



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

MAY 08 2012

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

Re: Prevention of Significant Deterioration (PSD) of Air Quality Preliminary Determination  
Arecibo Puerto Rico Renewable Energy Project

Dear Mr. Mahoney:

The U.S. Environmental Protection Agency (EPA), Region 2 Office, received a PSD application to construct a new 77 megawatts resource recovery facility at the former site of the Global Fibers Paper Mill in Barrio Cambalache, Arecibo, Puerto Rico. The Energy Answers Arecibo, LLC's (Energy Answers) proposed project, known as the Arecibo Puerto Rico Renewable Energy Project, will consist of two identical municipal waste combustors units (i.e., spreader-stoker boilers), a steam turbine-electrical generator, ash handling system, a carbon storage silo, a lime storage silo, an emergency diesel generator, an emergency diesel fire pump, one ammonia and three distillate fuel oil No.2 storage tanks, and a mechanical draft wet cooling tower. The municipal waste combustors will be primarily fueled by refuse-derived fuel (i.e., shredded municipal waste with most of its metal content removed and recycled). The two combustors will be permitted at a maximum combined refuse-derived-fuel consumption rate of 2,106 tons per day. Additionally the combustors will be capable of combusting, when available, supplementary fuels consisting of auto-shredder residue, tire-derived fuel, and processed urban wood waste. Ultra low sulfur distillate fuel oil No. 2 with a maximum sulfur concentration of 0.0015 % (15 ppm) by weight will be used as warmup/shutdown fuel in the municipal waste combustors' auxiliary burners, for firing the emergency diesel generator and the emergency diesel fire pump, and also for firing the Regenerative Selective Catalytic Reduction units' burners to provide optimal temperature range necessary for the nitrogen oxides' reduction.

Each municipal waste combustor will be equipped with the following air pollution control equipment: (1) Turbosorp circulating dry scrubber with lime injection, for the control of sulfur dioxide (SO<sub>2</sub>) hydrogen chloride (HCl), mercury (Hg), dioxin and furans (D/F), fluorides (as hydrogen fluoride (HF)), and sulfuric acid mist (H<sub>2</sub>SO<sub>4</sub>) emissions; (2) Activated carbon injection system, for the control of Hg, and D/F emissions; (3) Fabric filter system, for the control of particulate matter (PM), particulate matter with aerodynamic diameter of less than or equal to 10 micrometers (PM<sub>10</sub>), particulate matter with aerodynamic diameter of less than or equal to 2.5 micrometers (PM<sub>2.5</sub>), SO<sub>2</sub>, cadmium, chromium, HCl, lead, Hg, nickel, D/F, HF, H<sub>2</sub>SO<sub>4</sub>, zinc, beryllium, and arsenic emissions; and (4) a Regenerative Selective Catalytic

Reduction system with an Oxidation Catalyst module, for the control of carbon monoxide, and volatile organic compounds, and a Selective Catalytic Reduction module that will use ammonia injection, for the control of nitrogen oxides emissions. Each of the ash handling systems, and the storage silos' emission units will be equipped with fabric filter systems to control PM, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions. In addition, the cooling tower will be equipped with a drift eliminator system to control PM, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions.

Based upon the information submitted, EPA has made a preliminary determination to approve Energy Answers' PSD permit subject to public review. A detailed description of the proposed project, the applicable PSD regulations, the air pollution control equipment (i.e., control technologies), including all the measures and work practices proposed to be used for the project, the proposed emission limits for each emission unit of the project, and the information and analysis EPA used to support the draft PSD permit, are included in the attached fact sheet. The permit conditions are found in Enclosure I. In addition, a general project description, a summary of the pollutants subject to PSD requirements and the control technologies proposed to be used by Energy Answers are provided in Enclosure II.

Enclosure III is a copy of the public announcement which briefly describes the project under review and offers the public the opportunity to comment on the proposed project, and also provides the date, time and location for the public availability and public hearing sessions. This notice will be published in the near future in *El Vocero* and *El Norte* newspapers announcing the issuance of this preliminary determination. Written comments concerning this determination must be submitted by the close of the public comment period, which will extend forty-five (45) days from the date of publication of the public notice.

The final agency decision on the PSD permit will be issued to Energy Answers after the close of the public comment period. If no comments are received, and EPA makes no changes from the draft to the final permit, the final permit decision will become effective upon issuance and will be published in the Federal Register as a final Agency action. If comments are received, or EPA makes changes to the draft permit, the permit will not become effective until the administrative appeal procedures are exhausted.

It should be noted that if no change has been made from the draft to the final decision, administrative appeal of the final approval is available only to those who submitted comments on the proposed approval during the public comment period. Persons who do not file comments on the preliminary determination may petition for administrative review only regarding changes that are made from the draft to the final permit decision. The subject(s) of appeal is limited to those issues raised during the public comment period. Please refer to the Consolidated Permit Regulations codified at 40 CFR Part 124 and Enclosure III of this letter, for more details on permit effectiveness and appeal procedures.

Upon completion of the administrative appeal process, if applicable, the final permit decision will be published in the Federal Register as a final Agency action. Judicial review of this final action is available in the United States Court of Appeals within 60 days from the date on which this action appears in the Federal Register. A petition for administrative review is a prerequisite to seeking judicial review of the final agency action.

If you have any questions regarding this letter, please call Mr. Steven C. Riva, Chief, Permitting Section, Air Programs Branch, at (212) 637-4074.

Sincerely,

A handwritten signature in black ink, appearing to read "John Filippelli". The signature is fluid and cursive, with a long horizontal stroke at the beginning.

John Filippelli, Director  
Division of Environmental Planning and Protection

Enclosure I: Draft PSD Permit -Draft Permit Conditions  
Enclosure II: Draft PSD Permit - General Project Description  
Enclosure III: Public Notice  
Fact Sheet

cc: Luis Sierra, Puerto Rico Environmental Quality Board  
Jose Font, EPA Region 2, Caribbean Environmental Protection Division