BEFORE THE ENVIRONMENTAL APPEALS BOARD
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

IN THE MATTER OF:

PSD Permit Major Modification for Sierra Pacific Industries- Anderson Division
REGION 9 PSD PERMIT No. SAC 12-01

PETITION FOR REVIEW

INTRODUCTION

Pursuant to 40 C.F.R. § 124.19(a), Rob Simpson and Helping Hand Tools, petitions for review of the conditions of the Prevention of Significant Deterioration (PSD) Permit Number SAC 12-01, issued by the United States Environmental Protection Agency, Region IX ("Region") for a natural gas fired, biomass electric generating station. The facility is to be owned by Sierra Pacific Industries (SPI)

FACILITY NAME: Sierra Pacific Industries- Anderson

FACILITY LOCATION: 19758 Riverside Avenue Anderson, California 96007

The Notices for the permit decision at issue by the Region are dated as November 19, 20 and 21, 2012.

Issues not reasonably ascertainable during the comment period.

The Region's Response to Comments (RTC) raised new issues, it states; "because of recent actions by EPA and a recent decision from the United States Court of Appeals for the District of Columbia Circuit, *Sierra Club v. EPA*, No. 10-1413, 2013 WL 216018 (Jan. 22,

2013), we are supplementing our analysis of the Project's impacts on the annual PM2.5 National Ambient Air Quality Standards (NAAQS) and PSD increments for PM2.5." RTC 2-5. The EAB should take official notice of these actions.

The court made it clear that the Region's did not have the authority rely on the Significant Impact Level (SIL) to exempt the proposed modification from undertaking a cumulative air quality analysis. The court also made it clear that the Region did not have authority to waive the on-site monitoring requirement, as the Region did in this action.

Instead of correcting its mistakes the Region defended its action relying on the Annual SIL. The Response To Comments (RTC) states; "Table 8.4-2 of the AAQIR shows that emissions from the Project are predicted to be below the SIL for PM2.5 (annual)." The response failed to point out that, the same table that it referenced, to defend its failure to require a cumulative impact analysis, demonstrates that the project exceeds the PM2.5, 24 hour SIL. The Region should not rely on SIL's, especially only annual SIL's, to excuse the project from adequate consideration of the projects impacts. The EAB should remand the permit to allow the Region to adequately monitor and analyze the projects impacts.

The Region also relied on an antiquated version of Aermod to justify its PM2.5 determination, The 2010 application indicates that (Version 09292), which could demonstrate a lower downwash effect for PM2.5, than Versions 11059 and later including the present version 12345 as required by 40 CFR Part 51 Appendix W. Upon remand the EAB should instruct the Region to rely on the current version of Aermod

The Region erred when it relied on Calpuff. The E-Mail From Stanley Krivo of USEPA Region 4 Discussing Inclusion of Precursors When Predicting PM2.5 Concentrations in Class I

Areas Using CALPUFF dated May 30, 2012 *attached to*, Updated Air Dispersion Modeling Analysis Sierra Pacific Industries Biomass-Fired Cogeneration Project "OAQPS indicated the CALPUFF chemistry was not included in the regulatory evaluation of the model so is currently not a regulatory application of CALPUFF"

The court stated; "Indeed, one of Congress's stated purposes in enacting the PSD provisions was "to assure that any decision to permit increased air pollution in any area to which" the PSD provisions apply be made only after careful evaluation by the permitting authority and "after adequate procedural opportunities for *informed* public participation in the decisionmaking process." 42 U.S.C. § 7470(5) (emphasis added). Congress's express statement that the public shall have air quality data to allow for informed participation in PSD application hearings bolsters our conclusion that the **EPA** has **no** authority to exempt the monitoring requirement." In this case not only did the Region fail to monitor it failed to even agree to a hearing.

Issues raised during the comment period

The Region clearly erred in refusing my requests to extend the public comment period.

My request(s) clearly met the threshold of the code. My First request stated; "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?" my second request stated; The record is too extensive to review in the allotted time period."

The Region's Response To Comments (RTC) states; "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."

The Region with the EAB's acceptance has accepted this nebulous expansion of authority before in the Palmdale proceeding. The more restrictive and undefined threshold is at odds with Congress's intent. One of Congress's stated purposes in enacting the PSD provisions was "to assure that any decision to permit increased air pollution in any area to which" the PSD provisions apply be made only after careful evaluation by the permitting authority and "after adequate procedural opportunities for *informed* public participation in the decisionmaking process." 42 U.S.C. § 7470(5) (emphasis added). 40 C.F .R. § 124.13 (A comment period longer than 30 days may be necessary to give commenters a reasonable opportunity to comply with the requirements of this section. Additional time shall be granted under §124.10 to the extent that a commenter who requests additional time demonstrates the need for such time.) I adequately demonstrated such need.

The Palmdale matter is now before the Ninth Circuit Court of appeals for this and other reasons. Notably the Ninth Circuit has a streamlined request for an (automatic) 30 day extension of time to file briefs. The threshold for the public to request an extension of a permit comment period should not be higher than the reviewing court's threshold for an extension of time to file briefs.

If I had additional time to comment I would have been better informed. My comments would have been more compelling and would have resulted in less pollution.

The Region clearly erred in refusing to conduct a public hearing.

The RTC states; **11. Comment:** On October 17, 2012, the commenter requested a public hearing and an extension of the public comment period. The commenter stated that the record is too extensive to review in the allotted time period.

Response: As we stated in our earlier reply to the commenter's first request for an extension to the public comment period, the size of the record for this project is similar to that for other projects, and the commenter did not demonstrate a significantly greater burden to review the documents for this project. With regard to the commenter's request for a public hearing, please see our response to comment #9 above. We note that none of the three requests for a public hearing demonstrated that there was significant public interest to warrant a public hearing.

Again, the Region set some nebulous threshold to avoid doing its job. If not 3 requests, the Region should disclose what threshold is adequate to demonstrate significant public interest. Is it 4, 5, 50 or 100? Commenter's clearly met the threshold for a public hearing. The Region did not provide a, well-reasoned, response. As stated above, the decision is at odds with Congresses intent. A public hearing would have been the venue for informed public participation. It could have led to a significantly different permitting decision. The EAB should remand the permit to give the Region an opportunity to conduct a public hearing.

The Region clearly erred in response to my request to include solar power in its BACT analysis.

My comment; "A solar component should be considered in 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." Instead of including solar power in the BACT analysis the Region responded; "A solar component for this Project presents a significant departure from the existing facility's operations and the Project's purpose. In this instance, the existing lumber facility will add equipment within its existing physical footprint and utilize the excess biomass at this and other SPI sawmill or lumber operations." RTC 13. The Region's simplistic statement is less than fulsome and unsupported by the administrative record. There is no indication that a solar component is technically infeasible, would redefine the source, or would be ineffective at reducing emissions. Solar power is available[1] and there appears to be ample roof and other space at the facility for at least a several megawatts of solar power.

It is not even clear from the Region's response which exclusion the Region is relying on. They may be indicating that solar power would redefine the source. A critical question in considering add on solar configurations for the project under the redefining the source doctrine, is whether the addition of solar power configuration would disrupt the basic business purpose of the proposed facility. In this case clearly it would not. The Region's response was less than fulsome. *See Desert Rock,* slip op.at 69, 14 E.A.D. at_ (remanding a permit decision, in part, because the permit issuer did not take a "hard look" at the record and provide a sufficient explanation for why the proposed control technology would redefine the source).

In another section of the RTC the Region admitted "SPI's business purpose in constructing the new boiler is two-fold: to process steam for its mill operations and to provide a

[1] In this context, "available" refers to "those air pollution control technologies or techniques with a practical potential for application to the emissions unit and the regulated pollutant under evaluation." *NSR Manual* at B.5 (summarizing step 1analysis); *accord In reGen. Motors, Inc.,* 10 E.A.D. 360, 364 n.4 (EAB 2002)

renewable energy source of grid power." RTC 24. Solar power is clearly a renewable energy source and/or could provide steam. Adoption of such an option would not disrupt the applicant's basic business purpose for the proposed facility. It is not a departure from the projects purpose. Solar should have been included in the BACT analysis. The record is inadequate on this issue. Solar power clearly could have lowered emissions.

This project represents massive emissions per Megawatt. The Pio Pico project (now before the Board) Air Quality Impact Analysis offers 10 times the electricity with lower emissions than this project. This projects emissions per MW for CO emissions are 47 times higher, NOx is 37 times higher, PM2.5 is 11 times higher, SO2 is 25 times higher, H_2SO_4 is 122 times higher and CO_2e 6.5 times higher. It is the duty of the Region to consider any opportunity to minimize these emissions. Solar power could be the first response source on a daily basis, multiplying its benefit during periods of lower grid demand. This could have been a much cleaner project. The quality of the project is compromised.

As the Board reiterated in *In re Steel Dynamics, Inc.*,9 E.A.D. 165 (EAB 2000), to justify a remand, "there must be a compelling reason to believe that the omissions [by the permitting authority] led to an erroneous permit determination- in other words, that [omissions] materially affected the quality of the permit determination." 9 E.A.D. at 191-92 (quoting *In re Mecklenburg Cogeneration Ltd. P 'ship*,3 E.A.D. 492, 494 n.3 (Adm'r 1990)); *accord Three Mountain power,* 10 E.A.D. at 55. The EAB should remand the permit to allow the Region the opportunity to adequately consider solar power.

The Region clearly erred in failing to consider varying the fuel mix in the BACT analysis.

The Region summarized my comment but the board should consider my full comment in the subject on page 1 and 2, as argument against the EPA response. While the **Guidance for**

Determining Best Available Control Technology for Reducing Carbon Dioxide Emissions from Bioenergy Production reference in my comments largely refers to GHG it is applicable to all pollutants. The RTC states; 14. Comment: The fuel mix should be considered in the BACT analysis for the project and the analysis fails to consider a different fuel mix. Increased gas use can raise the temperature and reduce emissions through more complete [combustion].

Response: The Project calls for a new cogeneration unit to be located at an existing lumber manufacturing facility. The cogeneration unit will consist of a biomass-fired boiler, a steam turbine, and a generator. According to SPI's 2010 Application, SPI intends to use biomass from existing SPI facilities, as well as in-forest materials and various sources of agricultural and urban wood waste. Therefore, an inherent aspect of the project is that its fuel use be primarily biomass. The new boiler will also be capable of burning natural gas. The permit limits the amount of natural gas to be combusted to 10% of all heat input into the boiler. EPA believes that this limit is appropriate as the combustion within the boiler may need to be stabilized while burning biomass and to assist with the startup and shutdown of the boiler. While EPA recognizes that fuel mixtures affect the emissions of pollutants, it is unclear what mix the commenter is ultimately recommending and where this should be incorporated into the analysis. If the source changed its fuel mixture then numerous other considerations would need to be made, such as whether a boiler is an appropriate alternative and resulting control technologies. Moreover, alternative fuel mixes would change the profile of pollutants emitted in a myriad of ways where some pollutants would increase and others would decrease depending on the exact mixture." RTC 13

The Region's contention that the 10% gas heat input limitation is adequate for the projects operation ignores the comment and environmental benefits of increased gas use. The

comment was clear that it sought increased gas use to be considered in the BACT analysis. It is not the public's responsibility to complete the BACT analysis and determine the exact optimal fuel mix. Obviously it must first be considered in Step 1 of the Regions BACT analysis. As demonstrated in the above comparison to the Pio Pico AQIA, any increase in gas heat over biomass would reduce emissions.

There is no basis for the Region's position that a boiler would become inappropriate or that "pollutants would increase". In another section of the RTC the Region admitted; "EPA notes that particulate emissions from the combustion of PUC- quality pipeline natural gas are expected to be lower than particulate emissions resulting from the combustion of biomass." RTC 45-46. The project could burn up to 49% gas and still satisfy the allegedly "inherent aspect of the project is that its fuel use be primarily biomass" The Region has not demonstrated that greater gas use would disrupt the applicants basic business purpose or redefine the source.

U.S. EPA, *EPA-457/B-11-00l,PSD and Title V Permitting Guidance for Greenhouse Gases* 26 (Mar. 2011) (citing *Prairie State,* 13 E.A.D. at 23) [W]hen a permit applicant has incorporated a particular fuel into one aspect of the project design (such as startup or auxiliary applications), this suggests that a fuel is "available" to a permit applicant. In such circumstances, greater utilization of a fuel that the applicant is already proposing to use in some aspect of the project design should be listed as an option in Step 1 *unless it can be demonstrated that such an option would disrupt the applicant's basic business purpose for the proposed facility.*

A permit issuer must assess "which design elements are inherent for the applicant's purpose and which design elements 'may be changed to achieve pollutant emissions reductions without disrupting the applicant's basic business purpose for the proposed facility,' while keeping in mind that BACT, in most cases, should not be applied to regulate the applicant's purpose or

objective for the proposed facility." *Desert Rock,* slip op. at 64, 14 E.A.D. at _ (quoting *Prairie State,* 13 E.A.D. at 23, 26); *accord RCEC,* slip op. at 97-98, 14 E.A.D. at_. Additionally, the permit issuer must ensure that the proposed facility design was derived for reasons independent of air quality permitting.28 *Prairie State,* 13 E.A.D. at 26; *accord RCEC,*slip op. at 98, 14 E.A.D. at_; *Desert Rock,* slip op. at 64, 14 E.A.D.

The proposed facility design was derived for reasons of air quality permitting and the Region has failed to ensure otherwise. The 2010 Application states; "The cogeneration unit will burn natural gas during startup. Subpart Db prescribes SO2 and NOX limits on boilers that fire fossil fuels under certain conditions. The SO2 limits do not apply to boilers that combust natural gas. The NOX limits in Subpart Db do not apply to boilers that have an annual fossil fuel capacity factor of less than ten percent. SPI will maintain on-site records of the quantities and times that natural gas is fired in the boiler to ensure that gas provides less than 10 percent of the annual fuel input. Consequently, neither the SO2 nor the NOX emission limits identified in Subpart Db will apply."

The Draft Permit Relies on Unlawful EPA Rules.

The commenter, Center for Biological Diversity (CBD) raised issues of law that the Region has not resolved in the RTC. The EAB should take official notice of Center for Biological Diversity, et al., v. U.S. EPA, et al (D.C. Cir. No. 11-1101)

EPA's BACT Exemption for Biogenic CO2 Is Unlawful. The Region clearly erred by relying on the unlawful exemption.

"Grandfathering" Provisions in EPA's Proposed Rule Revising the PM NAAQS Are unlawful. The Region clearly erred by relying on the unlawful exemption.

The Region erred by failing to include an adequate evaluation for CO2 emission impacts.

The Region erred by failing to consider less-polluting alternatives. RTC 34-35. All of Center for Biological Diversity comments are incorporated into this petition. By not relying on unlawful rules the Region would have fully evaluated the project and not have approved it as they did.

Conclusion

For the above reasons the EAB should remand the permit.

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