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April 26, 2023

VIA EMAIL AND HAND DELIVERY

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Re: In the Matter of Shasta County Air Quality Management District Approval of the Fortera ReCarb Plant Authority to Construct Permit (No: 22-PO-15) and of Notice of Determination No: 45-04182023-037

Dear Mr. Stahl, Mr. Hellman, Honorable Members Ceehorne, Snook, Krumenacker,
Dr. Krohn, Brown, and Langfield:

We are resubmitting **Safe Fuel and Energy Resources California's** *Appeal of
Approval of the Fortera ReCarb Plant Authority to Construct Permit (No: 22-PO-15)
and of Notice of Determination No: 45-04182023-037 and Request a Hearing by the
Shasta County Air Quality Management District Hearing Board*, along with
payment of the appeal fee. Please process the document today and return a file-
endorsed copy of the front page of the Appeal in the stamped, self-addressed
envelope provided.

6260-011acp

April 26, 2023
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Thank you for your assistance with this matter.

Sincerely,

A handwritten signature in blue ink that reads "Kelilah Federman". The signature is written in a cursive style.

Kelilah D. Federman

KDF:acp

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Attorneys for Petitioners Safe Fuel and Energy Resources California

**BEFORE THE HEARING BOARD OF THE
SHASTA COUNTY AIR POLLUTION CONTROL DISTRICT**

<p>In the Matter of Shasta County Air Quality Management District Approval of the Fortera ReCarb Plant Authority to Construct Permit (No: 22-PO-15) and of Notice of Determination No: 45-04182023-037</p>	<p>PETITION FOR HEARING AND APPEAL OF APPROVAL OF AUTHORITY TO CONSTRUCT PERMIT NO. 22-PO-15 FOR THE FORTERA RECARB PLANT AT 15390 WONDERLAND BLVD, REDDING, CA</p> <p>Case No. Facility No. AP 3307-030-002-000</p> <p>SAFE FUEL AND ENERGY RESOURCES CALIFORNIA</p>
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a. The name, address, and telephone number of the petitioner, or other person authorized to receive service of notices.

Safe Fuel and Energy Resources California (“SAFER CA”)
c/o Kelilah D. Federman
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard Suite 1000
South San Francisco, CA 94080
Tel: (650) 589-1660
Email: kfederman@adamsbroadwell.com

b. Whether the petitioner is an individual, co-partnership, corporation, or other entity; and names and addresses of partners if a co-partnership, or names and addresses of the persons in control if other entity.

SAFER CA is an unincorporated association of individuals and labor unions that may be adversely affected by the Project's potential public health and safety impacts.

Kelilah D. Federman is an attorney at Adams Broadwell Joseph & Cardozo, the law firm representing SAFER CA in this appeal.

c. Describe the nature of business and activity involved.

The Applicant proposes to install a Fortera ReCarb Small Commercial Plant to operate in conjunction with the Portland cement manufacturing process at the facility. The Fortera process utilizes CaO, ammonium chloride aqueous ammonia, and the CO₂ from exhaust streams from the existing cement kiln exhaust to produce the Reactive Calcium Carbonate.

d. Give a brief description of device for which variance is sought.

Variance is defined as: An authorization by the Hearing Board to permit some act contrary to the requirements specified by these Rules and Regulations. Appellants do not seek a variance. Appellants seek an order from the Hearing Board requiring Best Available Control Technology for the facility's: 1) Baghouses; 2) Controlled Loading Spout Filter; 3) Dryer I Burner, DR-500; and 4) Dryer II Burner DR-510 because PM₁₀ emissions from these sources exceed BACT Thresholds laid out in Rule 2:1 Part 301.

Appellants also seek an order requiring BACT for: 1) Dryer I Burner, DR-500; and 2) Dryer II Burner DR-510 because NO_x emissions from these sources exceed BACT thresholds. Appellants also request BACT for 1) Dryer I Burner, DR-500; 2) Dryer II Burner DR-510; 3) and baghouses because SO₂ emissions from these sources exceed BACT thresholds. Finally, Appellants also seek an order requiring BACT for 1) Dryer I Burner, DR-500; and 2) Dryer II Burner DR-510 because VOC emissions from these sources exceed BACT thresholds.

e. Describe the location of such device.

All the devices for which Appellants request BACT are located within the Project site at 15390 Wonderland Blvd. in Redding, California, 96003.

f. List the Rule(s) or Permit condition(s) that can't be complied with.

Rule 2:1 Part 300.

The APCO's approval of the ATC Permit violated SHAAQMD Rule 2:1 Part 300 which requires the applicant apply BACT to any new emissions unit or modification of an existing emissions unit that results in an emission increase and the potential to emit for the emission unit equals or exceeds the following amounts:

- Nitrogen oxides - 25.0 pounds per day (lb/day);
- Sulfur oxides - 80.0 lb/day
- Particulate Matter 10 (PM10) - 80.0 lb/day;
- Volatile Organic Compound (VOC) -25 lb/day.

g. Give a detailed description of affected process.

The Project's emissions from 1) Particulate control devices designated as "Baghouses"; 2) Controlled Loading Spout Filter; 3) Dryer I Burner, DR-500; and 4) Dryer II Burner DR-510 exceed the applicable BACT thresholds.

- The Baghouses will emit 112 lb/day of PM10 emissions; the Controlled Loading Spout Filter will increase the PM10 emissions by 15.4 lb/day resulting in 125 lb/day of PM10 emissions exceeding the BACT PM10 threshold of 80 lb/day.
- Dryer I Burner, DR-500 will emit 29.9 lb/day of NOx; and Dryer II Burner, DR-510 will emit 34.1 lb/day of NOx, exceeding the BACT NOx threshold of 25 lb/day.
- Dryer I Burner, DR 510 and Dryer II Burner, DR-500 will emit a total of 218 lb/day of SO2, exceeding the BACT SO2 threshold of 80 lb/day.

h. Give detailed reasons for seeking variance relief.

N/A

i. Explain why operations under a variance are not likely to create a public nuisance.

N/A

j. Explain the advantages and disadvantages to the public if the variance is granted.

N/A

k. List the negative impacts resulting from granting the variance.

N/A

l. Explain why compliance is beyond reasonable control, and why requiring compliance would result in either an arbitrary taking of property or the practical closing and elimination of a lawful business.

Compliance with BACT is not beyond reasonable control. Compliance with BACT would not result in an arbitrary taking of property or the practical closing and elimination of a lawful business.

m. Explain why the possible closing of business or taking of property would be without a corresponding benefit in reducing air contaminants.

N/A

n. Explain what consideration has been given to curtailing operations in lieu of obtaining a variance.

N/A

o. Give an estimate of excess emissions during the variance period.

See below.

p. Explain how excess emissions will be reduced to the maximum extent feasible.

The application of BACT will allow for emissions of NO_x, PM₁₀, SO_x, and VOCs to be reduced to the maximum extent feasible.

q. Explain how emissions will be quantified or monitored and reported to the District during the period that the variance is in effect.

N/A

r. Explain how the petitioner will achieve compliance (including any requirements regarding New Source Review) and a compliance schedule for making modifications, repairs, additions, improvements, or alterations to equipment and processes to bring such devices into compliance; 1) Date by which a final control plan will be filed with the Clerk of the Hearing Board; 2) Date when an application for an Authority to Construct will be submitted to the Air Pollution Control Officer; 3) Date by which contracts will be let or purchase orders issued (if more than one, list separately); 4) Date by which construction or modifications will commence on the site (if more than one, list separately); 5) Date by which construction or

modification will be completed (if more than one, list separately); 6) Date by which full compliance will be achieved.

N/A

s. Period for which variance is sought.

N/A

I. APPEAL BACKGROUND

On behalf of Safe Fuel and Energy Resources California (“SAFER California” or “Appellants”), we submit this petition to appeal (“Appeal”) the March 27, 2023 approval of the Authority to Construct (“ATC”) Permit¹ for the Fortera ReCarb Small Commercial Plant (“Project”) proposed by CalPortland Company, Inc. (“Applicant”) by the Shasta County Air Quality Management District (“SHAAQMD” or “Air District”) Air Pollution Control Officer² (“APCO”) and request a hearing by the Shasta County Air Quality Management District Hearing Board (“Hearing Board”) pursuant to Air District Rules 4:2(b), (h), and 4:3³ and California Health and Safety Code § 42302.1. This Appeal is accompanied by the required fee of \$150 and five additional copies of this petition.⁴ This Appeal was prepared with the assistance of Dr. Phyllis Fox Ph.D, whose comments and qualifications are attached.⁵

The Shasta County Planning Commission approved an Initial Study Mitigated Negative Declaration (“IS/MND”)⁶ for the Project on May 12, 2022.⁷ On

¹ Shasta County Department of Resource Management Air Quality Management District, Authority to Construct Permit Issued to CalPortland Redding Cement Company for the Fortera ReCarb Plant at 15390 Wonderland Blvd., Redding, CA (March 27, 2023),

<https://www.dropbox.com/s/ajkgquui6wo425/22-PO-15.ATC%20.pdf?dl=0> (hereinafter “ATC”).

² Shasta County Air Pollution Control District, Rob Stahl, Senior Air Pollution Inspector, Authority to Construct Evaluation for Fortera Recarb Plant 22-PO-15, Wonderland Blvd., Redding, CA 96003, <https://www.dropbox.com/s/pm7cez5azld7oyr/22-PO-15.ATC.Eval.pdf?dl=0> (hereinafter “ATC Evaluation”).

³ Shasta County Air Quality Management District (“SHAAQMD”) Rule 4:3.

⁴ *Id.*

⁵ See **Attachment B**, Phyllis Fox, Ph.D., P.E., Comments on Fortera™ ReCarb™ Plant Project (April 15, 2023) (“Fox Comments”).

⁶ Environmental Initial Study & Mitigated Negative Declaration for Amendment 21-0003 (Use Permit 297-78) Lehigh Cement West, Inc., SCH Number 2022040041 (March 31, 2022), prepared by Shasta County Department of Resource Management Planning Division, available at https://www.dropbox.com/s/wibdc5af1ruz2we/Initial%20Study-MND_2022-0113.pdf?dl=0 (hereinafter “MND”).

⁷ Shasta County Planning Commission, Meeting Minutes (May 12, 2022), https://www.shastacounty.gov/sites/default/files/fileattachments/planning/page/4084/05_12_22_approved_minutes.pdf.

September 30, 2022, SAFER CA submitted comments⁸ to the APCO and the Air District detailing the Project’s violation of the Air District Rules for failure to implement Best Available Control Technology (“BACT”) pursuant to Air District Rule 301⁹ and requested that a new CEQA document be prepared by the Air District pursuant to CEQA Guidelines, sections 15052 and 15096 because the IS/MND prepared by the County failed to accurately analyze and fully mitigate facility emissions.¹⁰

On March 27, 2023, the APCO approved the ATC Permit for the Project.¹¹ The Health and Safety Code provides that within 30 days of any decision or action pertaining to the issuance of a permit by an air district, any aggrieved person who, in person or through a representative, appeared, submitted written testimony, or otherwise participated in the action before the district may request the hearing board of the district to hold a public hearing to determine whether the permit was properly issued.¹² Then, within 30 days of the request, the hearing board shall hold a public hearing and shall render a decision on whether the permit was properly issued.¹³

II. PROJECT DESCRIPTION

The Project proposes construction of a Fortera™ ReCarb™ Plant. The Fortera™ ReCarb™ process is a proprietary process that will utilize a portion of the carbon dioxide (CO₂) 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

⁸ **Attachment A**, Adams Broadwell Joseph & Cardozo, Comments on Permit Application For Authority To Construct Fortera ReCarb Small Commercial Plant (Permit No. 22-PO-15), (Sept. 30, 2022) (hereinafter, “ABJC ATC Comments”).

⁹ SHAAQMD Rule 301.

¹⁰ Cal. Code Regs., tit. 14, § 15052(a) [“Where a Responsible Agency is called on to grant an approval for a project subject to CEQA for which another public agency was the appropriate Lead Agency, the Responsible Agency shall assume the role of the Lead Agency when any of the following conditions occur:...The Lead Agency prepared environmental documents for the project, but the following conditions occur: (A) A subsequent EIR is required pursuant to Section 15162, (B) The Lead Agency has granted a final approval for the project, and (C) The statute of limitations for challenging the Lead Agency’s action under CEQA has expired.”]

¹¹ ATC, p. 1.

¹² Cal. Health and Safety Code § 42302.1.

¹³ *Id.*

disturbed land currently in use by Lehigh Cement West, Inc. for equipment storage would be graded for the installation of the facility. The Project is located approximately two miles north of the intersection of Interstate 5 and Old Oregon Trail on the west side of Wonderland Boulevard in the Mountain Gate area at 15390 Wonderland Boulevard, Redding, CA 96003, Assessor's Parcel Numbers: 307-020-002 and 307-030-002.

The facility operates under the Title V Permit No. 02-TV-07b.¹⁴ 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."¹⁵ 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.¹⁶ The Lehigh plant operates under Permit No. 02-TV-07b issued by Shasta County AQMD on January 23, 2020.¹⁷ 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™ ReCarb™ Plant would produce approximately 15,000 tons of supplemental cementitious material per year. The use permit Amendment 21-0003 to amend Use Permit 297-78 for the construction of a Fortera™ ReCarb™ Plant was approved on May 12, 2022 by the Shasta County Planning Commission. The MND provides that after the issuance of the ATC and prior to the operation of the new equipment, a minor permit modification application must be submitted to SCAQMD for the issuance of a Permit to Operate (PTO).¹⁸ With the minor permit modification request, the District will take action on the application and revise the Title V Permit to incorporate applicable conditions.¹⁹

III. LEGAL BACKGROUND

This Appeal letter represents SAFER CA's petition for hearing by the Hearing Board. The Air District Rules provide that the duties, powers, and procedures of the Hearing Board are regulated by the Health and Safety Code.²⁰ The Health and Safety Code provides that within 30 days of any decision or action pertaining to the issuance of a permit by an air district, any aggrieved person who, in person or through a representative, appeared, submitted written testimony, or otherwise participated in the action before the district may request the hearing board of the district to hold a public hearing to determine whether the permit was properly issued. Then, within 30 days of the request, the hearing board shall hold a

¹⁴ MND, Appendix C, p., 4 of 27

¹⁵ MND, p. 2.

¹⁶ *Id.*

¹⁷ *Id.*

¹⁸ *Id.*

¹⁹ MND, Appendix C, pdf, p. 88.

²⁰ SHAAQMD Rule 4:1.

public hearing and shall render a decision on whether the permit was properly issued.²¹ The Health and Safety Code and the Air District Rules do not limit the contents of the appeal to issues raised in prior written testimony.

The Clean Air Act²² defines “best available control technology” as an emission limitation based on the maximum degree of reduction of each pollutant emitted from or which results from any major emitting facility, which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such facility through application of production processes and available methods, systems, and techniques, including fuel cleaning, clean fuels, or treatment or innovative fuel combustion techniques for control of each such pollutant.²³ In no event shall application of “best available control technology” result in emissions of any pollutants which will exceed the emissions allowed by any applicable standard.²⁴ The record must contain the evidence to support the agency’s determination with respect to BACT.²⁵

Air District Rule 301 provides that “[a]n applicant shall apply BACT to any new emissions unit or modification of an existing emissions unit that results in an emission increase and the potential to emit for the emission unit equals or exceeds the following amounts:

Nitrogen oxides - 25.0 pounds per day (lb/day);
Sulfur oxides - 80.0 lb/day
Particulate Matter 10 (PM10) - 80.0 lb/day;
Volatile Organic Compound (VOC) - 25 lb/day.²⁶

Air District Rule 306 provides that “[i]n no case shall the emissions from the new or modified stationary source cause or make worse the violation of an ambient air quality standard. An impact analysis shall be used to estimate the effects of a new or modified source. In making this determination, the APCO shall take into account the mitigation of emissions through offsets obtained pursuant to this Rule.”²⁷ The APCO is required to ***deny any Authority to Construct*** or Permit to Operate if the APCO finds that the subject of the application would not comply with the standards set forth in this Rule.²⁸ As shown below, the Project does not comply

²¹ Cal. Health and Safety Code § 42302.1.

²² 42 U.S.C. § 7401 et seq.

²³ *Id.* at § 7479(3).

²⁴ *Id.*

²⁵ See *Alaska Dept. of Environmental Conservation v. E.P.A.* (2004) 540 U.S 461, 498-499 [“No record evidence suggests that the mine, were it to use SCR for its new generator, would be obliged to cut personnel or raise zinc prices. Absent evidence of that order, ADEC lacked cause for selecting Low NO_x as BACT based on the more stringent control’s impact...”]

²⁶ SHAAQMD Rule 301.

²⁷ SHAAQMD Rule 306.

²⁸ SHAAQMD Rule 307.

with Air District Rule 2:1 for New Source Review, and the APCO therefore, issued the Authority to Construct permit improperly.²⁹

Air District Rule 607 provides that the “Permit to Operate *shall* include daily emission limitations that reflect applicable emissions limitations, including BACT.”³⁰ The Air District cannot issue a Permit to Operate the Project without including the requisite BACT conditions.

The Air District is prohibited from issuing a permit that “purports to permit a condition violative of any provision of Rule 3.”³¹ The Rules provide that the existence of any permit shall not be a defense to any allegation of a violation of Rule 3.³² The Hearing Board should order the reissuance of the ATC with BACT as a requirement for Project construction and operation.

IV. BACT IS REQUIRED BECAUSE PROJECT EMISSIONS EXCEED APPLICABLE AIR DISTRICT THRESHOLDS

Shasta County Air Quality Management District Rule 2:1 requires the District to determine whether Best Available Control Technology (BACT) shall be implemented during the operation of a new or modified emissions unit. BACT is required for any modification that results in an emission increase and the potential to emit for a pollutant is above the following amounts:

<u>Pollutant</u>	<u>Pounds/Day</u>
Nitrogen Oxides	25.0
Sulfur Oxides	80.0
Particulate Matter (PM10)	80.0
Volatile Organic Compounds (VOCs)	25.0

A. BACT is Required because the Project’s PM10 Emissions Exceed the District’s Threshold of 80 Pounds per Day

BACT is required for any modification that results in an emission increase and the potential to emit more than 80 lb/day of Particulate Matter 10 (“PM10”).³³ Dr. Fox calculated that PM10 emissions from baghouses under the Conditions of the ATC may be as high as 112 lb/day.³⁴ Dr. Fox concluded that these baghouses alone exceed the BACT threshold in SCAQMD Rule 2:1, Part 301 of 80 lb/day, requiring BACT for all sources that emit PM10.³⁵

²⁹ SHAAQMD Rule 4:1.

³⁰ SHAAQMD Rule 607 (emphasis added).

³¹ SHAAQMD Rule 2:16.

³² *Id.*

³³ SHAAQMD Rule 301.

³⁴ Fox Comments, p. 7.

³⁵ Fox Comments, p. 7.

Dr. Fox calculated that the increased emissions from the Loading Spout Filter are 15.4 lb/day.³⁶ This would increase the PM10 emissions from 112 lb/day to 127 lb/day, further clarifying that BACT is required for PM10 emissions sources.³⁷ The APCO's failure to include BACT for Baghouses and Loading Spout Filter resulted in the improper approval of the ATC Permit, in violation of Air Rule 301.³⁸ Any Permit to Operate issued for the Project must include the BACT for the Baghouses and Loading Spout Filter pursuant to Air District Rule 607.³⁹

Dr. Fox found that the ATC Permit allows five times more PM10 than assumed in the emission calculations to determine if BACT is required for PM10. When this error is corrected, discussed below, BACT is required for PM10 emissions from all PM10 sources.⁴⁰ As described above and in Dr. Phyllis Fox's comments, the ATC Permit allows PM10 emissions of 112 lb/day from the baghouses. As the majority of the total PM emissions from baghouses is PM10, the ATC Permit allows PM10 emissions from all of the baghouses to exceed the emissions calculated to determine if BACT is triggered⁴¹ by a factor 15.⁴² The ATC Permit must be rescinded and revised to add BACT to comply with Air District Rules.⁴³

B. BACT is Required because the Project's NOx Emissions Exceed the District's Threshold of 25 Pounds per Day

BACT is required for any modification that results in an emission increase and the potential to emit more than 25 lb/day of Nitrogen oxides ("NOx").⁴⁴ Dr. Fox concluded that the burner criteria pollutant emissions calculations in the ATC Application were calculated from AP-42 emission factors, with an emission rating factor of D. AP-42 emission factor ratings of D are tests "based on a generally unacceptable method, but the method may provide an order-of-magnitude value for the source."⁴⁵ An order of magnitude estimate is a factor of ten estimate. Thus, the NOx emissions reported for dryer burners DR-500 and DR-510 are potentially as high as 29.9 lb/day and 34.1 lb/day, respectively.⁴⁶ These emissions individually exceed the BACT NOx threshold of 25 lb/day, requiring BACT for NOx emissions from Dryer I Burner, DR 510 and Dryer II Burner, DR-500.⁴⁷

³⁶ *Id.* at 8.

³⁷ *Id.*

³⁸ SHAAQMD Rule 301.

³⁹ SHAAQMD Rule 607.

⁴⁰ Fox Comments, p. 6.

⁴¹ ATC Evaluation, Table 2, p. 4.

⁴² Increase in total PM emissions from the baghouses = Permit Limit/Emission Factor Assumed in Emission Calculations = 0.15/0.01 = **15**.

⁴³ SHAAQMD Rule 301.

⁴⁴ SHAAQMD Rule 301.

⁴⁵ Fox Comments, p. 3; AP-42, Chapter 1, pdf 9; <https://www.epa.gov/sites/default/files/2020-09/documents/c00s00.pdf>.

⁴⁶ Fox Comments, p. 4.

⁴⁷ *Id.*; SHAAQMD Rule 301.

Moreover, the NOx calculations rely on a lower emissions threshold than required by the ATC Permit. The ATC Permit limits NOx emissions to 250 ppm or 0.3042 lb/ MMBtu.⁴⁸ But, the emissions calculations for the Dryer I Burner, DR 510 and Dryer II Burner, DR-500 are based on a NOx emission factor of 50 lb/MMscf⁴⁹ which equals 0.05 lb/MMBtu.⁵⁰ Therefore, the calculations rely on a more stringent NOx emissions factor than required in the ATC Permit. The ATC Permit was issued with an improper NOx emissions limit. The Hearing Board should not reissue the ATC Permit until this discrepancy is revised. The ATC Permit should be revised to limit NOx emissions from the dryers to 50 lb/MMscf or 41 ppm.⁵¹

C. BACT is Required because the Project's SO2 Emissions Exceed the District's Threshold of 80 Pounds per Day

BACT is required for any modification that results in an emission increase and the potential to emit more than 80 lb/day of Sulfur Oxides (SO2).⁵² Dr. Fox confirmed that SO2 emissions from the dryers (DR-500, DR-510) will be 218 lb/day, exceeding SHAAQMD threshold of 80 lb/day.⁵³ Dr. Fox was able to calculate the excess SO2 emissions by using the using the dryer flow rate (5.52 m³/sec) and temperature (753.15 K) from the ATC Evaluation and the Authority to Construct permit limit of 200 ppm,⁵⁴ to confirm that the SO₂ emissions are 9.1 lbs/hr⁵⁵ and 218 lb/day.⁵⁶ BACT is therefore required for Dryer I Burner, DR 510 and Dryer II Burner, DR-500. The APCO's failure to include BACT for Dryer I Burner, DR 510 and Dryer II Burner, DR-500 resulted in the improper approval of the ATC Permit, in violation of Air Rule 301.⁵⁷ The Permit to Operate must include the BACT for the Dryer I Burner, DR 510 and Dryer II Burner, DR-500 pursuant to Air District Rule 607.⁵⁸

⁴⁸ Draft ATC Permit, Condition 20.

⁴⁹ Supplemental Information, pdf 39, Table 5, Burner Process Parameters.

⁵⁰ Trinity Consultants, Environmental Permitting Strategy for the Fortera Small Commercial Plant at Lehigh's Redding Facility, (Feb. 18, 2022), https://www.dropbox.com/s/fv6vz0cmx4z6xev/4_Updated%20Trinity%20Fortera%20Permitting%20Strategy%20Memo%20v3.00.pdf?dl=0.

⁵¹ Fox Comments, p. 4.

⁵² SHAAQMD Rule 301.

⁵³ Fox Comments, p. 5.

⁵⁴ Draft ATC Permit, Condition 21.

⁵⁵ SO₂ emissions = (0.2071 g/m³)(19,872 m³/hr)/454 g/lb = **9.1 lb/hr**.

⁵⁶ SO₂ emissions in lb/day = (9.1 lb/hr)(24 hr/day) = **218 lb/day**.

⁵⁷ SHAAQMD Rule 301.

⁵⁸ SHAAQMD Rule 607.

D. BACT is Required because the Project's VOC Emissions May Exceed the District's Threshold of 25 Pounds per Day

The ATC Evaluation estimated that the dryers will emit 0.71 lb/day of VOC.⁵⁹ As discussed in Dr. Fox's comments, the NOx emissions were underestimated due to the use of outdated emission factors.⁶⁰ Similarly, the VOC emissions were also underestimated. The VOC emissions were estimated using an AP-42 emission factor with an emission factor rating of C.⁶¹ The EPA notes with respect to a C rating that "[although no specific bias is evident, it is not clear if the facilities tested represent a random sample of the industry."⁶² As the Project is a pilot test of a new process, and decades have passed since these AP-42 factors were developed, there is no basis for using outdated AP-42 generic emission factors for conventional combustion sources in a novel application.⁶³ Thus, there is substantial uncertainty in the accuracy of the NOx and VOC emissions estimated for the dryer burners in this novel application.⁶⁴ Testing is required to confirm the accuracy of these decades-old AP-42 emission factors for NOx and VOC emissions from the Project's boilers.⁶⁵ Accurate estimates of NOx and VOC emissions are essential to estimate ozone impacts of the Project's emissions.⁶⁶ Absent accurate estimates of NOx and VOC emissions, the record does not contain sufficient evidence to support the APCO's determination to not include BACT for NOx and VOC emissions.

V. THE AIR DISTRICT SHOULD PREPARE AN EIR FOR THE PROJECT AS THE RESPONSIBLE CEQA AGENCY

Under CEQA Guidelines section 15096(e), if a responsible agency believes a final EIR or negative declaration prepared by the lead agency is inadequate for its subsequent use, responsible agency may: (1) sue within 30 days of the lead agency's NOD filing; (2) be deemed to have waived any objection to the CEQA document's adequacy; (3) prepare a subsequent EIR if permissible; or (4) assume the lead agency role per 15052(a)(3).⁶⁷ CEQA Guidelines Section 15052 provides that "[w]here a Responsible Agency is called on to grant an approval for a project subject to CEQA for which another public agency was the appropriate Lead Agency, the Responsible Agency shall assume the role of the Lead Agency when any of the following conditions occur:

⁵⁹ ATC Evaluation, Table 2.

⁶⁰ Fox Comments, p. 3.

⁶¹ *Id.* at 14.

⁶² *Id.*; EPA, AP-42, Volume 1, Introduction, p. 9; <https://www.epa.gov/sites/default/files/2020-09/documents/c00s00.pdf>.

⁶³ Fox Comments, p. 14.

⁶⁴ *Id.*

⁶⁵ *Id.*

⁶⁶ *Id.*

⁶⁷ 14 CCR § 15096(e).

- (1) The Lead Agency did not prepare any environmental documents for the project, and the statute of limitations has expired for a challenge to the action of the appropriate Lead Agency.
- (2) The Lead Agency prepared environmental documents for the project, but the following conditions occur:
 - (A) A subsequent EIR is required pursuant to Section 15162,
 - (B) The Lead Agency has granted a final approval for the project, and
 - (C) The statute of limitations for challenging the Lead Agency's action under CEQA has expired.
- (3) The Lead Agency prepared inadequate environmental documents without consulting with the Responsible Agency as required by Sections 15072 or 15082, and the statute of limitations has expired for a challenge to the action of the appropriate Lead Agency.⁶⁸

When a Responsible Agency assumes the duties of a Lead Agency under Section 15052, the time limits applicable to a Lead Agency shall apply to the actions of the agency assuming the Lead Agency duties.⁶⁹

CEQA Guidelines Section 15162 provides that an EIR must be prepared following adoption of an EIR or a negative declaration when the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:

- (1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- (2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:
 - (A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
 - (B) Significant effects previously examined will be substantially more severe than shown in the previous EIR.

Here, substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement

⁶⁸ 14 CCR § 15052(a).

⁶⁹ *Id.* at § 15052(b).

of new significant environmental effects or a substantial increase in the severity of previously identified significant effects. As shown in these comments and in the expert consultant reports attached, Project emissions exceed those estimated in the MND, and exceed applicable Air District thresholds. Therefore, substantial evidence supports the conclusion that an EIR must be prepared for the Project.

As the Responsible Agency for this Project, the Air District is required to assume Lead Agency status when the Lead Agency prepared environmental documents for the project, but the following conditions occur:

- (A) A subsequent EIR is required pursuant to Section 15162,
- (B) The Lead Agency has granted a final approval for the project, and
- (C) The statute of limitations for challenging the Lead Agency's action under CEQA has expired.

Here, a subsequent EIR is required pursuant to CEQA Guidelines Section 15162 because the Project will result in substantial changes which will require major revisions of the MND due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects. The County Planning Commission granted a final approval for the Project by approving the MND on May 12, 2022.⁷⁰ The 30-day statute of limitations following the approval of the MND expired on June 13, 2022.

Dr. Fox concluded that the PM₁₀ emissions from the Project's Baghouses were not disclosed in the MND, and require mitigation to reduce their significant effect on the environment.⁷¹ Dr. Fox found that PM₁₀ emissions require preparation of EIR because monitoring is not required by the ATC Permit. Under SHAAQMD District Rule 2:11 testing is "voluntary" for facilities with emissions less than 25 ton/yr.⁷² The ATC Permit does not require any emission testing for PM₁₀ sources and would therefore allow emissions of PM₁₀ that would violate the 24-hour PM₁₀ ambient air quality standard of 50 µg/m³.⁷³ Dr. Fox concluded that this is a significant unmitigated impact requiring the preparation of an EIR.⁷⁴

Further, PM₁₀ impacts will be larger than estimated in the ATC Evaluation as the facility will also emit ammonia from the ammonia scrubber.⁷⁵ Ammonia,

⁷⁰ Shasta County Planning Commission Meeting, Approved Minutes (May 12, 2022), https://www.shastacounty.gov/sites/default/files/fileattachments/planning/page/4084/05_12_22_approved_minutes.pdf.

⁷¹ Fox Comments, p. 6.

⁷² *Id.*

⁷³ *Id.*

⁷⁴ *Id.*

⁷⁵ Supplemental Information, Project Report, p. 2-1.

SO₂, Nox, and VOCs are PM₁₀ precursors⁷⁶ and will increase ambient PM₁₀ concentrations above those estimated in the ATC Evaluation.⁷⁷

The ATC Permit does not include any limit on VOC or NO_x emissions from the dryers and does not require any VOC or NO_x ambient ozone monitoring.⁷⁸ VOC and NO_x emissions could be substantially higher and would not be detected as no monitoring is required.⁷⁹ Further, the SCAQMD VOC and NO_x significance thresholds do not assure that VOC and NO_x emissions will not result in significant ambient ozone impacts, for example, violate State and/or Federal 8-hour ozone ambient air quality standards.⁸⁰ Ambient air quality in Shasta County currently violates the California 8-hour ambient air quality standard on ozone.⁸¹ Thus, VOC and NO_x emissions from the Project's dryers would contribute to existing violations of the State 8-hour ozone standard in Shasta County, which is a significant air quality impact.⁸² Thus, the Air District should assume Lead Agency status, and reissue the MND to accurately calculate the Project's emissions and adequately mitigate such emissions through BACT.

VI. CONCLUSION

For the reasons discussed herein and in SAFER CA's prior comments and expert consultant reports, the ATC Permit was improperly issued by the APCO because the Project requires BACT for NO_x, SO₂, PM₁₀, and VOC emissions which exceed the District thresholds. Based on the significant environmental effects of the Project, and the MND's failure to mitigate them, the District also has a duty under CEQA to conduct additional environmental review and prepare an environmental review document for public review and circulation.

SAFER CA respectfully requests that the Hearing Board set a hearing on this Appeal, and issue an order rescinding the Project's ATC permit and requiring the Air District to prepare an EIR for the Project as the responsible agency pursuant to CEQA. The Air District must also revise the ATC permit to include

⁷⁶ U.S. EPA Memorandum from Scott Mathias and Richard Wayland to Regional Air Division Directors, Re: Fine Particulate Matter (PM_{2.5}) Precursor Demonstration Guidance, May 30, 2019; https://www.epa.gov/sites/default/files/2019-05/documents/transmittal_memo_and_pm25_precursor_demo_guidance_5_30_19.pdf.

⁷⁷ Fox Comments, p. 12.

⁷⁸ *Id.* at 17.

⁷⁹ *Id.*

⁸⁰ *Id.*

⁸¹ CARB, A2022 Area Designations for State Ambient Air Quality Standards, OZONE; https://ww2.arb.ca.gov/sites/default/files/2023-02/State_2022_O3.pdf.

⁸² Fox Comments, p. 17.

BACT as described herein. Petitioners reserve the right to supplement this Petition and Appeal.

Dated: April 25, 2023

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Attachments.