,272.00	2,277.00
Change	56,868.00	1,473.27

IX. EMISSION CHANGES:

(Emission in tons/yr unless otherwise noted.)

A. **PROJECT'S EMISSION CHANGE (tons/yr)**:
Sum of emissions changes for all emissions units to be included in the NSR Balances (NSRB) and the Stationary Source Potentials to Emit (SSPE). (See Pages 30 – 31)

	PM_{10}	SOx	NOx	VOC	CO
lb/day:	0.00	0.00	0.00	0.00	56,868.00
tons/yr	0.00	0.00	0.00	0.00	1,473.27

B. **PRE-PROJECT NSR BALANCES AND SSPE (tons/yr):**

	NSRB	NSRB	SSPE	SSPE	NSRB
Pollutant:	PM_{10}	SOx	NOx	VOC	CO
lb/day:	1,236.04	8,870.54	12,370.58	532.69	5,287.32
tons/yr:	205.99	1,618.84	2,253.27	96.81	961.46

C. **POST-PROJECT CUMULATIVE NSR BALANCE AND SSPE**:

Pre-Project NSR Balance/SSPE + Projects Emissions Change

	NSRB	NSRB	SSPE	SSPE	NSRB
Pollutant:	**PM_{10}**	**SOx**	**NOx**	**VOC**	**CO**
lb/day:	1,236.04	8,870.54	12,370.58	532.69	62,155.32
tons/yr:	205.99	1,618.84	2,253.27	96.81	2,434.73

NOTE: A negative NSR balance is not allowed. Reductions causing a negative balance shall be banked (if qualified) pursuant to Rule 210.3.

X. CONCLUSIONS:

A. Rule 210.1 (conclusions based on worst case):
- X Satisfies requirements of Subsection III.A. (BACT)
- X Project not subject to Subsection, III.B. (offsets), NSR balance for SOx< 27 tons/yr and PM_{10} < 15 tons/yr and SSPE for VOC and NOx < 25 tons/yr,.
- ___ Project subject to Subsection III.B. (offsets),
- ___ Project not subject to NSR requirements Sec

B. Rule 210.4: Applicant has performed a control technology review and source impact analysis in accordance with the requirements of the Rule. BACT for CO was found to be good combustion practices and is already implemented by CPCC. Modeling indicates that the increase in ambient concentration of CO would not cause or contribute to a violation of the NAAQS. The application, analysis, and draft permit will be made available for public review and comment in accordance with the Rule. Compliance with Rule 210.4 is expected.

C. Rule 302: Current permit fee schedule is for fuel burning equipment rated at > 100MMBtu.hr (Schedule 2, Line 9). This modification does not result in a change in fee schedule. Therefore, no changes in permit fees are required.

D. Rule 401: CO is a colorless gas and is not expected to impact visible emissions from the kiln. Compliance with Rule 401 is expected.

E. Rule 404.1: Particulate matter (PM) emissions from the kiln are not expected to increase as a result of this modification. Kiln exhaust stack is currently equipped with fabric collector for PM control required to meet an exhaust concentration of 0.015 grains per standard cubic foot (gr/scf); this is less than the 0.1-gr/scf required by the Rule. Continued compliance with Rule 404.1 is expected.

F. Rule 406: An increase in particulate emissions is not proposed. Most recent source test on file indicates CPCC complies with the PM standards found in the Standards of Performance for Portland Cement Plants (40 CFR §60.62). Continued compliance with Rule 406 is expected.

G. Rule 407: No increase in SOx emissions are proposed as part of this modification; recent source testing indicates SOx concentration is approximately 50 ppmv, well below the 0.2% (2,000-ppmv) requirement. Continued compliance with Rule 407 is expected.

H. Rule 409: Cement Kiln is subject to PM standards under the Standards of Performance for Portland Cement Plants (40 CFR Part 60 Subpart F); but is not currently subject to the SOx or NOx standards of Subpart F. No changes to PM emissions are proposed. Continued compliance with Rule 409 is expected.

I. Rule 419 and CH&SC §41700: CO is an odorless, colorless gas, and therefore not expected to create a nuisance. Ambient modeling included with the application indicates that the maximum

increase in ambient CO would be roughly 5% of the NAAQS. Therefore, the increase in emissions is not expected to present a significant health impact to off-site receptors. Compliance with Rule 419 and CH&SC §41700 is expected.

J. Rule 422 Subpart F: Subpart F does not have an emission standard for CO; no other emission changes are proposed as part of this modification. Continued compliance with Subpart F is expected.

K. Rule 423 Subpart LLL: Subpart F does not have an emission standard for CO; no other emission changes are proposed as part of this modification. Continued compliance with Subpart LLL is expected.

L. Rule 425.3 – Portland Cement Kilns (Oxides of Nitrogen): No change in NOx emissions are proposed; continued compliance with Rule 425.3 is expected.

XI. RECOMMENDATIONS:

Issue Authority to Construct No. 1003026V with the following conditions:

1003026V:

EQUIPMENT DESCRIPTION:

A. Oxygen injection system including: Vacuum Swing Absorption (VSA) plant, cryogenic storage tanks, vaporizers, pressure temperature control manifold with associated piping valves, regulators, trim heater and injection nozzles;
B. Scrap tire shipping trailer parking/storage area;
C. Scrap tire receiving conveyor;
D. Scrap tire elevator;
E. Scrap tire weigh bridge and conveyor;
F. Scrap tire sliding air lock gate valve followed by two air lock flap gates;
G. Two first stage preheating cyclones (H4-CC1A and CC1B) exhausting to heat exchanger (H4-6-HE1);
H. Second stage preheater cyclone (H4-6-CC2);
I. Third stage preheater cyclone (H4-6-CC3);
J. Fourth stage preheater cyclone (H4-6-CC4);
K. Gas conditioning tower with water injection;
L. Preheater section exhaust fan and roller mill sweep fan (H4-6-KF1) with 3,000 hp motor;
M. Preheater/precalciner combination burner assembly with coal and/or petroleum coke pipe, natural gas nozzle and fuel oil nozzle;
N. Preheater bypass/beneficiation quench air chamber and blower (H6-6-BL1);
O. Bleed air damper (H6-6-D1) with one drop out box (H6-6-B1) and two screw conveyors (H6-6-SC1 and H6-6-DC1-SC1) ventilated by fabric collector (H6-6-DC1);
P. Beneficiation fabric dust collector (H6-6-DC1) with 432 - 12 in. dia. by 20.83 ft. long fiberglass twill filter tubes, reverse air cleaning mechanism, 300 hp exhaust fan and 50 hp reverse air fan;
Q. Three beneficiation loadout screw conveyors (H6-6-DC1-SC1, SC2, and SC3) ventilated by fabric collector (H6-6-DC2);
R. Beneficiation bucket elevator (H6-6-BE1) ventilated by fabric collector (H6-6-DC2);
S. Beneficiation surge bin (H6-6-B2) ventilated by fabric collector (H6-6-DC2);
T. Beneficiation truck loadout screw conveyor (H6-6-SC4) ventilated by fabric collector (H6-6-DC2);
U. Beneficiation Fuller-Kenyon pneumatic transfer system (H6-6-FP1) and 100 hp compressor ventilated by fabric collector (H6-6-DC2);

V. Beneficiation loadout fabric dust collector (H6-6-DC2) with 64 - 4.75 in. dia. by 10 ft. long polyester filter tubes, pulse jet cleaning mechanism and 15 hp exhaust fan;
W. Beneficiation system alleviator (H6-6-CC1) going to existing surge bin ventilated by fabric collector (H6-6-DC3);
X. Beneficiation surge bin fabric dust collector (H6-6-DC3) with 25 - 4.5 in. dia. by 10 ft. long polyester filter tubes, pulse jet cleaning mechanism and 7.5 hp exhaust fan;
Y. Fuller Company rotary kiln #6 with variable, multiple fuel burner assembly with retractable burner pipes for coal and/or petroleum coke, and nozzles for natural gas and fuel oil;
Z. Coal and/or petroleum coke transfer belt conveyors (R3-BC7 and BC8) (from existing storage) with dust control achieved by maintaining adequate moisture content (supplied by existing coal and/or petroleum coke handling system PTO 1003010C);
AA. Coal and/or petroleum coke storage silo (R3-CSS2) with dust control achieved by maintaining adequate moisture content (supplied by existing coal and/or petroleum coke handling system PTO 1003010C);
BB. Coal and/or petroleum coke mill weigh feeder (H7-6-WF1) ventilated by fabric collector (H7-6-DC1);
CC. Inerting bin (H7-6-CC1) with two dampers (H7-6-D1 and H7-6-D2);
DD. Coal and/or petroleum coke mill (H7-6-CM1), natural gas-fired air heater (H7-6-AH1), and blower (H7-6-BL1) ventilated to fabric collector (H7-6-DC1);
EE. Coal and/or petroleum coke mill hot air (from clinker cooler) cleaning cyclone (H7-6-CC1) with two dampers (H7-6-D1 and D2);
FF. Coal and/or petroleum coke mill hot air alternate flow damper (H7-6-D4) and blower (H7-6-BL2) into kiln #6;
GG. Coal and/or petroleum coke mill fabric dust collector (H7-6-DC1) with 633 - 4.5 in. dia. by 10 ft. long polyester filter tubes, pulse jet cleaning mechanism and 300 hp exhaust fan;
HH. Coal and/or petroleum coke mill mini-bins (H7-6-B1, B2, and B3) ventilated by fabric collector (H7-6-DC1);
II. Two parallel coal and/or petroleum coke airlines (H7-6-AS1 and AS2), blower, and impact scales (H7-6-IS1 and IS2) ventilated by fabric collector (H7-6-DC1);
JJ. Two parallel coal and/or petroleum coke diverter gates (H7-6-DG1 and DG2);
KK. Fuller-Kenyon coal and/or petroleum coke pump (H7-6-FP1) and 150 hp blower with dust control ventilation by fabric collector (H7-6-DC1) (to precalciner burners);
LL. Fuller-Kenyon coal and/or petroleum coke pump (H7-6-FP3) and 150 hp blower with dust control ventilation by fabric collector (H7-6-DC1) (to coal burner H3-6-KBC01 at kiln #6);
MM. Fuller-Kenyon coal and/or petroleum coke pump (H7-6-FP2) and 150 hp blower with dust control ventilation by fabric collector (H7-6-DC1);
NN. Two precalciner hot air (from clinker cooler) dust settling chambers and one damper (H4-6-D1);
OO. One dust settling conveyor belt (H4-6-DCR1) ventilated by fabric collector (H2-6-DC1);
PP. Kiln gas fabric dust collector (H5-6-DC1) (gas from roller mill) with 3,168 – 6.5 in. dia. by 24 ft. long teflon/PTFE filter tubes and 1,750 hp exhaust fan;
QQ. Three kiln gas section screw conveyors (H5-6-DC1-SC2, SC4 and H5-6-SC1);
RR. Kiln gas section bucket elevator (H5-6-BE1) ventilated by fabric collector (D2-6-DC2) (roller mill system);
SS. Two kiln gas section airlines (H5-6-AS1 and AS2) and blower (H5-6-BL1) ventilated by fabric collector (D2-6-DC3) (roller mill system);
TT. Ammonia injection system, reagent for selective non-catalytic reduction system (SNCR), including: 20,000-gallon ammonia storage tank, ammonia pump (H4-6-APS-P1), distribution piping to injection ports at calciner and injection control system;
UU. Hydrated lime injection system, including: 10,000-cu.ft. storage bin, 2400-cfm bin vent filter (H4-6-LIS-DC1) with 10-hp exhaust fan, vibrating bin discharger (H4-6-LIS-BA), weigh bin, rotary feeder, blower with 40-hp motor (H4-6-LIS-BL1) feeding line to kiln feed/stage 2 outlet; and

VV. Lime slurry injection system, including hopper with dual pant leg, slurry tank, rotary feeder, slurry pump with 15-hp motor, and screw conveyor with 3-hp motor; and
WW. Fabric Collector CKD with 3,500-cfm exhaust flow rate

OPERATIONAL CONDITIONS:

1. Gas conditioning tower with water injection shall be equipped with operational water flow meters to assure operation of water injection system. (Rule 210.1)
2. Fabric collector serving hydrated lime storage silo shall be equipped with operational differential pressure indicator. (Rule 210.1)
3. Fabric collector shall be equipped with pulse-jet cleaning mechanism. (Rule 210.1)
4. Ammonia injection system shall be equipped with ammonia metering system determining rate of ammonia injection. (Rule 210.1)
5. Kiln exhaust stack shall be equipped with ammonia and sulfur dioxide continuous monitors/recorders system. (Rule 210.1)
6. Oxygen injection system including VSA plant shall be constructed and maintained in accordance with manufacturer's specifications. (Rule 210.1)
7. Visible emissions from fabric collector CKD shall not exceed 5% opacity or Ringelmann ¼ for not more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement)
8. Visible emissions from kiln shall not exceed 20% opacity. Visible emissions from all other sources shall not exceed 10% opacity. (Rule 422 NSPS, Subpart F)
9. Material removed from fabric dust collectors and other collected fines shall be returned to product stream (except beneficiation system alkali fines) or otherwise disposed of using method preventing entrainment in atmosphere. (Rule 210.1)
10. Alkali dust from beneficiation system shall be mixed into slurry before discharging to pond. (Rule 210.1)
11. Each fabric collector shall have operational differential pressure indicator(s). (Rule 210.1)
12. Sufficient moisture shall be applied to coal supply system (PTO 1003010C) to prevent dust emissions when handling, storing, and transferring. (Rule 210.1)
13. Kiln shall be fired only with coal, petroleum coke, natural gas, fuel oil, or whole tires. No other combustible products shall be added to kiln system without prior written permission of Control Officer. (Rule 210.1)
14. Tires shall not exceed 3.6% by weight of total pyro processing system fuel without prior District approval and toxics testing. (Rule 210.1 and per application and EIR)
15. Tires to be used as fuel shall not be open-stored or stockpiled, and, unless otherwise prohibited by local Fire Marshall, tires stored in delivery trailers shall not exceed seven days inventory without prior approval of Control Officer. (Rule 210.1)
16. No air contaminant shall be released into atmosphere which causes public nuisance or public health hazard. (Rule 419 and CH&SC, Sec 41700)
17. Equipment breakdowns resulting in non-compliance with any emission limitations shall be reported pursuant to Rules 111 and 422. (Rule 422, Subpart F)
18. Kiln shall be operated using tire-derived fuel only when all pyro processing system control equipment is operated pursuant to manufacturer's recommendations resulting in particulate emissions not exceeding 0.015-gr/scf and 0.30-lb/ton of kiln feed. (Rules 210.1 and 422, Subpart F)
19. Kiln exhaust NOx (as NO_2) emission rate not to exceed 2.5-lb NOx (as NO_2) per ton of clinker produced, based on a 30-day rolling average. (Rules 210.1)
20. Kiln exhaust SO_2 emission rate not to exceed 1.7-lb SO_2 per ton of clinker produced, based on a 90-day rolling average. (Rules 210.1)
21. There shall be no fugitive emissions from any process or dust control equipment. (Rule 210.1)
22. Hydrated lime shall be pneumatically loaded into storage bins. (Rule 210.1)
23. California Portland Cement Company shall maintain files including: a) data collected from in-stack monitoring instruments and process monitoring, b) fuel input rate, c) sulfur content of

fuels input into kiln, d) fuels sulfur balance showing compliance with 2.0% limit, e) clinker production rates, and f) results of all source tests and calibrations checks.

24. District shall have access to and be provided (upon request) with copies of any record required to be kept under terms and conditions of permit. Furthermore, such persons shall have access to inspect any equipment, operation, or method required in this permit, and to sample, or require sampling, of emissions sources. (Rule 107)
25. H5-6-DC1 exhaust stack shall be equipped with continuous monitors/recorders for opacity, nitrogen oxides, and non-methane hydrocarbons; and precalciner combustion chamber shall be equipped with continuous monitors/recorders for oxygen and carbon monoxide. Non-methane hydrocarbons and oxygen and carbon monoxide shall be monitored only when using tires as fuel. (Rule 210.1)
26. H5-6-DC1 exhaust stack shall be equipped with continuous monitors/recorders for oxides of sulfur as sulfur dioxide (SOx as SO_2), carbon monoxide (CO), and ammonia (NH_3). (Rule 210.1)
27. Kiln exhaust CO emission rate not to exceed 3.0-lb CO per ton of clinker produced, based on a 90-day rolling average. (Rule 210.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Annual testing for compliance with volatile organic compound, particulate, oxides of sulfur (as SO_2), oxides of nitrogen (as NO_2), and carbon monoxide (CO) emission limits shall be demonstrated by District-witnessed sample collection by certified testing laboratory pursuant to Rule 108.1.

Source test shall utilize hourly emissions limits on this permit to determine compliance.

For the purpose of determining compliance with an applicable standard or numerical limitation, the arithmetic mean of three test runs shall apply, unless two of the three results are above the applicable limit. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit.

If this permit utilizes an hourly rolling average or daily emission limits to determine normal compliance, only the hourly emission limit (rolling average shall not be utilized) or $1/24^{th}$ of daily emission limits shall be utilized to determine compliance for the required annual source test.

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emissions rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter (PM_{10}):

Beneficiation Collector H6-6-DC1	5.79	lb/hr
Loadout Collector H6-6-DC2	0.51	lb/hr
Surge Bin Collector H6-6-DC3	0.15	lb/hr
Coal Mill Collector H7-6-DC1	3.86	lb/hr
Kiln #6 Collector H5-6-DC1	31.89	lb/hr
Fabric Collector D2-6-DC1	0.99	lb/hr

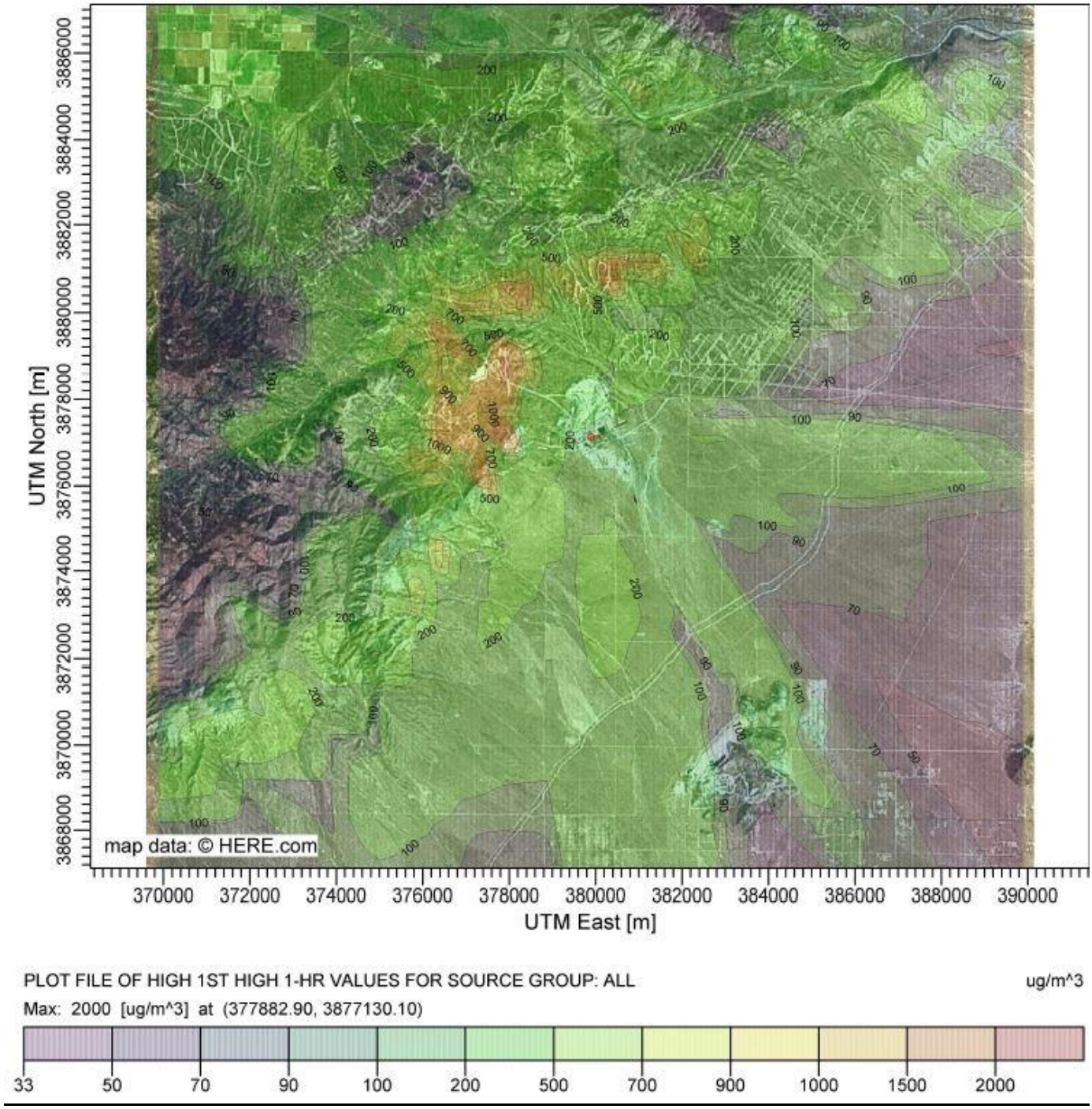
Fabric Collector D2-6-DC2	0.31	lb/hr	
Fabric Collector D2-6-DC3	0.71	lb/hr	
Fabric Collector H4-6-DC1	3.41	lb/hr	
Fabric Collector H4-6-DC2	0.90	lb/hr	
Fabric Collector F3-6-DC1	0.58	lb/hr	
Fabric Collector (Lime Storage)	0.21	lb/hr	
Fabric Collector (CKD)	0.15	lb/hr	
PM_{10} Emission Totals:	49.46	lb/hr	
	1,186.94	lb/day	
	215.72	ton/yr	
Oxides of Sulfur (as SO_2):	2,698.08	ton/yr	
Oxides of Nitrogen (as NO_2):	3,744.90	ton/yr	
Volatile Organic Compounds (VOC):	18.35	lb/hr	
(as defined in Rule 210.1)	440.40	lb/day	
	80.37	ton/yr	
Carbon Monoxide:	2,553.00	lb/hr	(8-hr average) (Rule 210.4)
	61,272.00	lb/day	
	2,277.00	ton/yr	
Ammonia:	10.0	ppmv	dry @ 7% O_2 (24-hr rolling avg.)
	171.17	lb/day	
	62,475.67	lb/yr	

(Emissions limits established pursuant to Rule 210.1 unless otherwise noted)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and recordkeeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rule 210.1)

Attachment A

AERMOD MODEL RESULTS



PLOT FILE OF HIGH 1ST HIGH 1-HR VALUES FOR SOURCE GROUP: ALL ug/m^3

Max: 2000 [ug/m^3] at (377882.90, 3877130.10)

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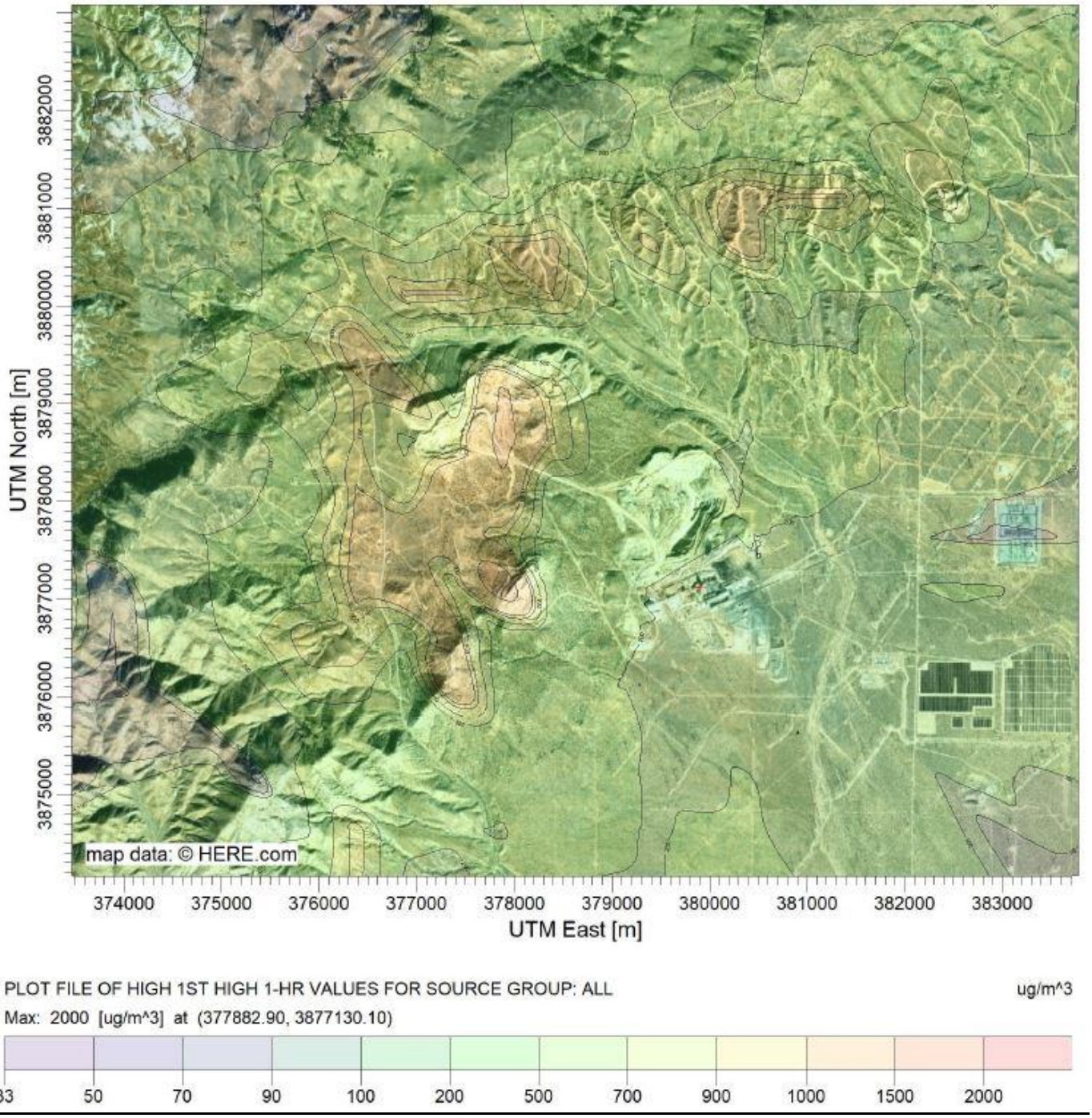
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Max: 2000 [ug/m^3] at (377882.90, 3877130.10)
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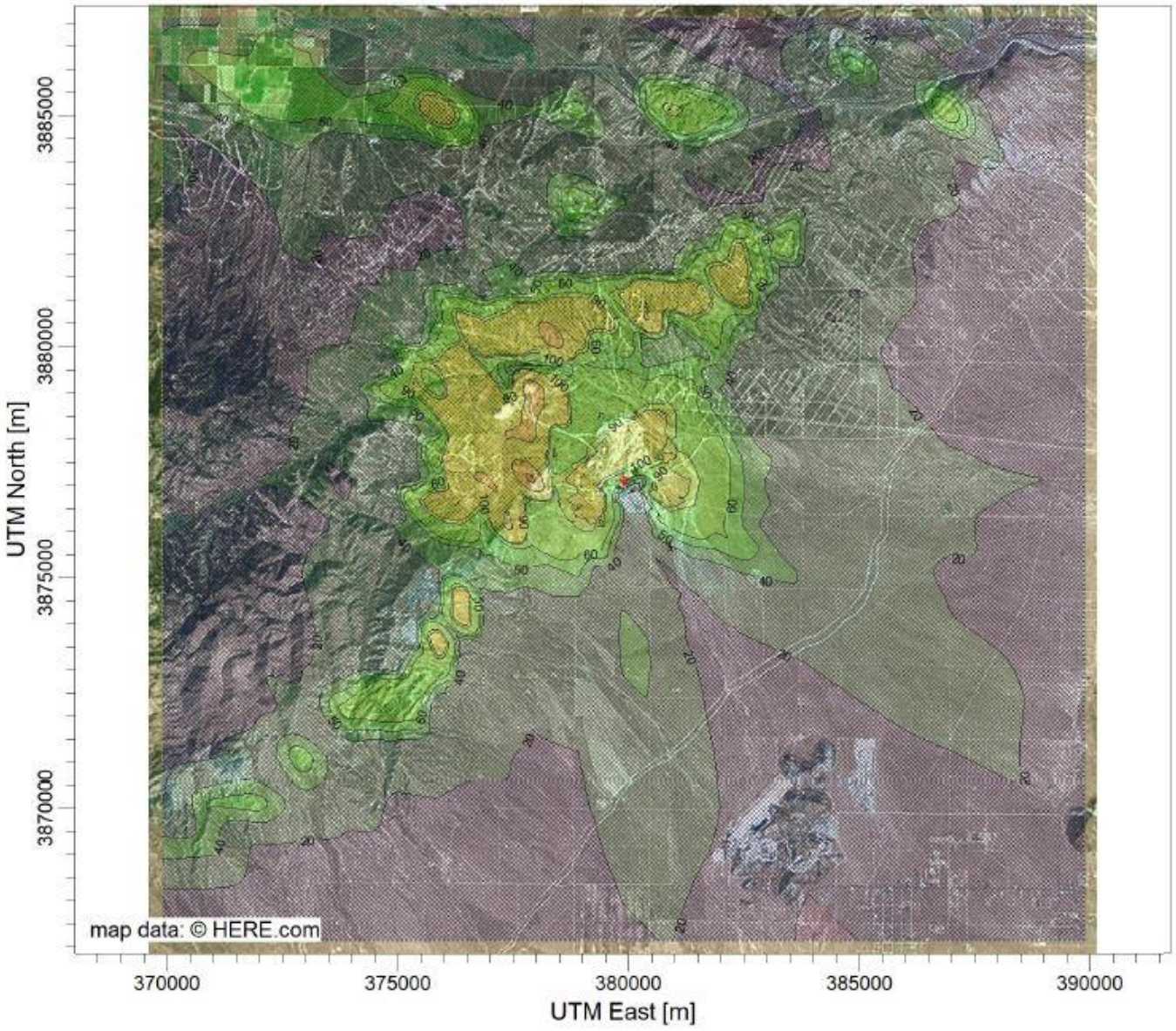

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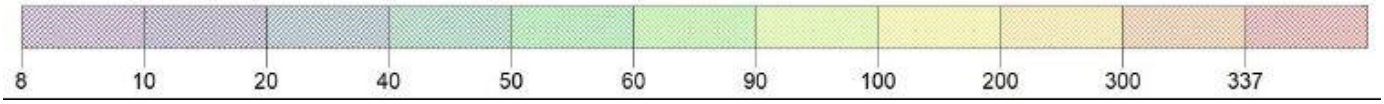
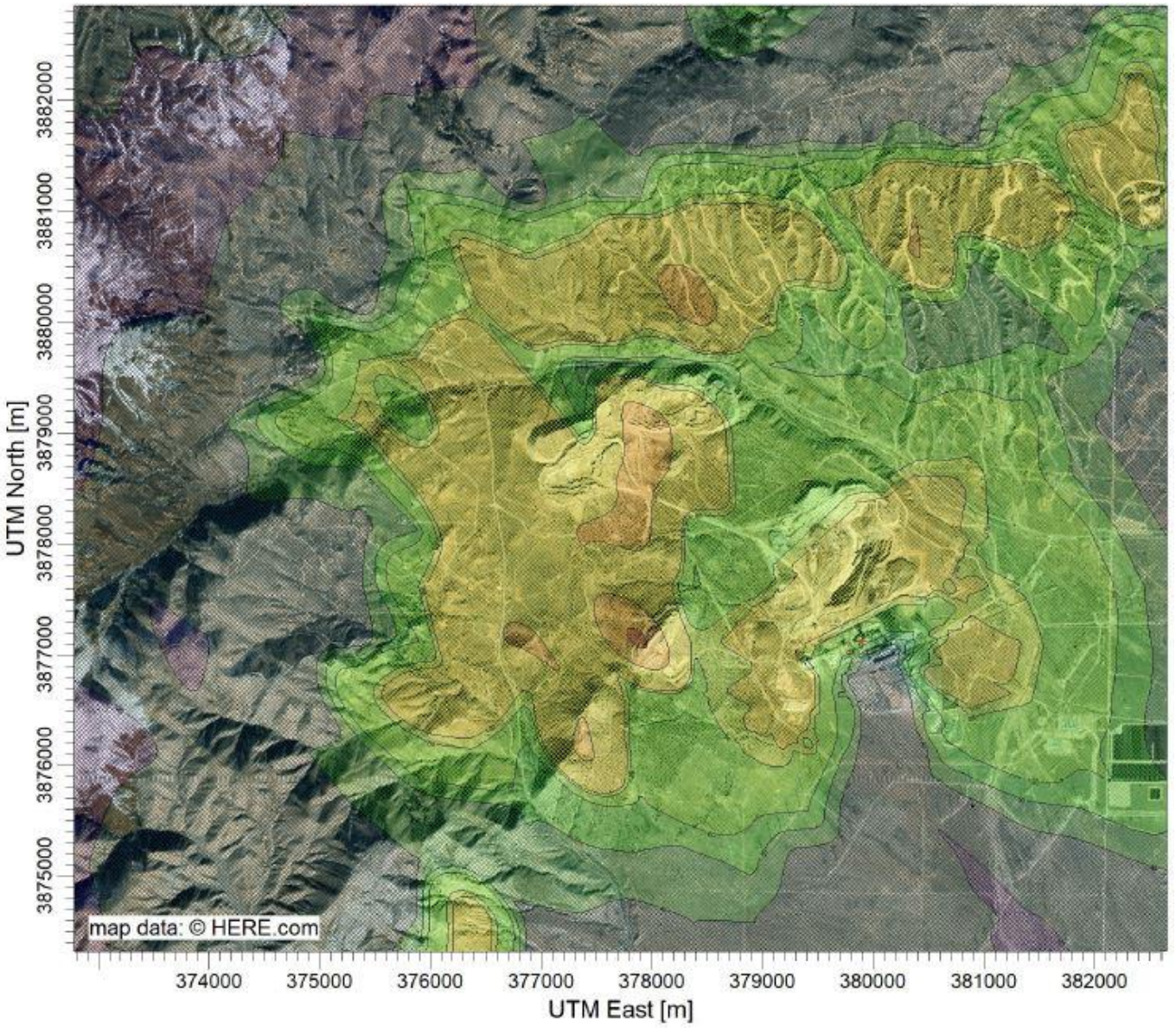
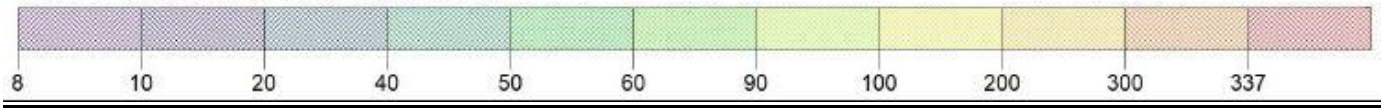




PLOT FILE OF HIGH 1ST HIGH 8-HR VALUES FOR SOURCE GROUP: ALL ug/m^3

Max: 337 [ug/m^3] at (377882.90, 3877130.10)



Attachment B

NSR Balance and Stationary Source Potential to Emit

California Portland Cement Co.

PTO/ATC No.	Issue Date	Project Description	PM-10		SOx		NOx		VOC		CO	
			lb/day	tons/yr	lb/day	tons/yr	lb/day	tons/yr	lb/day	tons/yr	lb/day	tons/yr
1003001A	11/15/1978	Primary Crushing Opeartion	182.06	33.23								
'002&'003		Crushing/Screening and Drying Opeartions	PTO Canceled									
'005-'009		Kiln #1,#2,#3,#4 retrofitted with Fabric Collectors	PTO Canceled For ERC									
'011-'015		Clinker Coolers	PTO Canceled									
1003016	11/15/1978	Clinker Storage	69.82	12.74								
1003019		5,000-gal UST GDF	PTO Canceled									
1003021A	11/15/1978	Sampling System	142.56	26.02								
1003022	11/15/1978	Limestone Storage and Reclaim System	98.88	18.05								
1003023	11/15/1978	Additives System	117.60	9.04								
1003024	11/15/1978	Roller Mill System	96.97	14.62								
1003025	11/15/1978	Homogenizing and Kiln Feed System	83.28	15.20								
1003026	11/15/1978	Pyroprocessing System	1,183.01	215.00	14,783.97	2,698.07	12,475.65	2,276.81	440.16	80.33	4,400.35	803.06
1003027	11/15/1978	Clinker Cooling System	614.16	112.08								
'028-'031		Varieties of Projects	ATC/PTO Expired or Canceled									
1003032	6/17/1987	2,100-kW Gen Set w/ 1566-bhp Diesel Engine	Emergency Equipment									
1003033	6/17/1987	2,100-kW Gen Set w/ 1578-bhp Diesel Engine	Emergency Equipment									
1003020A	6/27/1980	5,000-gal AST GDF							1.12	0.20		
1003001B	11/15/1980	Revise Conditions of Approval	No Net Emission									
022A-027A	11/15/1980	Renew the permits	No Net Emission									
1003017A	9/30/1983	Add Two New Fabric Collectors	82.29	15.02								
1003018A	12/14/1984	Packhouse Loading Operation	856.58	156.33								
'026B,C,F		Modification of Pyroprocessing System	ATC Canceled and Denied									
1003026D	3/12/1985	Increase HC & CO Emissions Limits							82.80	15.11	828.00	151.11
1003026E	7/25/1985	Revise Kiln Emission Limitations					8,040.00	1,467.00				
1003017B	7/25/1985	Add Fabric Collector to Existing Conveyors	No Net Emission									
'018B&C	2/24/1986	Add Fabric Collectors to Existing Packhouse	No Net Emission									
1003021B	9/23/1988	Modification of Sampling System	No Net Emission									
1003034	11/3/1988	Add Shredded Tire as Authorized Fuel	ATC Denied									
1003010A	9/6/1989	Add Petroleum Coke As Authorized Fuel	Modified to '010B									
1003026H	9/26/1989	Add Petroleum Coke As Authorized Fuel	Modified to '026I									
1003032A	2/8/1990	Modify compliance testing requirements	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1003033A	2/8/1990	Modify compliance testing requirements	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1003004A	1/30/1990	Add New Finish Mill	Modified to '004B									
Total Adjustments, Projects Deemed Complete Before 08/19/1991			3,527.21	627.33	14,783.97	2,698.07	20,515.65	3,743.81	524.08	95.64	5,228.35	954.17
Rule 210.1 (NSR) 8/19/1991 Rule Change Adjustments			-3,527.21	-627.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Emissions After 08/19/1991 Adjustments			0.00	0.00	14,783.97	2,698.07	20,515.65	3,743.81	524.08	95.64	5,228.35	954.17
1003024B	5/26/1992	Addition of Approved Metals to Silos	No Net Emission									
1003026I	2/2/1994	Modification of Coal Supply System	No Net Emission									
'035-'041		Varieties of Projects	ATC/PTO Canceled									
1003042	9/8/1992	70-bhp Gasoline Piston Engine w/ Welder	Emergency Equipment									
1003043	9/8/1992	Piston Engine	PTO Canceled									
1003044	9/8/1992	80.5-bhp Diesel Engine w/ Compressor	Modified to '044A									
1003045	9/8/1992	168-bhp Diesel Engine w/ Compressor	PTO cancelled. Replaced by 1003074									
'046-'047	9/8/1992	Piston Engines	PTO Canceled									
1003048	9/8/1992	95-bhp Diesel Engine	Emergency Equipment									
1003049	9/8/1992	95-bhp Diesel Engine w/ HP Washer	Emergency Equipment									
1003050	9/8/1992	Piston Engine	PTO Canceled									
1003051	9/8/1992	Vacuum Truck w/ 165-bhp Diesel Engine	No Emission									
1003052	9/8/1992	Piston Engine	PTO Canceled									
1003053	9/8/1992	180-bhp Propane Kiln Engine	Emergency Equipment									
1003017C	1/11/1993	Mod. of Finish Mill #4: Replace Dust Collector	No Net Emission									
1003017D	3/3/1993	Replace Fabric Collector for Finish Mill #1,2,3,5	No Net Emission									
1003055	9/10/1993	Finish Grinding Operation #2	82.29	15.02								
1003056	9/10/1993	Finish Grinding Operation #3	82.29	15.02								
1003057	9/10/1993	Finish Grinding Operation #4	82.29	15.02								
1003058	9/10/1993	Finish Grinding Operation #5	82.29	15.02								
1003016A	5/23/1994	Mod. of Clinker Storage: Replace Dust Collector	No Net Emission									
1003054	6/8/1993	Bulk Clinker Truck Loadout Operation	Modified to '054A									
026J - M		Modifications of Pyroprocessing System	No Net Emission									
'059A-C		Finish Grinding Operation #6	Modified to '059D									
1003001C	7/28/1994	Modification of Primary Crusher: Lime Control	No Net Emission									
1003060		Degreaser	PTO Canceled									
1003061	5/15/1995	Portable Crushing Operation	5.97	1.09								
1003062	1/7/1997	Paint Spray Booth	No Emission									
1003020B	3/20/1998	Change GDF Dispensers to Balance Ph. II	No Net Emission									
1003063	3/26/1999	Quarry Drill No. 1	Modified to '063A									
1003064	3/26/1999	Quarry Drill No. 2	PTO Canceled									
1003010B	3/9/2000	Modification of Coal Supply System	0.04	0.01								
1003016B	3/9/2000	Clinker Storage Increased by 20%	17.45	3.18								
1003018D	3/9/2000	Install Oxygen Injection System to Packhouse	No Net Emission									
1003021C	3/9/2000	Modification of Sampling System	0.00	0.05								
1003022B	3/9/2000	Modification of Lime Storage & Reclaim System	0.00	0.98								
1003023B	3/9/2000	Install Oxygen Injection Sys. to Additives Sys.	0.00	1.65								
1003024D	3/9/2000	Set up Emissions for Roller Mill System	0.00	1.99								
1003025B	3/9/2000	Homogenizing and Kiln Feed System	No Net Emission									
1003027B	3/9/2000	Clinker Cooling System	No Net Emission									
1003063A	3/27/2000	Modification of Quarry Drill No. 1	33.55	4.53	29.52	3.99	446.40	60.34	36.20	4.89	96.19	13.00
1003061A	7/12/2001	Replace Jaw Crusher w/ Horizontal Impact Crshr	No Net Emission									
1003004B	7/31/2002	Add 2 Mills w/ Baghouse & Retrofit Others	392.64	66.05								
1003020C	11/24/2003	Change UST GDF to AST GDF							-0.19	-0.03		
1003064A	12/21/2005	Modification of Quarry Drill No. 2	31.68	2.38								
1003065	3/15/2005	OK Finish Mill System	169.27	30.66	0.12	0.00	17.16	0.39	1.18	0.04	17.78	0.65
1003026N	3/21/2005	Pyroprocessing: Remove Fuel Oil Heater	-0.33	-0.06	-0.03	-0.01	-4.35	-0.79	-0.24	-0.04	-3.65	-0.67
1003010C	9/18/2006	Add Coal Mill Serving Perheater Tower	18.33	3.34								
1003054A	3/8/2007	Bulk Clinker Truck Loadout Operation	8.23	1.50								
1003044A	9/18/2007	80.5-bhp Diesel Engine w/ Compressor	0.42	0.01	0.01	0.00	7.90	0.11	1.41	0.02	5.22	0.07

1003066		Sweeper #1	No Emission									
1003018E	1/3/2008	Replace Fabric Collectors from Packhouse	No Net Emission									
1003067		Vacuum Truck	PTO Canceled									
1003068	8/12/2008	Vacuum Truck	0.53	0.10	0.02	0.00	22.51	4.11	5.23	0.96	5.23	0.96
'024E & F	1/13/2009	Add Recirculation to Roller Mill System	0.82	0.15								
1003069	1/25/2010	Portable Crushing Operation	19.20	3.50								
1003070	4/29/2010	Concrete Batching Operation	123.34	4.74								
1003071	4/29/2010	Concrete Storage Guppy	No Emission									
1003059D	8/20/2012	Finish Grinding Operation #6	127.54	23.28								
1003026O	7/18/2012	Replace Heat Exchanger with Cond. Tower	No Net Emission									
1003026P	12/10/2012	Addition of SNCR and LIS	9.87	1.80	-5,913.60	-1,079.23	-8,208.00	-1,497.96				
1003072	1/15/2013	Vacuum Truck	No Emission									
1003020D	5/27/2014	Upgrade Phase I of 5,000-gal AST GDF							-0.63	-0.12		
1003073	9/3/2014	Bulk Truck Loadout Operation	12.33	2.24								
1003064B	9/14/2015	Replacement of Quarry Drill No. 2	No Net Emission									
1003063B	8/31/2016	Replacement of Quarry Drill No. 1			-29.52	-3.99	-446.40	-60.34	-36.20	-4.89	-96.19	-13.00
1003026Q	5/26/2017	Modification: Add Lime Slurry Injection	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1003074	1/2/2018	250-bhp Diesel Engine w/ Compressor	0.13	0.02	0.05	0.01	19.71	3.60	1.85	0.34	34.39	6.28
1003065A	3/13/2018	Modification of Finish Mill: Replace Separator	No Net Emission Increase									
1003024G	5/1/2019	Replacement of Raw Mill	Emissions Change Replaced by '024H									
1003026R	11/26/2019	Remove Op. Cond. 22 (Termination of Consent Decree)	No Emission Changes									
1003004C	6/30/2020	Replace two dust collectors	-42.79	-7.20								
1003070A	7/21/2020	Modification of concrete batch plant: Incorporate addition of batch plant	No Emission Changes									
1003075	7/21/2020	Back-up concrete batch plant	Emergency Equipment									
1003026S	Pending	Change Kiln Baghouse from Reverse Air to Pulse Jet	No Emissions Change									
1003026T	Pending	Change CO and NH3 Averaging Periods	No Emissions Change									
1003069A	Pending	Change Crusher for Mobile Crushing Operation	0.00	0.00								
1003022C	Pending	Modify C2-DC4 Flow Rate, PM grain loading, & Operating hours	-13.89	-1.80								
1003024H	Pending	Modify/Shutdown Existing Dust Collectors, Install New Dust Collectors	-15.99	0.16								
1003026U	Pending	Modification: Install New Dust Collector	3.60	0.66								
1003065B	Pending	Modification: Install New Dust Collector	4.94	0.90								
1003026V	Pending	Increase CO Emissions (PSD Permit)									56,868.00	1,473.27
Total Adjustments		NSR Balance	1,236.04	205.99	8,870.54	1,618.84					62,155.32	2,434.73
since 12/28/1976		Stationary Source Potential to Emit (SSPE)					12,370.58	2,253.27	532.69	96.81		
			PM10 lb/day	**PM10 tons/yr**	**SOx lb/day**	**SOx tons/yr**	**NOx lb/day**	**NOx tons/yr**	**VOC lb/day**	**VOC tons/yr**	**CO lb/day**	**CO tons/yr**

ATTACHMENT A

PRELIMINARY BACT
DETERMINATION LIST

(To be completed by application processing engineer as part of determination of completeness review within 30 days of receipt of ATC Application. Submit with standard outline of ATC engineering analysis.)

Reviewed by:_____
Date:___/___/____

APPLICANT: California Portland Cement Co.

PROJECT DESCRIPTION: Increase CO Emissions from Pyroprocessing (PSD)

For each ATC subject to BACT, present a preliminary BACT determination list for administrative review.

ATC NUMBER(S): 1003026V

* Basic or process equipment type and rating: 495-MMBtu/hr

*Applicant Proposed BACT: Good Combustion Practices

* Preliminary BACT determination list:

Evaluate for Cost Effectiveness (to be checked by APCO):

_____ 1. (Category 1) Good combustion practices

_____ 2. (Category) Thermal Oxidation

_____ 3. (Category) Excess Air

_____ 4. (Category) Catalytic Incineration
(Attach additional list, if needed)

COMMENTS: Modification is subject to BACT under PSD; applicant submitted BACT analysis that determined catalytic incineration & excess air were technologically infeasible, and thermal oxidation was not cost effective ($31,000.ton CO removed)

STANDARD OUTLINE

EASTERN KERN AIR POLLUTION CONTROL DISTRICT

DATE: 03/02/2022

Application Nos.: 1003026V
Project No.: 220121

Deemed Complete On: 03/02/2022

Processing Engineer: Samuel Johnson

Applicant: California Portland Cement Co.
Location: 9350 Oak Creek Road, Mojave, CA 93501

Contact: Brian Males

I. **Proposed Project:**

Increase CO emissions from cement kiln. Requested increase will exceed significant increase threshold of 100 tpy; therefore, a prevention of significant deterioration (PSD) permit is required.

II. **APPLICABLE RULES AND REGULATIONS**:

Applicability (Check if Rule applies.)

__ A. Rule 202 (exemptions) - Section(s) providing exemption(s):

____ ____ ____ ____

__ B. Rule 205 (Cancellation of Applications)

X C. Rule 210.1 (New Source Review) - applicable Section(s):
- __ Section II.N. (functionally identical replacement)
- __ Section II.O. (identical replacement)
- __ Section III.A. (BACT)
- X Exempt from BACT by Subsection 2.a
- __ Section III.B. (Offsets)
- X Exempt from offsets by Subsection 3.a
- __ Section III.B.4. (offset ratios)
  (__ 1:1, __ 1.2:1, or __ 2.0:1) or __ 3.0:1)
- __ Subsection III.B.6.c. (interpollutant offsets)
- X Subsection III.C.3. (modeling)
- X Subsection III.C.4 (compliance certification)
- __ Subsection V.A.3. (public notice)
- __ Subsection VI.B. (subject to CEC review)

__ D. Rule 210.3 (Emissions Reductions Banking)

X E. Rule 210.4 (Prevention of Significant Deterioration)
- X Section III.B. (40 CFR §52.21 (j) through (r))
  - X §52.21 (j) (Control Technology Review)
  - X §52.21 (k) (Source Impact Analysis)
  - X §52.21 (l) (Air Quality Models)
  - X §52.21 (m) (Air Quality Analysis)
  - X §52.21 (n) (Source Information)
  - X §52.21 (o) (Additional Impact Analysis)
  - __ §52.21 (p) (Sources Impacting Federal Class I Areas)
  - X §52.21 (r) (Source Obligation)
- X Section III.D. (Inclusion of Fugitive Emissions Required)
- X Section VII. (Public Participation)

X F. Rule 401 (Visible Emissions)

__ G. Rule 402 (Fugitive Dust) – Indian Wells Valley

X H. Rule 404.1 (PM Concentration) 0.1 gr/scf

__ I. Rule 405 (PM Emission Rate)

X J. Rule 406 (Portland Cement Kiln PM Emission Rate)

II. **APPLICABLE RULES AND REGULATIONS (cont.)**:

__ K. Rule 407 (Sulfur Compounds)

__ L. Rule 408 (Disposal of Solids or Liquids)

X M. Rule 409 (Fuel Burning Equipment - SOx, NOx, and PM Emission Rates)

__ N. Rule 410 (Organic Solvents)

__ O. Rule 410.1A (Architectural Coatings)

__ P. Rule 410.2 (Disposal and Evaporation of Solvents)

__ Q. Rule 410.3 (Organic Solvent Degreasing Operations)

__ R. Rule 410.4 (Metal, Plastic, and Pleasure Craft Parts and Products Coating Operations)

__ S. Rule 410.4A. (Motor Vehicle and Mobile Equipment Refinishing)

__ T. Rule 410.5 (Cutback, Slow Cure, and Emulsified Asphalt, Paving)

__ U. Rule 410.6 (Perchloroethylene Dry Cleaning Systems)

__ V. Rule 410.6A. (Petroleum Solvent Dry Cleaning Operations)

__ W. Rule 410.7 (Graphic Arts)

__ X. Rule 410.8 (Aerospace Assembly and Coating Operations)

__ Y. Rule 410.9 (Wood Products Surface Coating Operations)

__ Z. Rule 411 (Storage of Organic Liquids, tvp> 1.5 psia)
- __ Subsection III.A. (pressure vessel exemption)
- __ Subsection III.B. (emergency standby exemption)
- __ Subsection IV.A.3.a. (welded tank/metallic primary seal)
- __ Subsection IV.A.4.b. (riveted tank/metallic shoe primary seal)
- __ Subsection IV.A.4.c. (resilient toroid primary seal)
- __ Subsection IV.A.4.d. (closure device equivalent to I.A.1.)
- __ Subsection IV.B. (fixed roof with internal floating roof)
- __ Subsection IV.C. (fixed roof with vapor control system)
- __ Subsection IV.D. (above ground gasoline storage tank vapor control requirements)

__ AA. Rule 412 (Gasoline Storage Tanks)

__ BB. Rule 412.1 (Refueling of Motor Vehicles)

__ CC. Rule 413 (Organic Liquid Loading)

II. **APPLICABLE RULES AND REGULATIONS (cont.)**:

__ DD. Rule 414 (Wastewater Separator)

__ EE. Rule 414.1 (Valves, Pressure Relief Valves, and Flanges) (Refineries & Chemical Plants)

__ FF. Rule 414.2 (Soil Decontamination – Volatile Organic Compounds)

__ GG. Rule 414.5 (Pump and Compressor. Seals at Refineries & Chemical Plants)

__ HH. Rule 415 (Reduction of Animal Matter)

__ II. Rule 416 (Open Burning)

__ JJ. Rule 417 (Agricultural Burning)

__ KK. Rule 418 (Incinerator Burning)

__ LL. Rule 418.1 (Medical Waste Incinerators)

X MM. Rule 419 (Nuisance)

__ NN. Rule 420 (Exception)

__ OO. Rule 421 (Orchard Heaters)

X PP. Rule 422 (Federal New Source Performance Standards)
Subpart F Standards of Performance for Portland Cement Plants

__ QQ. Rule 422.1 Municipal Solid Waste Landfills (Nonmethane Organic Compounds)

X RR. Rule 423 (National Emission Standards for Hazardous Air Pollutants)
Subpart LLL National Emission Standards for Portland Cement Manufacturing Industry

__ SS. Rule 424 Residential Water Heaters (Oxides of Nitrogen)

__ TT. Rule 425 Cogeneration Gas Turbine Engines (Oxides of Nitrogen)

__ UU. Rule 425.1 Hot Mix Asphalt Paving Plants (Oxides of Nitrogen)

__ VV. Rule 425.2 Boilers, Steam Generator, and Process Heaters (Oxides of Nitrogen)

X WW. Rule 425.3 Portland Cement Kilns (Oxides of Nitrogen)

__ XX. Rule 426 Experimental Research Operations

__ YY. Rule 427 Stationary Piston Engines (Oxides of Nitrogen)

II. **APPLICABLE RULES AND REGULATIONS (cont.)**:

__ ZZ. Rule 428 (Commercial Offsite Multiuser Hazardous Waste & Nonhazardous Waste Disposal Facilities)

__ AAA. Rule 429 (Decorative and Hard Chrome Plating and Chromic Acid Anodizing)

__ BBB. Rule 429.1 (Cooling Towers)

__ CCC. Rule 430 Sterilizers (Ethylene Oxide)

__ DDD. Rule 431 Propellant Combustion and Rocket Testing

__ EEE. Rule 432 Polyester Resin Operations

X FFF. Section 41700 of California Health & Safety Code (Health Risk)

X GGG. (CEQA) California Environmental Quality Act

__ HHH. Other:_____

Rule 202 Exempt Equipment:

AIR CONTAMINANTS TO BE CONSIDERED:

_____	**PM_{10}**	_____	**SO_4**	_____	**SO_2**	_____	**NOx**	_____	**VOC**
X	**CO**	_____	**Odors**	_____	**Visible Emissions**	_____	**Toxics**		

POSSIBLE EMISSION POINTS:

Kiln Baghouse Exhaust

NSR CONSIDERATION:

Source's NSR Balance Since 12/28/76

205.37 tons/yr	**PM_{10}**	_____ tons/yr	**SO_4**	**1,618.84** tons/yr	**SO_2**	**2,253.27** tons/yr	**NOx**	**96.81** tons/yr	**VOC**	**961.46** tons/yr	**CO**

Source's Potential to Emit: **2,253.27** tons/yr **NOx** **96.81** tons/yr **VOC**

X BACT required for any new emissions unit or modified emissions unit (except CO, unless PSD applies)

____ New Source Review Balance/Potential to Emit: ____ SOx (as SO_2) ≥ 27 tons/year

____ PM_{10} ≥ 15 tons/year, ___NOx, ___VOC ≥ 25 tons/yr therefore offsets are required

Planned Air Pollution Control Equipment Design Review:
Final review is required.