

Attachment 2

Full Email Correspondence with Petitioners
Strand, Simpson and Draisner

Appendix A

Correspondence with Petitioner Strand
(11 pages)



Re: My request for a hearing and full environmental review. Heidi Strand
R9AirPermits to: hswriter@frontiernet.net 09/17/2012 09:24 AM
Sent by: Omer Shalev

Dear Ms. Strand,

I am confirming receipt of your email, comments and request for a public hearing in regards to the Sierra Pacific Industries PSD permit modification application. The public comment period for this proposed permitting action concludes on October 17, 2012 and all comments received during the public comment period will be reviewed. For more information regarding EPA's proposed action regarding the Sierra Pacific Industries application, please visit <http://epa.gov/region9/air/permit/r9-permits-issued.html#pubcomment>. Thank you for your comments.

Sincerely,

Omer Shalev
Environmental Engineer
Air Permits Office (Air-3)
Environmental Protection Agency, Region 9
75 Hawthorne St.
San Francisco, CA 94105
(415) 972-3538

"hswriter@frontiernet.net"

Dear Mr. Shalev,

09/16/2012 03:35:54 PM

From: "hswriter@frontiernet.net" <hswriter@frontiernet.net>
To: R9AirPermits@EPA
Date: 09/16/2012 03:35 PM
Subject: My request for a hearing and full environmental review. Heidi Strand

Dear Mr. Shalev,

Please accept this email as my official request for a hearing regarding the PSD permit change for the proposed Sierra Pacific Cogeneration plant in Anderson, CA. Please enter my letter below into the public record.

Your acknowledgment of receipt of this email would be very much appreciated.

Respectfully,

Heidi Strand

September 16th 2012

Red Emmerson
Sierra Pacific Industries
19794 Riverside Ave
Anderson, CA 96007

Dear Mr. Emmerson,

Citizens for Clean Air received a public notice regarding the construction of a Cogeneration plant at

your Anderson facility.

Citizens for Clean Air participated in the Knauf Fiberglass PSD permitting process. The Environmental Appeals board of the EPA remanded Knauf's permit back to the Shasta County Air Quality Management Board because of it's lack of compliance with Environmental Justice guidelines.

These guidelines call for the permitting process in EJ communities to 'go above and beyond usual protocol to identify, involve and to help potentially effected communities from the very beginning of a project."

The public notice stated that Sierra Pacific's existing PSD permit needs a 'major modification' in order to be in compliance once a new plant is built. Clearly this proposed building is a major polluter and anything less than a new PSD permit for this plant is highly inadequate and in flagrant violation of the intent of Executive Order #12898.

Sincerely,

Heidi Strand, Co-chair
Citizens for Clean Air
Box 1544,
City of Shasta Lake, CA 96019

CC: Omer Shalev, Region 9 E.P.A. CC: Shasta Lake City Council

CC: Anderson City Council CC: Knauf Fiberglass, Shelbyville, In.

CC: Shasta County Board of Supervisors CC: Shawn Angoria, Record Searchlight



Re: My request for a hearing and full environmental review. ~Heidi Strand 
R9AirPermits to: hswriter@frontiernet.net 10/01/2012 03:19 PM
Sent by: Omer Shalev
Cc: Gerardo Rios, Kara Christenson

Dear Ms. Strand,

I am providing an update on your request for a public hearing in regards to the Prevention of Significant Deterioration major modification at the Sierra Pacific Industries- Anderson Division facility. EPA does not currently plan to hold a public hearing for this proposed action. As stated in the public notice for this proposed action, "pursuant to 40 CFR 124.12, EPA has discretion to hold a Public Hearing if we determine there is a significant amount of public interest in the proposed permit. Requests for a Public Hearing must state the nature of the issues proposed to be raised in the hearing." To date, EPA has not received a significant amount of public interest in this project or additional requests for a public hearing. Moreover, your request for a public hearing has not stated "the nature of the issues proposed to be raised in the hearing." If you still desire for EPA to hold a public hearing, you must state the issues that you intend to propose at the hearing, and we must receive indications that there is a significant amount of public interest. The public comment period for this proposed action is scheduled to end on October 17, 2012.

Thank you for your interest in the proposed permit action. If you have any questions or comments in regard to this action or email, please contact me at shalev.omer@epa.gov or (415) 972-3538, or my supervisor, Gerardo Rios, at rios.gerardo@epa.gov or (415) 972-3974.

Omer Shalev
Environmental Engineer
Air Permits Office (Air-3)
Environmental Protection Agency, Region 9
75 Hawthorne St.
San Francisco, CA 94105
(415) 972-3538



Fw: 2nd request for a hearing and full environmental review. ~Heidi Strand
R9AirPermits to: Omer Shalev 10/04/2012 02:46 PM
Sent by: Omer Shalev

— Forwarded by Omer Shalev/R9/USEPA/US on 10/04/2012 02:46 PM —

Subject: 2nd request for a hearing and full environmental review. ~Heidi Strand
From: "hswriter@frontiernet.net"
To: R9AirPermits
Date: 10/01/2012 08:04 PM

September 1st, 2012

Omer Shalev, Environmental Engineer, EPA Region 9

The threshold for public interest is lower in Environmental Justice Communities. Our organization only heard about this project on the day I originally wrote to you. Your agency needs to make a greater effort to comply with Executive order# . and enri Knauf

The issues our community wishes to raise are:

- 1) What methods of BACT (Best Available Control Technology) are being utilized by Sierra Pacific in the new construction of this Cogeneration plant?
- 2) Can you provide us with a discussion of the cumulative impacts of air, water and waste disposal methods proposed for this new project?
- 3) Can you provide any information regarding Sierra Pacific's environmental violations at their pre-existing Shasta County facilities and operations?
- 4) What are your agencies procedures for determining the threshold required to hold a public hearing?
- 5) Why doesn't EPA Region 9 require Sierra Pacific to secure a new PSD Permit for this new facility?

We deserve a public hearing. Anything less disenfranchises us from the public process.

Sincerely,

Heidi Strand, Co-coordinator
Citizens for Clean Air



Re: Fw: 2nd request for a hearing and full environmental review. ~Heidi Strand

Omer Shalev to: hswriter@frontiernet.net

10/04/2012 05:08 PM

Cc: Kara Christenson, Gerardo Rios

Bcc: Deldi Reyes, Jacquelyn Hayes, Ken Israels

Dear Ms. Strand,

Thank you again for your interest in EPA's proposed action for the Sierra Pacific Industries- Anderson Division project.. I encourage you to consult the *SPI-Anderson Fact Sheet AAQIR/ Fact Sheet*, available at <http://epa.gov/region9/air/permit/r9-permits-issued.html#pubcomment>, which explains the basis for the proposed permit under the Prevention of Significant Deterioration program. In particular, it discusses many of the concerns that you raise in your email regarding the project. I encourage you to submit written comments which must be received by EPA via e-mail by October 17, 2012, or postmarked by October 17, 2012. Comments or requests must be sent or delivered in writing to me at one of the following addresses:

E-mail: R9airpermits@epa.gov

U.S. Mail: Omer Shalev (AIR-3)
U.S. EPA Region 9
75 Hawthorne Street
San Francisco, CA 94105-3901
Phone: (415) 972-3538

Omer Shalev
Environmental Engineer
Air Permits Office (AIR-3)
Environmental Protection Agency, Region 9
75 Hawthorne St.
San Francisco, CA 94105
(415) 972-3538



Re: Fw: 2nd request for a hearing and full environmental review. ~Heidi Strand
hswriter@frontiernet.net

to:

Omer Shalev

10/04/2012 09:52 PM

Hide Details

From: "hswriter@frontiernet.net" <hswriter@frontiernet.net>

To: Omer Shalev/R9/USEPA/US@EPA,

Please respond to "hswriter@frontiernet.net" <hswriter@frontiernet.net>

History: This message has been replied to.

October 4, 2012

Dear Mr. Shalev,

You state that the fact sheet explains the basis for the proposed permit. But your agency is not proposing a permit. EPA Region 9 is proposing ALTERING AND OLD PERMIT THAT WAS ISSUED FOR A DIFFERENT BUILDING .

That appears to circumvent the entire PSD permitting process which was intended to give the public fair environmental review before a major pollution source is built. This is clearly in violation of the intent of Environmental Justice in which your agency is the lead federal agency.

Again I am requesting a public hearing.

Respectfully,

Heidi Strand, Co-coordinator
Citizens for Clean Air



Re: Fw: 2nd request for a hearing and full environmental review. ~Heidi Strand

Omer Shalev to: hswriter@frontiernet.net
Cc: Kara Christenson, Gerardo Rios

10/05/2012 10:06 AM

Dear Ms. Strand,

Please note that EPA's proposed action is for a PSD permit modification an additional cogeneration unit at an existing facility, Sierra Pacific Industries-Anderson Division. There is also a 6 megawatt cogeneration plant located adjacent to Sierra Pacific Industries- Anderson, near the northwest corner. It has come to my attention that this distinct facility has undergone some retrofitting and is currently undergoing start-up air emissions testing. An Authority to Construct Permit for this other facility, Anderson Plant, LLC (Kiara Solar), was issued by the Shasta County Air Quality Management District on October 1, 2010. For more information or questions regarding Anderson Plant, LLC (Kiara Solar), please contact the Shasta Air Quality Management District at (530) 225-5674.

I hope this clears up any possible confusion. EPA is still receiving comments regarding its proposed action for Sierra Pacific Industries- Anderson Division until the public comment period ends. Thank you for your comments.

Omer Shalev
Environmental Engineer
Air Permits Office (Air-3)
Environmental Protection Agency, Region 9
75 Hawthorne St.
San Francisco, CA 94105
(415) 972-3538



Re: Fw: 2nd request for a hearing and full environmental review. ~Heidi Strand
hswriter@frontiernet.net

to:

Omer Shalev

10/05/2012 10:39 AM

Hide Details

From: "hswriter@frontiernet.net" <hswriter@frontiernet.net>

To: Omer Shalev/R9/USEPA/US@EPA,

Please respond to "hswriter@frontiernet.net" <hswriter@frontiernet.net>

History: This message has been replied to.

Dear Mr. Shalev,

Thank you for your prompt responses.

I do not see the difference if Sierra Pacific builds a new cogeneration plant at an "existing facility" or somewhere else. It is still a *new* facility. Please explain why you are not requiring this new (and larger) plant to undergo the full PSD Permitting process.

Your agency has taken the authority away from Shasta County to issue PSD permits. So your agency is the correct entity to also ask if there are enough air pollution credits available in Shasta County to alter an existing PSD permit.

Sincerely,

Heidi Strand, co-coordinator
Citizens for clean Air

75 Hawu...



Re: Fw: 2nd request for a hearing and full environmental review. ~Heidi Strand

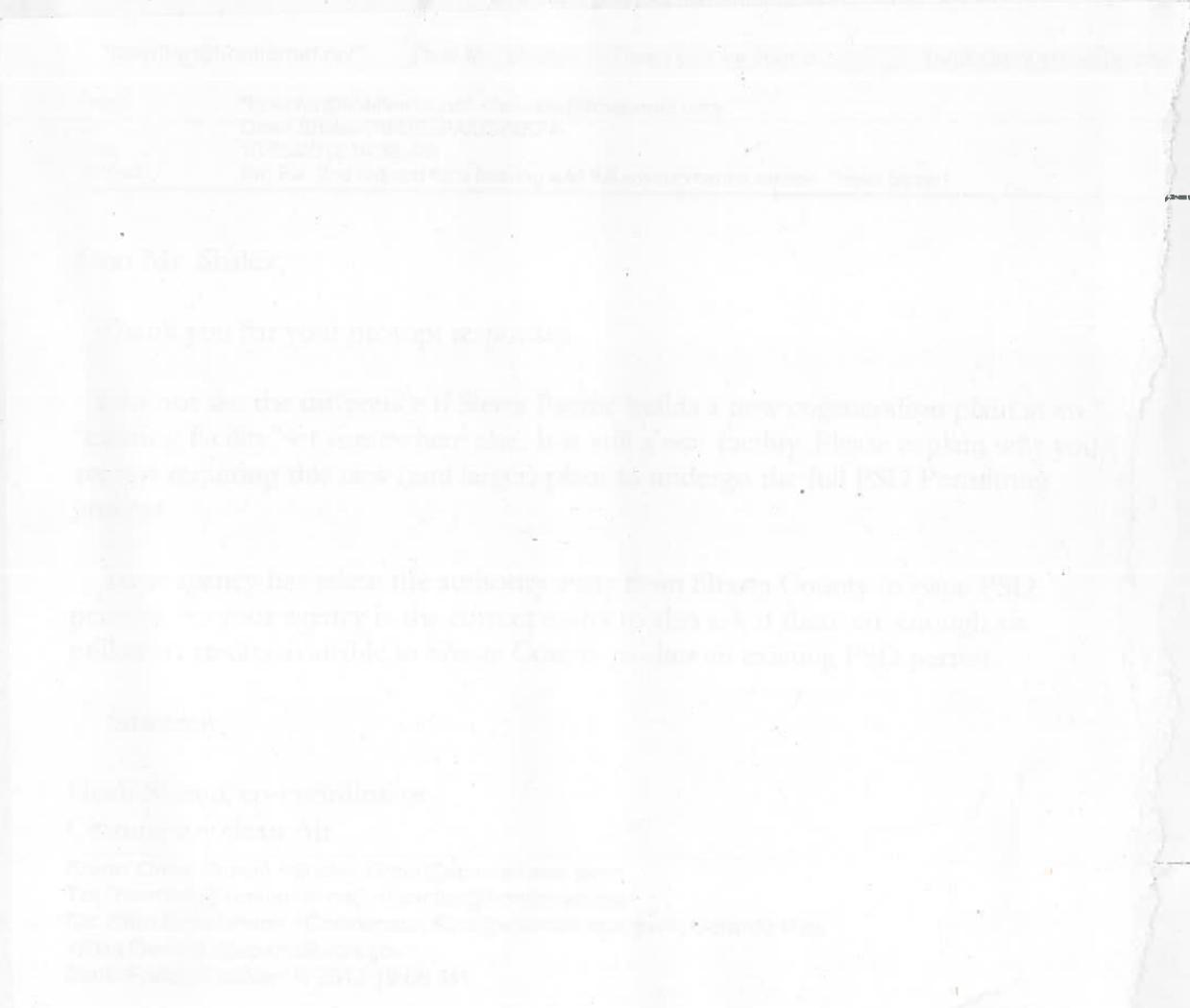
Omer Shalev to: hswriter@frontiernet.net

10/05/2012 02:27 PM

Dear Ms. Strand,

Thank you again for your interest. Please be sure to submit written comments regarding your concerns by the end of the public comment period on October 17, 2012.

Omer Shalev
Environmental Engineer
Air Permits Office (Air-3)
Environmental Protection Agency, Region 9
75 Hawthorne St.
San Francisco, CA 94105
(415) 972-3538





Please supply all information for filing an appeal to the EAB, especially the deadline.

hswriter@frontiernet.net to: Omer Shalev
Please respond to "hswriter@frontiernet.net"

10/06/2012 12:04 PM

History: This message has been replied to and forwarded.

Dear Mr. Shalev

What is the deadline for our appeal to the EAB?
Please provide all necessary information.

Sincerely,
Heidi Strand

From: Omer Shalev [mailto:hswriter@frontiernet.net]
To: Heidi Strand [mailto:hswriter@frontiernet.net]
Sent: Friday, October 5, 2012 12:04 PM
Subject: What is the deadline for our appeal to the EAB?

Xerox WorkCentre
On Demand Overwrite Configuration Report
Job Status: SUCCESS
11/27/2012 11:27:00 AM

Job Details
Job ID: 1127000001
Job Name: On Demand Overwrite Configuration Report
Job Status: SUCCESS
Job Start Time: 11/27/2012 11:27:00 AM
Job End Time: 11/27/2012 11:27:00 AM
Job Pages: 1
Job Size: 1000000
Job Location: Xerox WorkCentre
Job Operator: Heidi Strand

Job Details
Job ID: 1127000001
Job Name: On Demand Overwrite Configuration Report
Job Status: SUCCESS
Job Start Time: 11/27/2012 11:27:00 AM
Job End Time: 11/27/2012 11:27:00 AM
Job Pages: 1
Job Size: 1000000
Job Location: Xerox WorkCentre
Job Operator: Heidi Strand

Dear Mr. Shalev
Thank you for your reply.



Re: Please supply all information for filing an appeal to the EAB, especially the deadline.

Omer Shalev to: hswriter@frontiernet.net
Cc: Kara Christenson, Gerardo Rios

10/09/2012 01:38 PM

Dear Ms. Strand,

As set forth in the public notice for this proposed action, EPA's final permit decision may be appealed to EPA's Environmental Appeals Board (EAB) pursuant to 40 Code Federal Regulations (CFR) section 124.19. 40 CFR section 124.19 states:

Within 30 days after a ... PSD final permit decision ... has been issued under 40 CFR Part 124.15 of this part, any person who filed comments on that draft permit or participated in the public hearing may petition the Environmental Appeals Board to review any condition of the permit decision... Any person who failed to file comments or failed to participate in the public hearing on the draft permit may petition for administrative review only to the extent of the changes from the draft to the final permit decision. The 30-day period within which a person may request review under this section begins with the service of notice of the Regional Administrator's action unless a later date is specified in that notice. The petition shall include a statement of the reasons supporting that review, including a demonstration that any issues being raised were raised during the public comment period (including any public hearing) to the extent required by these regulations and when appropriate, a showing that the condition in question is based on:

- (1) A finding of fact or conclusion of law which is clearly erroneous, or
- (2) An exercise of discretion or an important policy consideration which the Environmental Appeals Board should, in its discretion, review.

Our public notice for this proposed action also explains that EPA will provide notice of the final permit decision to each person who has submitted written comments or requested notice of the final permit decision. Please note that the exact date of such notice is not known at this time because EPA must conclude the public comment process, including preparing a response to all timely and substantive public comments in a document that will accompany our final permit decision. Our public notice for this proposed action also states that EPA will accept public comments until October 17, 2012.

See 40 CFR Part 124 and visit <http://www.epa.gov/eab/> for information regarding the procedures for appeal of a PSD permit decision to the EAB. Please consult EPA's public notice for more information regarding submittal of public comments. A copy of our public notice is attached.



2012-10-12-public-notice-spi-anderson.pdf

Omer Shalev
Environmental Engineer

Appendix B

Correspondence with Petitioner Simpson
(7 pages)



Fw: Sierra Pacific Industries- Docket no. EPA-R09-OAR-2012-0634
R9AirPermits

to:
shalev.omer
09/26/2012 02:13 PM

Sent by:
Omer Shalev
Hide Details

From: R9AirPermits
To: shalev.omer@epa.gov,
Sent by: Omer Shalev/R9/USEPA/US
History: This message has been replied to.

----- Forwarded by Omer Shalev/R9/USEPA/US on 09/26/2012 02:12 PM -----

From: <rob@redwoodrob.com>
To: R9AirPermits@EPA
Date: 09/26/2012 11:09 AM
Subject: Sierra Pacific Industries- Docket no. EPA-R09-OAR-2012-0634

Sierra Pacific Industries- Anderson Division
Anderson, CA
Docket no. [EPA-R09-OAR-2012-0634](#)

Hi,

I am preparing to comment on the above referenced permit. I wish to contact the applicant but could not find a contact person in the record. Could you direct me to a contact person. Can you extend the comment period? This is the first such facility that I will comment on and it appears that there is more information on the docket than I could possibly review and comment about in the time allotted. Also there appears to be several applications, which would be the one considered?

Thank you

Rob Simpson
Executive Director
Helping Hand Tools (2HT)



Request for information and extension of comment period for SPI- Anderson

Elizabeth Adams to: rob

09/28/2012 12:28 PM

Cc: Gerardo Rios, Omer Shalev, Kara Christenson, Kerry Drake

Dear Mr. Simpson,

We received your questions regarding the proposed PSD permit modification for SPI- Anderson. Let me first address your request for a public comment period extension. In order for EPA to extend the public comment period beyond the currently scheduled end date of October 17, 2012, a commenter must adequately justify why additional time is required in order to comment on the proposed action. While your request states that there are many documents to review, the number of documents for this project is no different than any other project, and you have not demonstrated why there would be a significantly greater burden to review the documents for this project. Thus, we do not plan to extend the public comment period at this time.

You also asked about the location of the applicants' contact information. The contact information for the applicant can be found in the online Docket no. EPA-R09-OAR-2012-0634. For example, "I.20 SPI-Anderson to EPA perceived permit timeline 10JUN10" contains the relevant information you are seeking. You may want to contact David Brown, Environmental Affairs and Compliance Manager, (530) 378-8179, DBrown@spi-ind.com.

Finally, regarding the application materials, they can be found in the online Docket no. EPA-R09-OAR-2012-0634. The majority of the application information can be found in I.01, but additional important materials are also included in I.03, I.05, I.07, I.08, I.25, I.31, I.33, I.34. Document I.08 contains a Greenhouse Gas emissions estimate and discussion. The other items listed above contain additional emissions estimates, modeling information and other relevant material.

Thank you for your interest in EPA's proposed action. I hope you find this information useful.

Sincerely,

Elizabeth J. Adams

Elizabeth J. Adams
Deputy Director Air Division
US EPA Region 9
telephone: (415) 972-3183
cell: (415) 297-4308
fax: (415) 947-3579



Comments SPI APPLICATION NO. SAC 12-01

rob

to:

R9AirPermits

10/17/2012 11:40 AM

Hide Details

From: <rob@redwoodrob.com>

To: R9AirPermits@EPA,

History: This message has been forwarded.

1 Attachment



SPI Rob Simpson comments PSD.docx

Thank you for consideration of my attached comments on the SIERRA PACIFIC INDUSTRIES - ANDERSON DIVISION PROPOSED CLEAN AIR ACT PREVENTION OF SIGNIFICANT DETERIORATION PERMIT PERMIT APPLICATION NO. SAC 12-01

Rob Simpson
27126 Grandview Avenue Hayward CA.
94542

Rob Simpson comments on;

PROPOSED PREVENTION OF SIGNIFICANT DETERIORATION PERMIT SPI - Anderson

For the forgoing reasons I request a public Hearing and extension of the public comment period. The record is too extensive to review in the allotted time period. The following clear errors are evident in the administrative record for this proceeding;

The Modification fails to consider

A No or reduced project alternative. The facility apparently requires 7 of the 23 megawatts electricity that it can generate. No state authority has, or is, required to make a determination of if this electricity, in this location, is beneficial to the system. The project will interfere with the development of superior solar and wind alternatives which would have created more jobs and a cleaner environment than this project. Clearly appropriately sized equipment 7/23 of the size of this one would result in reduced emissions.

Since it is gas and wood burning proposal; the fuel mix should be considered in BACT analysis. The BACT analysis fails to consider a different fuel mix. Increased gas use can raise the temperature and reduce emissions through more complete ignition. While the below discussion deals with GHG it should hold true for each pollutant.

In addition, EPA has observed that the application of methods, systems, or techniques to increase energy efficiency is a key GHG-reducing opportunity that falls under the category of “lower-polluting processes/practices.” Use of inherently lower-emitting technologies, including energy efficiency measures, represents an opportunity for GHG reductions in these BACT reviews. EPA has encouraged permitting authorities to use the discretion available under the PSD program to include the most energy efficient options in BACT analyses for both GHG and other regulated New Source Review (NSR) pollutants...

“energy efficient measures may serve as the foundation for a BACT analysis...For facilities that are co-firing biomass with a primary fuel, the permitting record should provide a reasoned justification for basing BACT for greenhouse gases on a specific proportional allocation of fuels...See, In re: Northern Michigan University Ripley Heating Plant. PSD Appeal No. 08-02, Slip. Op at 18-23, 28 (EAB 2009) (remanding a permit for a co-fired electric generating facility where record did not contain justification for establishing BACT limits based on specific proportional allocation of wood and coal)...In cases where a permit applicant proposes to co-fire or combine biomass fuels with another primary fuel type, the list of BACT options should include the option of utilizing both types of primary fuels in different combinations. If the applicant proposes a specific proportional allocation or fuel mix (i.e., <5 percent biomass, >95 percent fossil fuel) and believes other allocations should be eliminated from consideration in the BACT analysis for GHGs, the permit application should provide an explanation as to why the particular allocation desired by the applicant is necessary to achieve a fundamental business objective of the project. If the permit applicant is unable to demonstrate that a different allocation of primary fuels would fundamentally redefine the proposed source, the options at Step 1 should

include varying allocations of the two primary fuels if the proportional allocation of fuels has the potential to affect the amount of GHGs emitted from the facility or the net atmospheric GHG concentrations.” <http://www.epa.gov/nsr/ghgdocs/bioenergyguidance.pdf>

A solar component should be considered in the BACT analysis. A solar component would reduce all emissions by preheating the system or augmenting the electrical output. Solar energy is an inherently lower emitting, add on control technology.

The BACT analysis fails to adequately consider energy efficiency options. There should be no need for cooling towers and their associated emissions to dissipate heat. The heat should be used in the existing Kiln or in a new Kiln or pre heater to warm the material before it enters the full temperature Kiln. The Permit should consider the existing Kiln as permitted equipment in context of this modification and the Kiln should be required to undertake a BACT analysis. The insulation, operation and even color of the Kiln will have an effect on its efficiency in reducing use of the associated emissions units.

A new cogeneration unit equipped with a stoker boiler is being proposed in order to burn additional clean cellulosic biomass fuel. Fuel will be generated on site from the lumber operations and delivered from other fuel sources to produce roughly 250,000 pounds per hour of steam. This steam be used to dry lumber in existing kilns for the lumber operation, as well as feed a turbine that will drive a generator to produce electricity for use on site or for sale to the electrical grid. A closed-loop two-cell cooling tower will be used to dispose of waste heat from the steam turbine. 4

EPA notes that energy efficiency is an option for inclusion in the set of control options in the BACT analysis at Step 1 for all facilities. EPA agrees that this should become standard practice for all facilities, and notes that the Bioenergy BACT Guidance does not intend to remove energy efficiency as a control option for bioenergy facilities. http://www.epa.gov/nsr/documents/RTC_6-30_final_comb.pdf

The permit should identify the existing equipment and require its retirement. The administrative record demonstrates that the permit should at least require that the existing emissions units do not operate concurrently with the new units. The EPA has no authority to modify the underlying State permit.

Handling and transport emissions. The analysis fails to consider the, perhaps collateral, emissions associated with the, primarily diesel powered, collection transport and on site handling of biomass. A permit condition should require that all associated equipment operates on Methane gas, or biomass power.

The analysis fails to consider increased kiln emissions and other operational emission increases. Kiln and other facility emissions should be considered prior to final circulation of a draft permit.

The project should be based upon a Comparison to the actual baseline instead of prior permit levels.

The air quality monitoring station, 50 miles from the site fails to represent conditions in the projects impact area. The EPA should require one year of local monitoring prior to consideration of a permit request.

EJ The EPA failed to identify the environmental Justice community in the vicinity of the proposed project. This should be the first step in an EJ analysis in order for the EPA to conduct outreach and identify any stressors. It is inadequate for the EPA to skip this step and simply claim no harm to any potential community without notification. The EPA failed to issue a notice in Spanish.

Public notice participation The EPA failed to demonstrate that it notified participants in the State action(s) about this proposed permit. The EPA failed to demonstrate that it provided Notice to the appropriate elected officials. The EPA should reissue a Public Notice to the appropriate elected officials and members of the public who have expressed an interest in this project and other projects in the area. The public Notice fails to disclose any effect on air quality. A new notice should demonstrate the projects effects in relationship to the National Ambient Air Quality Standards or at least in gross pollutant weights. The Notice fails to alert the public of a reason to participate.

The analysis is misleading because it does not disclose that the project intends to burn “urban wood” or post-consumer wood which would be more appropriately burned with a DLN Burner

“In addition, there are 50,000 BDT of agricultural and urban wood wastes available to SPI annually.” Application

DLN Burner

With two or more DLN burners, the biomass combustion fuel would need to be pulverized and burned in suspension using wall-mounted burners. This presents a significant departure from SPI’s proposed boiler design where combustion occurs on a moving grate. DLN burners are designed to limit the amount of fuel-bound nitrogen that is converted to NOx during combustion, and are generally suited to boilers that burn wood waste containing a high percentage of resins, such as the waste from medium density fiberboard, plywood, or veneer operations. The emission rate with DLN burners is projected to be 0.35 lb/MMBtu.

The permit fails to require appropriate Ash bunker waste disposal. It does little good if the ash is collected and then left to blow away into the air or contaminate some other resource.

EMX, SCR and Urea should be required.

Consideration of the McNeil facility are entirely speculative. If the project is to be excused from the BACT demonstrated at McNeil than additional analysis is required

Although the McNeil Generating Station has demonstrated a lower NOx emission limit on a calendar quarterly basis, it has a short term NOx emission limit of 0.23 lb/MMBtu. Moreover,

the possible economic incentives of the Class 1 Renewable Energy Credits in New England are difficult to quantify and not available to SPI- Anderson. This may allow SCR system to be more economically feasible for McNeil Generating Station and other proposed systems in the New England area than for SPI- Anderson in California.

EPA does not anticipate additional significant environmental or energy impacts from employing the SNCR or SCR technology. Both systems use ammonia as a reagent: anhydrous ammonia, aqueous ammonia, or urea mixed with water (which hydrolyzes in the hot exhaust to form ammonia). In the case of aqueous ammonia or urea mixed with water, additional fuel must be combusted to evaporate the water associated with the reagent. Moreover, energy is required to operate the injectors used by either technology to introduce the reagent into the exhaust. With either technology, the exhaust leaving the boiler stack will contain some small quantity of ammonia.

The PSD increment trigger date should have been when the original permit was issued.

“With respect to the PSD increment analysis for PM_{2.5}, the applicable trigger date when the PM_{2.5} increments become effective under the Federal PSD program is October 20, 2011. The SPI- Anderson PSD permit application was determined to be administratively complete by EPA on October 4, 2010. However, EPA is requiring each source that receives its PSD permit after the trigger date, regardless of when the application was submitted, to provide a demonstration that the proposed emissions increase, along with other increment consuming emissions will not cause or contribute to a violation of the PM_{2.5} increments. Also the major source baseline, which precedes the trigger date is the date after which actual emissions increases associated with construction at any major stationary source consume PSD increment. That date is October 20, 2010. With this PSD permit, SPI-Anderson would begin construction after this date. In general, for PM_{2.5}, the minor source baseline date is the earliest date after the trigger date of a complete PSD permit application for a source with a proposed increase in emissions of PM_{2.5} that is significant. No source has triggered the minor source baseline date in the area at issue. Other than SPI- Anderson’s projected construction emissions, there have been no actual emissions changes of PM_{2.5} from any new or modified major stationary source on which construction commenced after October 20, 2010. Therefore, the only source to consume PM_{2.5} increment in the area is SPI- Anderson. The applicant considered only the allowable emissions increase from the SPI- Anderson project in the 24-hour PM_{2.5} increment analysis”³³

The analysis must demonstrate the Nitrogen and other pollutant deposition on the adjacent Elderberry plants

SPI has confirmed that construction activities will not occur within 100 feet of the elderberry shrubs that are in the Pacific Gas and Electric power line Right of Way. The nearest construction activity to the existing elderberry plants will be the erection of the electrical power poles at the existing electrical sub-station which are 137 feet away from the nearest elderberry shrub. 45 Rob Simpson 27126 Grandview Avenue Hayward CA. 94542 Rob@redwoodrob.com

Appendix C

Correspondence with Petitioner Draisner
(15 pages)



Public Comments Regarding Sierra Pacific Industries PSD permit modification (code: Shasta 123)

Rose Flame

to:

Omer Shalev

10/17/2012 06:27 PM

Cc:

Heidi Strand, Eric Cassano, Adam Fieseler, Bill Walker, "Ed Smith & Virginia Phelps", Angelique Salzmann, Alayna Shulman, Gerardo Rios

Hide Details

From: Rose Flame <mysecretfires@gmail.com> Sort List...

To: Omer Shalev/R9/USEPA/US@EPA,

Cc: Heidi Strand <hswriter@frontiernet.net>, Eric Cassano <ecassano@shastalake.com>, Adam Fieseler <afieseler@co.shasta.ca.us>, Bill Walker <bwalker@co.shasta.ca.us>, "Ed Smith & Virginia Phelps" <ednva@frontiernet.net>, Angelique Salzmann <asalzmann@me.com>, Alayna Shulman <ashulman@redding.com>, Gerardo Rios/R9/USEPA/US@EPA

Omer Shalev
Environmental Engineer
Air Permits Office (Air-3)
Environmental Protection Agency, Region 9
75 Hawthorne St.
San Francisco, CA 94105

[415-972-3538](tel:415-972-3538)

Dear Presiding Officer Omer Shalev,

I am disappointed in EPA Region 9's decision to not address BACT (Best Available Control Technology) seriously.

1. What specific and actual examples of filtering technology are being provided by EPA Region 9 in their "fact sheet"?

SPI-Anderson Fact Sheet AAQIR/ Fact Sheet, available at: <http://epa.gov/region9/air/permit/r9-permits-issued.html#pubcomment>

2. Are wet electrostatic precipitators (WESP or wet ESP) being considered for use at the proposed Anderson manufacturing facility? A WESP operates with saturated air streams (100% relative humidity). WESPs are commonly used to remove liquid droplets such as sulfuric acid mist from industrial process gas streams. The WESP is also commonly used where the gases are high in moisture content, contain combustible particulate, or have particles that are sticky in nature.

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the downflow tubular design be utilized here?

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5. ESPs continue to be excellent devices for control of many industrial particulate emissions, including smoke from electricity-generating utilities (coal and oil fired), salt cake collection from black liquor boilers in pulp mills, and catalyst collection from fluidized bed catalytic cracker units in oil refineries to name a few. These devices treat gas volumes from several hundred thousand ACFM to 2.5 million ACFM (1,180 m³/s) in the largest coal-fired boiler applications. For a coal-fired boiler the collection is usually performed downstream of the air preheater at about 160 °C (320 deg.F) which provides optimal resistivity of the coal-ash particles. For some difficult applications with low-sulfur fuel hot-end units have been built operating above 371 °C (700 deg.F).

6. The original parallel plate-weighted wire design has evolved as more efficient (and robust) discharge electrode designs were developed, today focusing on rigid (pipe-frame) discharge electrodes to which many sharpened spikes are attached (barbed wire), maximizing corona production. Transformer-rectifier systems apply voltages of 50 – 100 kV at relatively high current densities. Modern controls, such as an automation voltage control, minimize electric sparking and prevent arcing (sparks are quenched within 1/2 cycle of the TR set), avoiding damage to the components. Automatic plate-rapping systems and hopper-evacuation systems remove the collected particulate matter while on line, theoretically allowing ESPs to stay in operation for years at a time. Which of these BACT methods, procedures and determinations have you, as the EPA Region 9 Presiding Officer, considered?

7. Please provide and describe what tests have been conducted to determine resistivity under the previous Sierra Pacific permit and how that would apply to this “modified PSD permit.” A widely taught concept to calculate the collection efficiency is the Deutsch model, which assumes infinite remixing of the particles perpendicular to the gas stream. Was the Deutsch model used here, as part of your agency’s BACT analysis? (Resistivity can be determined as a function of temperature in accordance with IEEE Standard 548. This test is conducted in an air environment containing a specified moisture concentration. The test is run as a function of ascending or descending temperature or both. Data are acquired using an average ash layer electric field of 4 kV/cm. Since relatively low applied voltage is used and no sulfuric acid vapor is present in the environment, the values obtained indicate the maximum ash resistivity.)

8. Ideally, BACT considers energy, environmental, and economic impact. How specifically are these issues being addressed by EPA Region 9?

9. BACT can be add-on control equipment or modification of the production processes or methods. Were any add-ons to the previous factory, under this permit, looked at? Were any add-ons used?

10. BACT includes fuel cleaning or treatment and innovative fuel combustion techniques. BACT may also be a design, equipment, work practice, or operational standard, if imposition of an emissions standard is infeasible. Were any of the above items and conditions considered in your BACT determination?

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13. The baseline concentration is defined for each pollutant and, in general, is the ambient concentration existing at the time that the first complete PSD permit application affecting the area is submitted. Significant deterioration is said to occur when the amount of new pollution would exceed the applicable PSD increment. It is important to note, however, that the air quality cannot deteriorate beyond the concentration allowed by the applicable NAAQS, even if not all of the PSD increment is consumed. Will significant deterioration be the case here? How were ambient concentrations determined at this proposed facility?

I hope that these questions will be addressed by EPA Region 9. The health and welfare of real people will be affected by the decisions you and your agency make.

Sincerely,

Celeste Draisner

[\(530\)921-0272](tel:(530)921-0272)

Shalev, Omer

From: Rose Flame [mysecretfires@gmail.com]
Sent: Friday, February 22, 2013 10:48 PM
To: Shalev, Omer
Subject: Re: Public Comments Regarding Sierra Pacific Industries PSD permit modification (code: Shasta 123)

Dear Omer Shalev,

I have reviewed the permit, all public comments and EPA's responses to the public comments online at: www.regulations.gov (Docket ID # EPA-R09-OAR-2012-0634).

I could not find my own comments.

Why is this? Did I not look in the correct place?

Included is a copy of my original email.

Thank you,

Celeste Draisner

On Wed, Oct 17, 2012 at 6:27 PM, Rose Flame <mysecretfires@gmail.com> wrote:

Omer Shalev
Environmental Engineer
Air Permits Office (Air-3)
Environmental Protection Agency, Region 9
75 Hawthorne St.
San Francisco, CA 94105

[415-972-3538](tel:415-972-3538)

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I am disappointed in EPA Region 9's decision to not address BACT (Best Available Control Technology) seriously.

1. What specific and actual examples of filtering technology are being provided by EPA Region 9 in their "fact sheet"?

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Shalev, Omer

From: Shalev, Omer
Sent: Tuesday, February 26, 2013 5:55 PM
To: 'Rose Flame'
Cc: Rios, Gerardo; CHRISTENSEN, KARA
Subject: RE: Public Comments Regarding Sierra Pacific Industries PSD permit modification (code: Shasta 123)

Dear Ms. Draisner,

I am responding to confirm receipt of your email dated February 22, 2013. We are currently looking into this matter and will respond to you shortly.

Omer Shalev
Environmental Engineer
Air Permits Office (Air-3)
Environmental Protection Agency, Region 9
75 Hawthorne St.
San Francisco, CA 94105
(415) 972-3538

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Shalev, Omer

From: Rose Flame [mysecretfires@gmail.com]
Sent: Wednesday, February 27, 2013 11:19 AM
To: Shalev, Omer
Subject: Re: Public Comments Regarding Sierra Pacific Industries PSD permit modification (code: Shasta 123)

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Thank you,

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Shalev, Omer

From: Shalev, Omer
Sent: Monday, March 04, 2013 2:14 PM
To: 'Rose Flame'
Subject: RE: Public Comments Regarding Sierra Pacific Industries PSD permit modification (code: Shasta 123)

Dear Ms. Draisner,

I am preparing a response to your email. I would like to mail and email our response to you. Can you please provide a physical address where we can mail our response? Thank you for your patience and understanding.

Omer Shalev
Environmental Engineer
Air Permits Office (Air-3)
Environmental Protection Agency, Region 9
75 Hawthorne St.
San Francisco, CA 94105
(415) 972-3538

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Air Permits Office (Air-3)
Environmental Protection Agency, Region 9
75 Hawthorne St.
San Francisco, CA 94105

Shalev, Omer

From: Shalev, Omer
Sent: Wednesday, March 06, 2013 5:25 PM
To: 'Rose Flame'
Cc: Rios, Gerardo
Subject: USEPA Region 9- Response to Comments Submitted by Ms. Celeste Draisner for PSD Permit SAC 12-01
Attachments: Response to Comments submitted by Celeste Draisner_06MAR13.pdf

Dear Ms. Draisner:

I am responding to your email sent to Omer Shalev and received on Friday, February 22, 2013, inquiring about comments you submitted regarding the U.S. Environmental Protection Agency's Prevention of Significant Deterioration (PSD) permit (PSD permit # SAC 12-01). The PSD permit applies to the approval to construct and operate a new stoker boiler capable of generating 31 MW of gross electrical output from the combustion of biomass and natural gas, and related auxiliary equipment (Project), at Sierra Pacific Industries' Anderson, California facility. Thank you for your interest in this PSD permit action and for your efforts in preparing a submittal.

We could not find your submittal among the comments received at either of the two locations specified in the public notice for our proposed permit. Our September 12, 2012 public notice stated that all written comments and requests on EPA's proposed action "must be sent or delivered in writing to Omer Shalev" either by email to R9airpermits@epa.gov or by U.S. mail at the EPA's offices at 75 Hawthorne Street in San Francisco. The AAQIR/Fact Sheet that you reference in your comments also states on page 46 that all written comments and requests on the EPA's proposed action "must be sent or delivered in writing to Omer Shalev" either by email to R9airpermits@epa.gov or by U.S. mail at the EPA's offices at 75 Hawthorne Street in San Francisco.

When EPA staff could not find your submittal, they checked individual email accounts and found your comments in Omer Shalev's individual email account. This account was not the correct address for submitting email comments regarding the EPA's PSD permit for the Project; therefore, your comments were not identified or recognized as formal comments and were not included in the Responses to Public Comments document for the Project.

Nevertheless, the EPA would like to acknowledge your interest in the PSD permit for SPI-Anderson. We are therefore providing the following responses to your questions in the attachment to this email. To a large extent, we believe that your comments were addressed by the EPA's Ambient Air Quality Impacts Report (AAQIR) or were similar to comments the EPA received from other commenters. We hope that you will find these responses helpful in addressing your concerns regarding the Project. We will be including your comments and our responses in the online docket for this action under the heading of "Post Final Decision Material Not Included in the Administrative Record." This material is accessible through a link on our website, www.epa.gov/region09/air/permit/r9-permits-issued.html#psd, or at www.regulations.gov (Docket ID # EPA-R09-OAR-2012-0634).



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street

San Francisco, CA 94105-3901

MAR 06 2013

Ms. Celeste Draisner
1000 Shepard Court
Redding, California 96002
via email to: Rose Flame [mysecretfires@gmail.com]

Dear Ms. Draisner:

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If you have any questions regarding this matter, please contact Omer Shalev of the EPA's Region 9 Permits Office at (415) 972-3538 or Gerardo Rios, the EPA's Region 9 Permits Office Chief, at (415) 972-3974.

Sincerely,



Deborah Jordan
Director, Air Division

Enclosure

**Enclosure: U.S. Environmental Protection Agency's Response to Comments
Submitted by Ms. Celeste Draisner
Regarding PSD Permit #SAC 12-01 for Sierra Pacific Industries- Anderson Division**

1. **Comment:** I am disappointed in EPA Region 9's decision to not address BACT (Best Available Control Technology) seriously. What specific and actual examples of filtering technology are being provided by EPA Region 9 in their "fact sheet"? SPI-Anderson Fact Sheet AAQIR/ Fact Sheet, available at: <http://epa.gov/region9/air/permit/r9-permits-issued.html#pubcomment>

Response: To the extent your reference to "filtering technology" refers to the application of BACT for PM emissions from the Project, the AAQIR and response to comments contained a detailed BACT analysis for PM from each emissions unit in the Project. Pages 19-22 of the AAQIR discuss BACT for PM, PM₁₀ and PM_{2.5} from the stoker boiler in the Project. Pages 24-26 of the AAQIR discuss BACT for PM, PM₁₀ and PM_{2.5} from the cooling tower. Pages 51-53 of the Response to Comments document (RTC) discusses BACT for PM, PM₁₀ and PM_{2.5} from the emergency engine. We concluded that BACT for the stoker boiler to perform this operation is 0.02 lb/MMBtu (3-hour block average) using a multiclone and ESP during normal operation. This emissions limit is in conjunction with a lb/hr mass emission rate limit of 9.4 lb/hr (3-hour block average) during normal operations. BACT during periods of startup and shutdown, during which the ESP will be required to be in operation, is 8.93 lbs/hr (24-hour average).

2. **Comment:** Are wet electrostatic precipitators (WESP or wet ESP) being considered for use at the proposed Anderson manufacturing facility? A WESP operates with saturated air streams (100% relative humidity). WESPs are commonly used to remove liquid droplets such as sulfuric acid mist from industrial process gas streams. The WESP is also commonly used where the gases are high in moisture content, contain combustible particulate, or have particles that are sticky in nature.

Response: The AAQIR discusses BACT for PM, PM₁₀ and PM_{2.5} from the stoker boiler in the Project on pages 19-22. As stated on page 20 of the AAQIR, "[t]he applicant has proposed a total PM, including filterable and condensable particulate, emission limit of 0.02 lb/MMBtu (3 hour block average) utilizing an ESP preceded by a multiclone. SPI has proposed the most stringent PM, PM₁₀, and PM_{2.5} emission limit of biomass stoker boilers that have constructed." We concluded that BACT for PM, PM₁₀ and PM_{2.5} for the stoker boiler to perform this operation is 0.02 lb/MMBtu (3-hour block average) using a multiclone and ESP. See page 21 of the AAQIR.

Section 169(3) of the Clean Air Act defines BACT as an emission limitation, not a control technology. Therefore, our BACT analysis for PM, PM₁₀, PM_{2.5} does not differentiate between wet ESP and ESP. We will note, however, that wet ESPs are not typically used for this type of application. As noted by your comment, wet ESPs are used in situations for which dry ESPs are not suited, such as when the material to be collected is wet, sticky, flammable, explosive, or has a high resistivity.

3. **Comment:** The preferred and most modern type of WESP is a downflow tubular design. This design allows the collected moisture and particulate to form a slurry that helps to keep the collection surfaces clean. Will the downflow tubular design be utilized here?

Response: As we explained in answer to #2 above, SPI proposed the most stringent PM, PM₁₀, and PM_{2.5} emission limit for biomass stoker boilers that have been constructed, and EPA concluded that BACT for PM, PM₁₀ and PM_{2.5} for the stoker boiler is 0.02 lb/MMBtu (3-hour block average) using a multiclone and ESP. Section 169(3) of the Clean Air Act defines BACT as an emission limitation, not a control technology. Therefore, our BACT analyses for PM, PM₁₀, PM_{2.5} did not differentiate between different types of ESP technologies.

4. **Comment:** Plate style and upflow design WESPs are very unreliable and should not be used in applications where particulate is sticky in nature. Are the particulates at the proposed Anderson facility of a type that could be effectively filtered out by a plate style and unflow design?

Response: See answers to #2 and #3 above.

5. **Comment:** ESPs continue to be excellent devices for control of many industrial particulate emissions, including smoke from electricity-generating utilities (coal and oil fired), salt cake collection from black liquor boilers in pulp mills, and catalyst collection from fluidized bed catalytic cracker units in oil refineries to name a few. These devices treat gas volumes from several hundred thousand ACFM to 2.5 million ACFM (1,180 m³/s) in the largest coal-fired boiler applications. For a coal-fired boiler the collection is usually performed downstream of the air preheater at about 160 °C (320 deg.F) which provides optimal resistivity of the coal-ash particles. For some difficult applications with low-sulfur fuel hot-end units have been built operating above 371 °C (700 deg.F).

Response: Thank you for providing additional information. We do not interpret this comment as requesting a response.

6. **Comment:** The original parallel plate-weighted wire design has evolved as more efficient (and robust) discharge electrode designs were developed, today focusing on rigid (pipe-frame) discharge electrodes to which many sharpened spikes are attached (barbed wire), maximizing corona production. Transformer-rectifier systems apply voltages of 50 – 100 kV at relatively high current densities. Modern controls, such as an automation voltage control, minimize electric sparking and prevent arcing (sparks are quenched within 1/2 cycle of the TR set), avoiding damage to the components. Automatic plate-rapping systems and hopper-evacuation systems remove the collected particulate matter while on line, theoretically allowing ESPs to stay in operation for years at a time. Which of these BACT methods, procedures and determinations have you, as the EPA Region 9 Presiding Officer, considered?

Response: See answers to #2 and #3 above.

7. **Comment:** Please provide and describe what tests have been conducted to determine resistivity under the previous Sierra Pacific permit and how that would apply to this “modified PSD permit.” A widely taught concept to calculate the collection efficiency is the Deutsch model, which assumes infinite remixing of the particles perpendicular to the gas stream. Was the Deutsch model used here, as part of your agency’s BACT analysis? (Resistivity can be determined as a function of temperature in accordance with IEEE Standard 548. This test is conducted in an air environment containing a specified moisture concentration. The test is run as a function of ascending or descending temperature or both. Data are acquired using an average

ash layer electric field of 4 kV/cm. Since relatively low applied voltage is used and no sulfuric acid vapor is present in the environment, the values obtained indicate the maximum ash resistivity.)

Response: *Condition XI.2.c.* of the EPA's final permit requires annual PM₁₀ performance tests for the new stoker boiler (UI). *Condition XI.1* specifies the EPA test methods required for these tests. These EPA test methods along with monitoring, recordkeeping, reporting requirements in the final permit will ensure compliance with our BACT determination for the new stoker boiler. Resistivity may be an indicator of ESP performance; however, the EPA's permit requires actual emissions testing to directly quantify emissions.

8. **Comment:** Ideally, BACT considers energy, environmental, and economic impact. How specifically are these issues being addressed by EPA Region 9?

Response: The EPA considered energy, environmental and economic impacts in its BACT analyses for each emissions unit included in the Project. See pages 15-16, 18, 21 and 26 of the AAQIR, also responses to comments #15, 33 and 49, and page 52 of the RTC document.

9. **Comment:** BACT can be add-on control equipment or modification of the production processes or methods. Were any add-ons to the previous factory, under this permit, looked at? Were any add-ons used?

Response: The Project involves the construction of new equipment at the existing SPI-Anderson facility, including a new stoker boiler equipped with a selective non-catalytic reduction (SNCR) system to control NO_x emissions and a multiclone and ESP to control PM emissions. The Project also includes a new cooling tower, and a new emergency engine.

The EPA's Prevention of Significant Deterioration requirements for BACT apply to the Project for nitrogen dioxide (NO₂), carbon monoxide (CO), particulate matter (PM), PM less than 10 microns in diameter (PM₁₀), and PM less than 2.5 microns in diameter (PM_{2.5}). See Table 6-1 of the AAQIR.

The facility's existing equipment is permitted by the Shasta County Air Quality Management District. Our BACT analyses for NO_x, CO, and PM for the Project considered many recent BACT determinations made by different state agencies nationwide. We consider these recent BACT determinations to be more relevant to our PSD permit than the permits issued by Shasta County Air Quality Management District for the existing equipment. Please refer to AAQIR Tables 7.1-1, 7.1-3 and 7.1-5 for comparisons of similar units for various pollutants. In addition, please see our response to comments #16 and 54 of the RTC document.

10. **Comment:** BACT includes fuel cleaning or treatment and innovative fuel combustion techniques. BACT may also be a design, equipment, work practice, or operational standard, if imposition of an emissions standard is infeasible. Were any of the above items and conditions considered in your BACT determination?

Response: The EPA found that emissions standards were feasible. The following is a summary of the BACT determinations and emissions standards imposed through the final permit:

For U1 (boiler), emissions limitations for NO_x, CO, PM, PM₁₀, PM_{2.5} are located in *Sections X.C. and X.D.* of the final permit.

For U2 (cooling tower), emissions limitations for PM, PM₁₀ are located in *Section X.E.* Also, *Condition X.F.14.* of the final permit states that the drift rate of the cooling tower shall not exceed 0.0005%. The cooling tower is not expected to have measurable emissions of CO or NO_x.

For U3 (emergency engine), emissions limitations for NO_x, CO, PM and PM₁₀ are located in *Section X.E.*

11. **Comment:** Currently, Shasta County has rated 2nd worst in California for filthy air quality, behind Los Angeles. What is EPA Region 9 doing to help solve our air quality problems?

Response: This permit decision is for the approval to construct and operate equipment associated with the Project. EPA is committed to protecting human health and the environment; however, this permitting action only addresses the approval to construct and operate emissions units at the SPI-Anderson facility.

12. **Comment:** PSD increment is the amount of pollution an area is allowed to increase. PSD increments prevent the air quality in clean areas from deteriorating to the level set by the NAAQS. The NAAQS is a maximum allowable concentration "ceiling." A PSD increment, on the other hand, is the maximum allowable increase in concentration that is allowed to occur above a baseline concentration for a pollutant. Please explain how the baseline concentration in Shasta County was determined and where our "ceiling" is currently at. What efforts, if any, were considered in regards to PSD increments at the proposed Anderson facility?

Response: Section 8 of the AAQIR discusses air quality impacts. Since PSD increment consumption calculations reflect only the ambient pollutant concentration change attributable to increment-affecting emissions a determination of the baseline concentrations in Shasta County was not necessary for the Project. The increment modeling conducted to determine compliance with the PSD increments for the Project was conservative because it only considered increment-consuming sources rather than including both increment-consuming and increment-expanding sources. Only increment-changing sources are included when demonstrating compliance with the PSD increments since the predicted increment consumption concerns only changes occurring since the applicable baseline dates.

PSD increments have been established for some pollutants, but not all. For the Project, only the increments for PM₁₀, PM_{2.5} and NO₂ pollutants (and applicable averaging times) apply because there are no established increments for CO. Section 8.4 of the AAQIR provides the analysis of Class II increment consumption resulting from the Project. As explained in section 8.4.1, EPA expects that emissions from the Project will exceed "significant emission rates" (SERs) for CO, NO₂, PM₁₀ and PM_{2.5}; therefore, we conducted additional analyses of how the Project would affect NO₂, PM₁₀ and PM_{2.5} PSD increments. In section 8.4.2, we explained that we use "significant impact levels" (SILs) to characterize impacts on air quality – generally, if modeling indicates that a source's impacts will be below a SIL for a given pollutant, further air quality analysis is usually not necessary. On the other hand, if modeling indicates that a source's impacts will exceed a SIL, EPA requires additional modeling that looks at impacts from a project as well as impacts from nearby sources of air pollution to determine the impact on PSD increments and

the NAAQS. In the case of this project, EPA determined that the Project could exceed SILs for annual and 1-hour NO₂ and 24-hour PM_{2.5}. See AAQIR at 32 and Table 8.4-2. Section 8.4.3 discusses the additional modeling, called a cumulative impact analysis, and EPA's conclusions. For the cumulative analyses, the "ceiling" for the applicable pollutant and averaging time are given in the "NAAQS" column of Table 8.4-3. As can be seen for each of the pollutants in Table 8.4-3 the "Cumulative Impact w/ Background" column is lower than the NAAQS or "ceiling." Moreover, the "PSD Increment Consumption" column from Table 8.4-3 shows that the maximum increment consumed in the Project area for the applicable pollutant and averaging time is less than its respective PSD increment. As summarized in section 8.4.3.5 and Table 8.4-3, EPA found that emissions from the Project will not cause or contribute to exceedances of the NAAQS or increments.

13. **Comment:** The baseline concentration is defined for each pollutant and, in general, is the ambient concentration existing at the time that the first complete PSD permit application affecting the area is submitted. Significant deterioration is said to occur when the amount of new pollution would exceed the applicable PSD increment. It is important to note, however, that the air quality cannot deteriorate beyond the concentration allowed by the applicable NAAQS, even if not all of the PSD increment is consumed. Will significant deterioration be the case here? How were ambient concentrations determined at this proposed facility?

Response: Section 8 of the AAQIR discusses air quality impacts and EPA's conclusion that the Project will not cause or contribute to an exceedance of the applicable NAAQS or applicable PSD increments. For each of the NAAQS analyses, the applicant assessed maximum measured background concentration data from representative monitors in the Project area from 2011. These background concentrations and the Project's modeled impacts, included with other nearby modeled source impacts when appropriate, were compared to the NAAQS to demonstrate that the Project will not cause or contribute to an exceedance of any applicable NAAQS.

Section 8.2 discusses background ambient air quality. It explains that the basis for NO₂ background values are ambient air concentrations recorded at a monitor located on Manzanita Avenue in Chico, California which EPA determined was the closest and most representative NO₂ monitor to the site. CO (1-hour) and CO (8-hour) background concentrations were also recorded from the monitor located on Manzanita Avenue in Chico. Section 8.2 also explains that the basis for PM_{2.5} and PM₁₀ background values are ambient air concentrations recorded at monitors located at the Redding Department of Health and Anderson, respectively. Table 8.2-1 of the AAQIR shows the maximum background concentrations in the area and the corresponding NAAQS.

EPA's RTC document contains additional information regarding our analysis of PM_{2.5} increments and NAAQS. In particular, with respect to PM_{2.5} (annual) standard, we found that adding the Project's predicted PM_{2.5} (annual) impact (0.27 ug/m³) to the existing background concentration yields a total PM_{2.5} (annual) concentration of 5.57 ug/m³, which is less than [40%] of the PM_{2.5} (annual) NAAQS. See RTC at pages 3-4.