Excerpt 14

Letter from EPA (Steven Riva) to Energy Answers (Patrick Mahoney), Administrative Incompleteness of the PSD Application for the Arecibo Puerto Rico Renewable Energy Project, dated March 31, 2011, AR II.A.3

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

MAR 3 1 2011

Patrick Mahoney, President
Energy Answers, LLC
79 North Pearl Street
Albany, NY 12207

RE: Arecibo Puerto Rico Renewable Energy Project
Prevention of Significant Deterioration- Air Permit Application

Dear Mr. Mahoney:

This letter is in response to your application dated February 4, 2011, and received by the U.S. EPA Region 2 (EPA) office on February 8, 2011, for a Prevention of Significant Deterioration (PSD) permit for Energy Answers (EA) - Arecibo Puerto Rico Renewable Energy Project, which will be located at the former site of the Global Fibers paper mill in Barrio Cambalache, Arecibo Puerto Rico. The project consists of the construction of a 77 megawatt (MW) waste to energy plant, and involves the construction and installation of the following equipment: two 2,106 tons per day (TPD) combined spreader – stoker municipal waste combustors (MWC), each with a maximum heat input rate of 500 million Btu per hour (MMBTU/hr), one steam turbine generator, one cooling tower, one diesel emergency generator, one diesel emergency fire water pump, three storage silos (lime, carbon and fly ash), municipal solid waste processing system, ash handling, conveying and processing systems, one ammonia solution storage tank, and one fuel oil storage tank. EA proposes to fuel the MWC primarily with processed refuse fuel (PRF) that is shredded municipal solid waste with the metal content removed and recycled. EA also proposes to combust supplemental fuel comprising of the following: auto shredded residue (ASR), tire-derived fuel (TDF), and processed urban wood waste (PUWW). A fuel oil -fired auxiliary burners system will be used on a limited basis during the periods of startup and shutdown of the MWC.

The project triggers PSD requirements for nitrogen oxides (NO_x), carbon monoxide (CO), volatile organic compounds (VOC), sulfur dioxide (SO_2), particulate matter (PM), particulate matter less than 10 microns (PM_{10}), fine particulate matter ($PM_{2.5}$), fluorides (HF), sulfuric acid mist, municipal waste combustor organics, municipal combustor metals (measured as particulate matter) and municipal waste acid gases. In addition, the project triggers PSD requirements for greenhouse gases (GHG) emissions.

This letter is to inform you that your application is incomplete and EPA needs additional information in order to proceed with our review.

I. AIR PERMITTING ISSUES

Municipal waste combustors (MWC)

Steam production rate

We noticed that EA proposes to measure the steam production, instead of measuring the fuel combusted, as a monitoring method of the MWC's operation. However, the application does not specify the MWC's steam production limit. Therefore, please provide the following:

- Proposed steam production limit pounds per hour (lb/hr) and pounds per year (lb/yr) and all relevant calculations, and assumptions employed in deriving the limit.
- Steam temperature (^{0}F), and steam pressure (psig).

Startup and Shutdown emissions

It appears that Table 7/Appendix A of the application contains only the MWC's emissions information during startup. Therefore, please provide the MWC's emissions information during the shutdown events. Also, please provide the number of startup and shutdown events per year, and clarify if the startup and shutdown emissions were included in the potential to emit (PTE).

Although, EA's application indicates that the emissions during startup and shutdown will be vented through the air control equipment, it is unclear whether the startup and shutdown emissions would meet the MWC's proposed best available control technology (BACT) emission limits. Consequently, please address the following: 1) confirm whether EA proposes to meet the BACT limits during startup and shutdown events; 2) provide the MWC's startup and shutdown emissions limits expressed in units similar to the units used for the MWC's BACT emissions limits during its normal operation; 3) indicate the source of the PM, PM_{10}, and $PM_{2.5}$ emission factors used during startup (and shutdown) and clarify whether these factors contain both condensable and filterable fractions; and 4) add ammonia slip to the startup and shutdown emission information table.

BACT analysis discussion

BACT is defined as "... an emission limitation based on the maximum degree of emission reduction for each pollutant subject to regulation ... which is determined to be achievable taking into account energy, environmental and economic impacts." First, the BACT analysis must include consideration of the most stringent available control technologies (i.e., those that provide the maximum degree of emissions reduction). Second, any decision taken by a PSD applicant to require a lesser degree of emissions reduction must be justified by an objective analysis of energy, environmental, or economic impacts.

Based on our review of your application, and as detailed below, it is EPA's opinion that EA has not adequately justified, for each pollutant included in the BACT analysis, why lower emissions limits are not achievable for the proposed MWC. For instance, while EA recognizes that the US EPA - RACT/BACT/LAER Clearinghouse has similar sources with CO, VOC, HF, SO_2, and

EPA - RACT/BACT/LAER Clearinghouse has similar sources with CO, VOC, HF, SO_2, and H_2SO_4 limits lower than the EA's MWC proposed limits, the applicant has not provided the rationale why lower BACT limits should not be applied for the proposed MWC. Furthermore, recent EPA's research reveals that Palm Beach Renewable Energy Facility (MWC), Florida (Palm Beach)[1], approved on 12/23/2010, has established lower CO, VOC, Dioxin/Furans, Hydrogen chloride, Mercury(Hg)[2], and HF[3], emissions limits than the EA's proposed limits.

In conclusion, based on the issues outlined above, we recommend EA to either propose lower emission limits (i.e., similar with the lowest limits identified above) for the above listed pollutants or substantiate the BACT analysis by demonstrating that lower BACT emission limits than the limits already contained by the application are infeasible for the proposed MWC.

NO_x BACT emission limit - averaging period

While we recognize that 45 ppmvd @ 7% O_2 NO_x BACT emission limit is as low, and in most cases lower, as any permit issued for this type of source, the limit's averaging period of "12-month rolling average" it does not represent an adequate averaging period for demonstrating compliance with a BACT limit. However, some other permits, including the EA Fairfield MWC Project, in Maryland, use the "24-hour daily arithmetic average" of hourly CEMS. Therefore, EA should revise their application by proposing a more stringent NO_x BACT emission limit averaging time for the MWC.

Hg emissions

Please provide your proposed plan for reducing the mercury emissions after commencing operation. Also, please be advised that since CEMS are available for Hg, we anticipate incorporating Hg CEMS as a permit condition. Consequently, we recommend EA to consider CEMS for Hg as part of the MWC design.

PM, PM_{10}, and $PM_{2.5}$

Please be advised that, since the PM_{10} surrogate policy is no longer in effect, EA should revise the application, including the BACT Analysis Section, by removing any reference to this policy. In addition, please provide a discussion that would address the following: 1) clearly state whether the MWC will emit all of the following particulate sizes: PM, PM_{10}, and $PM_{2.5}$; 2) clarify whether the proposed PM, PM_{10} and $PM_{2.5}$ emissions limits comprise of both condensable and filterable fraction; and 3) address BACT analysis separately for PM, PM_{10}, and $PM_{2.5}$. Furthermore, please substantiate your BACT Analysis with a clear demonstration of the appropriateness of using the same emission factors for PM, PM_{10}, and $PM_{2.5}$ for the proposed MWC during normal operation. Also, since there are EPA Methods available for measuring

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[1] Available at : http://appprod.dep.state.fl.us/air/emission/apds/listpermits.asp

[2] Palm Beach was not subject to PSD review for Hg emissions. The permit establishes an annual Hg limit of 113 lb/yr (on 12-month rolling basis based on CEMS data) that is equivalent to 12 micrograms Hg/dscm @7% O_2

[3] Palm Beach was not subject to PSD review for HF emissions. The Technical Evaluation document contains an emission factor of 3.5 ppmvd @7%O_2 that is equivalent to 0.002 lb HF/MBTU that was used to determine the PTE of HF.

condensable and filterable, EA should propose separate emission limits for condensable and filterable particulate.

Emission factors, air control equipment's efficiency, and averaging periods

Please provide, in a tabular format, similar to the Table 7/Appendix A of your application, the following information regarding the MWC's emissions during its normal operations: 1) uncontrolled emission factors; 2) estimated efficiency of each air control equipment; and 3) controlled emission factors (i.e., BACT emissions limit) and their corresponding averaging period. Please be advised that the BACT emission limits averaging times could not be less stringent than the averaging times required under NSPS Eb or other applicable standards.

Ammonia (NH_3) slip

The 20 ppmvd @ 7% O_2 as ammonia slip limit is higher than the limit at other sources. For example, Palm Beach has an ammonia slip limit of 10 ppmvd @ 7% O_2. While, ammonia slip is not a PSD pollutant, it is known to cause, among other things, increases in plume visibility. Therefore please provide a discussion to describe the potential impact of the EA's ammonia slip emissions on visibility (i.e., plume visibility), and to explain why a lower ammonia slip limit is not feasible for your project.

Discussion on the supplemental fuel's emissions

Please substantiate your application with actual stack data, including but not limited to the SEMASS' stack data, and with relevant technical information to demonstrate that the use of ASR, TDF, and PUWW as fuels in combination with the PRF at the proposed feed rates, would guarantee the continuing compliance of the MWC with the proposed emissions limits.

Air control equipment -Manufacturer information

Please provide the following design criteria information for the BACT technologies you propose to use in conjunction with your project:

- For each air control equipment: make, manufacturer and model (if known), manufacturer's operation and maintenance requirements, one or more key operating parameters that EA proposes to monitor on a routine basis to demonstrate compliance with the proposed BACT emission limits, and the number of emitting sources using each air control equipment.

- Fabric Filters (for MWC, bottom and fly ash handling and processing, lime and carbon silos): fabric filter type, number and size of bags/ or cartridges, total bags/ or cartridges area, bag fabric type, maximum design operating temperature capability, normal operating temperature, maximum design air flow rate, maximum air flow rate to cloth or filter area ratio, maximum operating pressure drop, method of monitoring pressure drop, method of bag/ or cartridge cleaning, method of determining when bag/or cartridge replacement is required, and control efficiency expressed as percentage, grains/dry standard cubic feet,

grams per dry standard cubic meter and grams per dry standard cubic feet for PM, PM_{10} and $PM_{2.5}$.

- Regenerative Selective Catalytic Reduction System: minimum and maximum temperature at catalyst bed, minimum and maximum reagent charge rate gallons per minute(gpm),volume of catalyst, anticipated life of catalyst, method of determining the breakthrough, and catalyst replacement schedule.

- Turbosorp/Dry Circulating Fluid Bed Scrubber System: inlet flue gas flow rate, method of monitoring gas flow rate, inlet flue gas temperature, inlet particulate loading, outlet temperature set point, height, type and size of packing material, inlet particulate loading, inlet SO_2, and HCL mass (lb/hr) and concentration, operating pressure drop, method of monitoring pressure drop, maximum recommended lime use rate, and method of monitoring the lime use rate.

- Activated Carbon Injection System: maximum activated carbon feed rate, and method of monitoring the activated carbon feed rate.

Cooling Tower

Please address the following information regarding the proposed cooling tower:

- Provide a discussion that would describe the potential impact of the visible water vapor clouds produced by the cooling tower on visibility.
- Confirm that the maximum total dissolved solids estimated in the recirculation water is 3,000 part per million by weight.
- Submit your proposed calculation methodology of determining the cooling tower's compliance with the short-term and annual emissions limits.
- Provide the vendor operation and maintenance requirements for the proposed cooling tower.
- Provide the proposed cooling tower's characteristics, including but not limited to, length and width.

Emergency Generator (EG) and Fire Water Pump (FWP)

Please address the following: 1) EG and FWP model year and electrical power (kW); and 2) the basis for using the same value as the emission factor in the calculation of PM, PM_{10} and $PM_{2.5}$ emissions.

Ammonia and Fuel oil storage tanks

Please address the following: 1) type and rates of the emissions associated with the ammonia and fuel oil storage tanks; 2) identify all regulations that may potentially be applicable to the ammonia and fuel oil storage tanks; and 3) general storage tanks' information (e.g., above or underground, devices to collect or prevent air emissions).

Bottom and Fly Ash handling, storage and processing, and Lime and Carbon Silos

Please address the following:

- Submit your proposed calculation methodology of determining the above-mentioned emitting sources' compliance with the short-term and annual emissions limits.

- While the application's Project Summary mentions that EA's project include a carbon storage silo, the Emissions Summary and the BACT Section do not address the carbon storage silo's emissions. Therefore, please clarify whether a carbon storage silo is proposed, and also provide the silo's volume.

- Provide a discussion clarifying whether the particulate emissions expected from the above - mentioned activities (and carbon silo) comprise of all of the following: PM, PM_{10} and $PM_{2.5}$. In addition, please address BACT analysis separately for PM, PM_{10}, and $PM_{2.5}$.

Supplemental fuel (SF) handling and storage activities

Please clarify whether the SF storage area is located outdoors. If so, please describe the measures that EA proposes to adopt to minimize the fugitive emissions.

Fugitive emissions

EA belongs to one of the 28 named PSD source categories, and therefore it is subject to the requirement that quantifiable fugitive emissions be included in determining the PTE.
While, your application identifies some of the proposed project potential sources of fugitive dust emissions and discusses the measures that EA proposes to adopt to minimize these emissions, it is unclear whether the project's PTE includes the fugitive emissions. Consequently, please address the following:

- Quantify the short term and annual fugitive emissions, from the following sources associated with the proposed project, as appropriate: 1) road dust due to traffic within the project boundaries; 2) outdoors receiving and storage areas of the MSW and SF; 3) building ventilation (i.e., MSW, PRF, and Ash Processing buildings); and 4) ammonia storage tank, and fuel oil storage tanks. Please indicate the source of the emission factors, and provide the calculations.

- Provide a discussion regarding the type of contaminants comprising the project's fugitive emissions.

Discussion on the PSD Applicability for the GHG emissions

Since EA's emissions of non-GHG pollutants exceed the statutory threshold of 100 TPY, the proposed source would be a new major stationary source that is subject to PSD regulations for any pollutant emitted at or above its significant level. Furthermore, since it has a potential to emit (PTE) of 293,443 TPY CO_2e, which is greater than the applicable threshold of 75,000 TPY CO_2e, it is considered an "anyway source" and consequently PSD also applies to its GHG emissions. However, while EA agrees that non-GHG pollutants may be subject to PSD review for this project, EA has determined that their project is not subject to PSD review for GHG. EA's rationale for non-applicability is that the proposed source's GHG PTE would be less than a landfill GHG PTE, assuming EA were to instead send the waste off site to a hypothetical uncontrolled landfill. Thus, EA asserts that there is a net reduction in GHG emissions.

Pursuant to the PSD regulations and guidance: "Netting must take place at the same stationary source; emission reductions cannot be traded between stationary sources."[4] Thus, the EA's proposed project is not allowed to use emissions reductions from a landfill, unless the proposed project and landfill were shown to belong to the same stationary source. In this case, the landfill does not exist, and no such "single source" demonstration has been made. Consequently, it is EPA's determination that the proposed project is subject to PSD requirements for GHG emissions. Therefore, please address the following:

- Provide the following information concerning the primary fuel (i.e., processed refused fuel) and all possible supplemental fuels (e.g., ASR, TDF, and PUWW): 1) the estimated feed rate (tons per day and tons per year); and 2) the estimated biomass content. Please indicate the basis of the fuels' estimated biomass content.

- Provide a revised project PTE of GHG that should include the GHG emissions (i.e., both CO_2 and non-CO_2 GHG) from all type of fuels proposed to be combusted by the project's emitting sources. Furthermore, since some of the fuels proposed to be combusted by the municipal solid waste combustors may have a higher potential of GHG emissions, please calculate a "worst case scenario" of GHG emissions. Please provide the calculations and the basis of the GHG emission factors.

- Provide a BACT analysis for the project's GHG emissions, similar to the top-down analysis provided for the non-GHG emissions from the project. EPA recommends that the GHG BACT analysis be conducted following the guidance provided in the following EPA documents: "PSD and Title V Permitting Guidance for GHG"[5], "Guidance for Determining Best Available Control Technology for Reducing Carbon Dioxide Emissions from Bioenergy Production, March 11, 2011"[6], EPA's technical white papers[7], and 1990 Draft New Source Review Workshop Manual.[8] Since EA proposes to combine biomass fuels with other fuel

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[4] EPA's 1990 "Draft New Source Review Workshop Manual" at A.35: http://www.epa.gov/nsr/gen/wkshpman.pdf
[5] Available at: http://www.epa.gov/nsr/ghgdocs/ghgpermittingguidance.pdf
[6] "Guidance for Determining Best Available Control Technology for Reducing Carbon Dioxide Emissions from Bioenergy Production.": http://www.epa.gov/nsr/ghgdocs/bioenergyguidance.pdf
[7] Available at: http://www.epa.gov/nsr/ghgpermitting.html
[8] Available at: http://www.epa.gov/nsr/gen/wkshpman.pdf

types, based on the March 11, 2011 guidance, the utilization of the biomass fuel should be included in the list of BACT options (i.e., Step 1 of the BACT analysis). Additionally, the fact that the project would generate energy from combusting the municipal solid waste, which may be used to meet the energy demand in Puerto Rico, might be used by EA to justify their GHG BACT selection based on the project's energy and economic impacts (see March 11, 2011 guidance at pages 40-44, which describes considerations of these impacts as they relate to the Step 4 of the GHG BACT Analysis). Also, because the project may enable reduction of methane emissions by displacing landfills, it might also be used by EA to justify their GHG BACT selection based on the project's environmental impact.

II. AIR MODELING ISSUES

Introduction

Modeling was done with the 1 year of site specific meteorological data collected in Arecibo in 1992 to 1993 with the EPA preferred model, Aermod. It is stated that the air quality impacts are less than the significant impact levels for all pollutants except for the 1 hour NO_2 and 1 hour SO_2. The NO_2 NAAQS analysis was done using the EPA Guideline on Air Quality Model's Tier 2 Ambient Ratio Technique. In general, these procedures are acceptable but we have comments on elements of the analysis that are either incomplete or need further clarification in order for us to deem the application approvable. These are discussed below:

Remaining Issues Related to the Air Quality Modeling Protocol

We provided several comments on the protocol on March 10 and August 31, 2010. A complete response to these comments was not received. The protocol serves to assist you in the preparation of an approvable application. In this case, the application was submitted directly which is not incorrect in of itself but some of the procedures followed are not clear. In order to ensure that we are both in agreement with the procedures, we recommend responding to each of the comments of the protocol. For example, we discussed several aspects of the AERMET input files during the protocol stage. The final AERMET inputs dealing with the surface characteristics need to be provided so that we can be assured that the proper procedures were followed. Further, please verify that the evaluation of the surface characteristics for the calculation of the surface roughness is limited to a 1 km radius surrounding the meteorological tower. Figure 2-2 depicts a 5 km radius which would be an inappropriate input to AERMET.

In addition, a protocol that addresses details that are specific to the 1 hour NO_2 or SO_2 modeling was not proposed. Regarding this analysis, we would like to offer the following suggestion. As you know, on March 1, 2011, EPA issued additional guidance to clarify modeling guidance and assist sources to better understand how compliance with the new NAAQS could be shown. The 1 hour NO_2 and SO_2 analysis should be revisited following this guidance. For example, the application states that the maximum impacts occur from the emergency generator. If this is the case and you assumed that the emergency generator operated continuously for 8760 hours per year, this may be overly conservative. Further information should be provided regarding the time of day that these will tested, whether the main boilers will be operating or shut down during the use of these units and the frequency of testing. This type of information may lead to a better assessment of compliance with the 1 hour NAAQS.

Startup/Shut Down

Impacts due to start up or shut down were not addressed. This must be done for any short term NAAQS compliance demonstration. This is not limited to the 1 hour NO_2 or SO_2 NAAQS but includes other PSD affected pollutants such as CO where the NAAQS are not based on the same statistical form. Information on the frequency and duration of both startup and shutdown are necessary for this process.

Cumulative 1 Hour NO_2 and 1 Hour SO_2 Impacts

We have several comments regarding the cumulative source inventory. First we want to note that EPA guidance provides that the assessment of impacts is generally done throughout the Significant Impact Area. Regarding which sources should be included we refer you to Table 9-2 of the EPA's Guideline on Air Quality Models, where it states that the source inventory is comprised of nearby (with significant concentration gradients in the vicinity of the new source) and other sources taking into account modeling and monitoring data. The March 1st 1 hour NO_2 guidance further clarifies that the cumulative assessment for the 1 hour NAAQS (including the 1 hour SO_2) could be done only at receptors where the primary source has a significant impact. Further, while the NSR Manual, (draft 1990) suggests a 50 km radius beyond the SIA, this radius is only for screening. It is not a fine line for cumulative inventory especially for analyses of these new statistically based new standards. Judgment should be made of the possibility of overlapping impacts at new source's receptors that could lead to the worst case hour of day and have that hour of day be the controlling day in the annual 98th or 99th percentile.

In order to assist you with this analysis, EPA is updating the AERMOD model to perform the various calculations and the source contribution analyses. This updated version should be posted on SCRAM shortly and we strongly recommend that any new modeling be done with this version.

Regarding your question in the application of whether existing sources in the southern part of Puerto Rico located up to 50 km away and separated by a large mountain range from the north should be included in the cumulative modeling analysis, we agree with your assessment. The SIA is between 3 and 11 km and as you stated are defined largely by the emergency generator. The sources to the south are not likely to have a "significant concentration gradients" in the north in the vicinity of the new source. In addition, any component of the plume that could be transported would be accounted for through the background monitored concentration. However, you may want to provide further assurance by showing that the maximum impacts and concentration gradients are truly located in the south.

Preconstruction Ambient Air Monitoring

As stated in our comments on March 10 and August 31, 2010, Energy Answers must submit a waiver from preconstruction ambient air monitoring requirements if you would like to obtain an exemption from this requirement per 40 CFR 52.21(i). This is a pre-application requirement. We have not received this waiver to date. Rather, the application shows that for some of the pollutants, the air quality impacts are less than the significant monitoring concentration or de minimis levels which could serve as an exemption. However, there are some pollutants that are not addressed in this application such as impacts of fluorides and ozone (we include ozone since the NOx emissions are greater than 100 tpy). Also note that Table 6-6 does not include $PM_{2.5}$. An analysis of these impacts or the presence of an existing, representative ambient monitor with 3 years of current data must be submitted.

Measured Background Concentrations

Background monitored concentrations are needed for the 1 hour NO_2 and SO_2 for the purpose of the cumulative NAAQS analysis. For the NO_2, the use of the 1 year of data collected at Cambalache may be acceptable if there has not been any growth in the area. In this case, that monitor does not contain impacts from Cambalache but this source would be included in a cumulative modeling analysis. Given that there are other more current monitors in the area, and that the NAAQS design value is based on a 3 year average, it is recommended to obtain data for background at an existing monitor provided that it is representative of Arecibo. Similarly, it appears that only 1 year of background SO_2 data was obtained. The NAAQS for the 1 hour SO_2 is also based on a 3 year average, so 3 years of the most current and representative data should be obtained.

Load Analysis

Modeling was done at 110%, 100% and 80% loads in order to assess the load that leads to the worst case impacts. According to the summary on Table 6-3, the impacts are less than the SIL for most pollutants except the 1 hour NO_2 and SO_2. However, the maximum impacts for the SO_2 do not occur at the maximum capacity but rather at the reduced 80% capacity. There is no information that shows that the impacts will not increase further at loads less than 80%. Further, the protocol stated that the load analysis would include loads down to 60%. This was not provided here. It must be shown that the load that leads to the maximum impact is selected unless a permit condition that restricts lower loads is accepted. It is also not clear what the fuel mix is in this summary. There are footnotes missing on this table which may explain some of this information.

Default NO_2/NO_x Ambient Ratio

The 1 hour NO_2 NAAQS analysis was done using the Ambient Ratio Method. However, on March 1st EPA established a default ambient ratio for the 1 hour NO_2 NAAQS of 0.8 rather than 0.75 that existed in guidance for the annual NAAQS. This correction should be made.

Merged Stacks

The 2 boilers were modeled as if they are a single merged stack. This may be acceptable provided the two flues operate at the same time and have similar flow characteristics. Please confirm that this is the case.

PM_{10} Surrogate Policy

We note a reference made to the PM_{10} surrogate policy. We would like to clarify that the PM_{10} surrogate policy has not been in effect in Puerto Rico since the Final $PM_{2.5}$ Implementation Rule became effective in July 15, 2008. However, we note that a different emission rate is used in the PM_{10} and $PM_{2.5}$ modeling analysis and that the impacts are compared to their respective SILs/NAAQS as they should be. What is unclear is whether condensable emissions of these pollutants are included in the modeling analyses.

Additional Impact Analysis

The additional impact analysis section needs to be expanded particularly with respect to PSD affected pollutants other than SO_2 and NO_2. In particular, since the area is largely agricultural, impacts of fluorides and particulates on soils and vegetation need to be addressed.

Environmental Justice Analysis

The Environmental Justice analysis could be expanded to address any disproportionate or adverse impacts from lead and fluorides on the neighboring areas. Any outreach that was done or is planned to be done by EA should be discussed.

Endangered Species Act

We understand that you are evaluating impacts on Endangered Species under the EIS. However, we still request a letter from the local Federal Land Manager as part of the application that states that you have met all of the requirements under the Endangered Species Act.

We look forward to working with you on this project. If you wish to discuss any of the above issues or have any questions, please contact me at (212) 637-4074, or Ms. Annamaria Coulter (modeling) at (212) 637-4016, and Ms. Viorica Petriman (BACT) at (212)-637-4021.

Sincerely,

Steven C. Riva, Chief
Permitting Section
Air Programs Branch

Cc:

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